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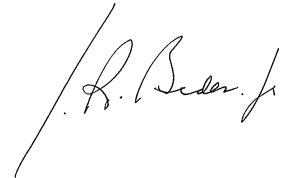
The President

Delegation of Authority Under Section 614(a)(1) of the Foreign Assistance Act of 1961

Memorandum for the Secretary of State

By the authority vested in me as President by the Constitution and the laws of the United States of America, including section 621 of the Foreign Assistance Act of 1961 (FAA), I hereby delegate to the Secretary of State the authority under section 614(a)(1) of the FAA to determine whether it is important to the security interests of the United States to furnish up to \$76 million in assistance to Ukraine without regard to any provision of law within the purview of section 614(a)(1) of the FAA.

You are authorized and directed to publish this memorandum in the *Federal Register*.



THE WHITE HOUSE,
Washington, November 1, 2024

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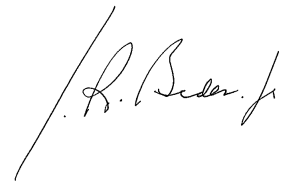
Presidential Determination Pursuant to Section 1245(d)(4)(B) and (C) of the National Defense Authorization Act for Fiscal Year 2012

Memorandum for the Secretary of State[, the Secretary of the Treasury[, and] the Secretary of Energy

By the authority vested in me as President by the Constitution and the laws of the United States, after carefully considering the reports submitted to the Congress by the Energy Information Administration, including the report submitted in October 2024, and other relevant factors, including global economic conditions, the level of spare capacity, and the availability of strategic reserves, I determine, pursuant to section 1245(d)(4)(B) and (C) of the National Defense Authorization Act for Fiscal Year 2012, Public Law 112–81, and consistent with prior determinations, that there is a sufficient supply of petroleum and petroleum products from countries other than Iran to permit a significant reduction in the volume of petroleum and petroleum products purchased from Iran by or through foreign financial institutions.

I will continue to monitor this situation closely.

The Secretary of State is authorized and directed to publish this determination in the *Federal Register*.



THE WHITE HOUSE,
Washington, November 7, 2024

Rules and Regulations

Federal Register

Vol. 89, No. 225

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

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 25

[Docket No. FAA–2024–2388; Special Conditions No. 25–871–SC]

Special Conditions: Gulfstream Aerospace Corporation, Model GVII–G400 Airplane; Installation of a Therapeutic Oxygen System for Medical Use

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final special conditions; request for comments.

SUMMARY: These special conditions are issued for the Gulfstream Aerospace Corporation (Gulfstream) Model GVII–G400 airplane. This airplane will have a novel or unusual design feature when compared to the state of technology envisioned in the airworthiness standards for transport-category airplanes. This design feature is the installation of a therapeutic oxygen distribution system that provides a shared source of oxygen between the flightcrew and passengers. The applicable airworthiness regulations do not contain adequate or appropriate safety standards for this design feature. These special conditions contain the additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to that established by the existing airworthiness standards.

DATES: This action is effective on Gulfstream on November 21, 2024. Send comments on or before January 6, 2025.

ADDRESSES: Send comments identified by Docket No. FAA–2024–2388 using any of the following methods:

- *Federal eRegulations Portal:* Go to www.regulations.gov and follow the online instructions for sending your comments electronically.
- *Mail:* Send comments to Docket Operations, M–30, U.S. Department of

Transportation (DOT), 1200 New Jersey Avenue SE, Room W12–140, West Building Ground Floor, Washington, DC 20590–0001.

- *Hand Delivery or Courier:* Take comments to Docket Operations in Room W12–140 of the West Building Ground Floor at 1200 New Jersey Avenue SE, Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

- *Fax:* Fax comments to Docket Operations at 202–493–2251.

- *Docket:* Background documents or comments received may be read at www.regulations.gov at any time. Follow the online instructions for accessing the docket or go to Docket Operations in Room W12–140 of the West Building Ground Floor at 1200 New Jersey Avenue SE, Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Robert Hettman, Mechanical Systems, AIR–623, Technical Policy Branch, Policy and Standards Division, Aircraft Certification Service, Federal Aviation Administration, 2200 South 216th Street, Des Moines, WA 98198; telephone 206–231–3171; email robert.hettman@faa.gov.

SUPPLEMENTARY INFORMATION: The substance of these special conditions has been published in the **Federal Register** for public comment in several prior instances with no substantive comments received. Therefore, the FAA finds, pursuant to title 14, Code of Federal Regulations (14 CFR) 11.38(b), that new comments are unlikely, and notice and comment prior to this publication are unnecessary.

Privacy

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in title 14, Code of Federal Regulations (14 CFR) 11.35, the FAA will post all comments received without change to www.regulations.gov, including any personal information you provide. The FAA will also post a report summarizing each substantive verbal contact received about these special conditions.

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 these special conditions contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to these special conditions, 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 the indicated comments will not be placed in the public docket of these special conditions. Send submissions containing CBI to the individual listed in the **FOR FURTHER INFORMATION CONTACT** section below. Comments the FAA receives, which are not specifically designated as CBI, will be placed in the public docket for these special conditions.

Comments Invited

The FAA invites interested people to take part in this rulemaking by sending written comments, data, or views. The most helpful comments reference a specific portion of the special conditions, explain the reason for any recommended change, and include supporting data.

The FAA will consider all comments received by the closing date for comments, and will consider comments filed late if it is possible to do so without incurring delay. The FAA may change these special conditions based on the comments received.

Background

On June 30, 2020, Gulfstream applied for an amendment to Type Certificate No. T00021AT to include the new Model GVII–G400 airplane. The Gulfstream Model GVII–G400 airplane, which is a derivative of the Model GVII–G500 airplane currently approved under Type Certificate No. T00021AT, is a twin-engine, transport-category, business jet, with a maximum seating for 19 passengers, and a maximum take-off weight of 73,500 pounds.

Type Certification Basis

Under the provisions of title 14, Code of Federal Regulations (14 CFR) 21.101, Gulfstream must show that the Model

GVII–G400 airplane meets the applicable provisions of the regulations listed in Type Certificate No. T00021AT, or the applicable regulations in effect on the date of application for the change, except for earlier amendments as agreed upon by the FAA.

If the Administrator finds that the applicable airworthiness regulations (e.g., 14 CFR part 25) do not contain adequate or appropriate safety standards for the Gulfstream Model GVII–G400 airplane because of a novel or unusual design feature, special conditions are prescribed under the provisions of § 21.16.

Special conditions are initially applicable to the model for which they are issued. Should the type certificate for that model be amended later to include any other model that incorporates the same novel or unusual design feature, or should any other model already included on the same type certificate be modified to incorporate the same novel or unusual design feature, these special conditions would also apply to the other model under § 21.101.

In addition to the applicable airworthiness regulations and special conditions, the Gulfstream Model GVII–G400 airplane must comply with the exhaust-emission requirements of 14 CFR part 34, and the noise-certification requirements of 14 CFR part 36.

The FAA issues special conditions, as defined in 14 CFR 11.19, in accordance with 14 CFR 11.38, and they become part of the type certification basis under § 21.101.

Novel or Unusual Design Features

The Gulfstream Model GVII–G400 airplane will incorporate the following novel or unusual design feature:

An oxygen distribution system that provides a shared source of oxygen between the flightcrew and passengers to provide supplemental and therapeutic oxygen.

Discussion

There are no specific regulations that address the design and installation of required passenger or crew oxygen systems that share a supply source with an optional oxygen system used specifically for therapeutic applications. Therapeutic oxygen systems have been previously certified and were generally considered an extension of the passenger oxygen system for the purpose of defining the applicable regulations. As a result, existing requirements, such as 14 CFR 25.1309, 25.1441(b) and (c), 25.1451, and 25.1453, in the Gulfstream GVII–G400

airplane's certification basis applicable to this project, provide some design standards appropriate for oxygen system installations. In addition, § 25.1445 includes standards for oxygen distribution systems when oxygen is supplied to crew and passengers. If a common source of supply is used, § 25.1445(a)(2) requires a means to separately reserve the minimum supply required by the flight crew.

Section 25.1445 is intended to protect the flightcrew by ensuring that an adequate supply of oxygen is available to complete a descent and landing following a loss of cabin pressure. When the regulation was written, the only passenger oxygen system designs were supplemental oxygen systems intended to protect passengers from hypoxia in the event of a decompression. Existing passenger oxygen systems did not include design features that would allow the flightcrew to control oxygen to passengers during flight. There are no similar requirements in § 25.1445 when oxygen is supplied from the same source to passengers for use during a decompression, and for discretionary or first-aid use any time during the flight. In the design, the crew, passenger, and therapeutic oxygen systems use the same source of oxygen. These special conditions contain additional design requirements for the equipment involved in this dual therapeutic oxygen plus supplemental gaseous oxygen installation.

These special conditions contain the additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to that established by the existing airworthiness standards.

Applicability

As discussed above, these special conditions are applicable to Gulfstream Model GVII–G400 airplane. Should Gulfstream apply at a later date for a change to the type certificate to include another model incorporating the same novel or unusual design feature, or should any other model already included on the same type certificate be modified to incorporate the same novel or unusual design feature, these special conditions would apply to that model as well.

Conclusion

This action affects only the certain novel or unusual design feature on the Gulfstream Model GVII–400 airplane. It is not a rule of general applicability.

List of Subjects in 14 CFR Part 25

Aircraft, Aviation safety, Reporting and recordkeeping requirements.

Authority Citation

The authority citation for these special conditions is as follows:

Authority: 49 U.S.C. 106(f), 106(g), 40113, 44701, 44702, and 44704.

The Special Conditions

Accordingly, pursuant to the authority delegated to me by the Administrator, the following special conditions are issued as part of the type certification basis for Gulfstream Aerospace Corporation Model GVII–G400 airplanes.

The distribution system for the passenger therapeutic oxygen system must be designed and installed to meet requirements as follows:

(1) When oxygen is supplied to passengers for both supplemental and therapeutic purposes, the distribution system must be designed for either—

(a) A source of supplemental oxygen for protection following a loss of cabin pressure, and a separate source for therapeutic purposes; or

(b) A common source of supply with means to separately reserve the minimum supply required by the passengers for supplemental use following a loss of cabin pressure.

Issued in Des Moines, Washington, on November 15, 2024.

Paul R. Siegmund,
*Acting Manager, Technical Policy Branch,
Policy and Standards Division, Aircraft
Certification Service.*

[FR Doc. 2024–27131 Filed 11–20–24; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 71

[Docket No. FAA–2023–2166; Airspace
Docket No. 23–ASO–45]

RIN 2120–AA66

Amendment of Class E Airspace; Lady Lake, FL

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This action amends Class E airspace extending upward from 700 feet above the surface for Lady Lake Hospital, Lady Lake, FL. This action increases the existing radius to accommodate a new instrument approach procedure for UF Health The Villages Hospital Heliport, The Villages, FL. Controlled airspace is necessary for the safety and management of

instrument flight rules (IFR) operations at this airport.

DATES: Effective 0901 UTC, February 20, 2025. The Director of the Federal Register approves this incorporation by reference action under 1 CFR part 51, subject to the annual revision of FAA Order JO 7400.11 and publication of conforming amendments.

ADDRESSES: A copy of the Notice of Proposed Rulemaking (NPRM), all comments received, this final rule, and all background material may be viewed online at www.regulations.gov using the FAA Docket number. Electronic retrieval help and guidelines are available on the website. It is available 24 hours a day, 365 days a year.

FAA Order JO 7400.11J, Airspace Designations, and Reporting Points, as well as subsequent amendments, can be viewed online at 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.

FOR FURTHER INFORMATION CONTACT: Marc Ellerbee, Operations Support Group, Eastern Service Center, Federal Aviation Administration, 1701 Columbia Avenue, College Park, GA 30337; telephone: (404) 305-5589.

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 E airspace extending upward from 700 feet above the surface for Lady Lake Hospital in Lady Lake, FL.

History

The FAA published a notice of proposed rulemaking for Docket No. FAA 2023-2166 in the **Federal Register** (89 FR 54739; July 2, 2024), proposing to amend Class E airspace extending upward from 700 feet above the surface for Lady Lake Hospital in Lady Lake, FL. Interested parties were invited to participate in this rulemaking effort by

submitting written comments on the proposal to the FAA. No comments were received.

Incorporation by Reference

Class E airspace is published in paragraph 6005 of FAA Order JO 7400.11, Airspace Designations and Reporting Points, which is incorporated by reference in 14 CFR 71.1 on an annual basis. This document amends the current version of that order, FAA Order JO 7400.11J, dated July 31, 2024, and effective September 15, 2024. FAA Order JO 7400.11J is publicly available as listed in the **ADDRESSES** section of this document. These amendments will be published in the next update to FAA Order JO 7400.11. FAA Order JO 7400.11J lists Class A, B, C, D, and E airspace areas, air traffic service routes, and reporting points.

The Rule

This action amends 14 CFR part 71 by amending Class E airspace extending upward from 700 feet above the surface for Lady Lake Hospital, Lady Lake, FL, by increasing the radius to 7 miles (previously 6 miles) to encompass UF Health The Villages Hospital Heliport, The Villages, FL. Controlled airspace is necessary for the safety and management of instrument flight rules (IFR) operations in the area.

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. 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 will only affect air traffic procedures and air navigation, it is certified that this proposed rule, when promulgated, will 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 5-6.5a. This airspace action is not expected to cause any potentially

significant environmental impacts, and no extraordinary circumstances exist that warrant the preparation of an environmental assessment.

Lists of Subjects in 14 CFR Part 71

Airspace, Incorporation by reference, Navigation (air).

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 14 CFR 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 Federal Aviation Administration Order JO 7400.11J, Airspace Designations and Reporting Points, dated July 31, 2024, and effective September 15, 2024, is amended as follows:

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

* * * * *

ASO FL E5 Lady Lake, FL [Amended]

Lady Lake Hospital Point In Space Coordinates

(Lat. 28°57'36" N, long. 81°57'50" W)

UF Health The Villages Hospital Heliport, FL (Lat. 28°56'59" N, long. 81°57'36" W)

That airspace extending upward from 700 feet above the surface within a 7-mile radius of the point in space (lat. 28°57'36" N, long. 81°57'50" W) serving Lady Lake Hospital and UF Health The Villages Hospital Heliport.

* * * * *

Issued in College Park, Georgia, on November 15, 2024.

Andreese C. Davis,

Manager, Airspace & Procedures Team South, Eastern Service Center, Air Traffic Organization.

[FR Doc. 2024-27266 Filed 11-20-24; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 97

[Docket No. 31576; Amdt. No. 4140]

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 November 21, 2024. 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 November 21, 2024.

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 Information Services, 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, visit www.archives.gov/federal-register/cfr/ibr-locations or email fr.inspection@nara.gov.

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, Standards Section Manager, Flight Procedures and Airspace Group, Flight Technologies and Procedures Division, Office of Safety Standards, Flight Standards Service, Aviation Safety, Federal Aviation Administration. Mailing Address: FAA Mike Monroney Aeronautical Center, Flight Procedures and Airspace Group, 6500 South MacArthur Blvd., STB Annex, Bldg. 26, Room 217, Oklahoma City, OK 73099. Telephone: (405) 954–1139.

SUPPLEMENTARY INFORMATION: This rule amends 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 Air Missions (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, pilots 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 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 November 8, 2024.

Thomas J. Nichols,
Standards Section Manager, Flight
Procedures and Airspace Group, Flight
Technologies and Procedures Division, Office
of Safety Standards, Flight Standards Service,
Aviation Safety, Federal Aviation
Administration.

Adoption of the Amendment

Accordingly, pursuant to the
authority delegated to me, 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.

■ 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	Procedure name
26-Dec-24 ..	AL	Montgomery	Montgomery Rgnl (Dannelly Fld).	4/0399	10/17/2024	VOR-A, Amdt 4B.
26-Dec-24 ..	TX	Hereford	Hereford Muni	4/1076	9/27/2024	RNAV (GPS) RWY 2, Orig-B.
26-Dec-24 ..	TX	Hereford	Hereford Muni	4/1077	9/27/2024	RNAV (GPS) RWY 20, Orig-C.
26-Dec-24 ..	NY	Farmingdale	Republic	4/1519	10/21/2024	RNAV (GPS) Y RWY 14, Amdt 2E.
26-Dec-24 ..	MI	Ironwood	Gogebic/Iron County	4/2271	9/30/2024	ILS OR LOC RWY 27, Amdt 3C.
26-Dec-24 ..	MI	Ironwood	Gogebic/Iron County	4/2274	9/30/2024	VOR RWY 9, Amdt 13B.
26-Dec-24 ..	AK	Kotlik	Kotlik	4/3073	10/2/2024	RNAV (GPS) RWY 20, Orig-A.
26-Dec-24 ..	PA	Hazleton	Hazleton Rgnl	4/3250	8/7/2024	RNAV (GPS) RWY 10, Amdt 3A.
26-Dec-24 ..	GA	Fitzgerald	Fitzgerald Muni	4/4073	8/23/2024	LOC RWY 2, Amdt 2.
26-Dec-24 ..	GA	Fitzgerald	Fitzgerald Muni	4/4074	8/23/2024	RNAV (GPS) RWY 2, Amdt 2A.
26-Dec-24 ..	GA	Fitzgerald	Fitzgerald Muni	4/4075	8/23/2024	NDB RWY 2, Amdt 2.
26-Dec-24 ..	TX	Houston	Houston Exec	4/4714	8/7/2024	RNAV (GPS) RWY 18, Orig-B.
26-Dec-24 ..	TX	Houston	Houston Exec	4/4722	8/7/2024	RNAV (GPS) RWY 36, Amdt 1A.
26-Dec-24 ..	WI	Tomah	Bloyer Fld	4/4739	10/4/2024	RNAV (GPS) RWY 7, Orig.
26-Dec-24 ..	WI	Tomah	Bloyer Fld	4/4745	10/4/2024	RNAV (GPS) RWY 25, Orig.
26-Dec-24 ..	NM	Clovis	Clovis Rgnl	4/4746	10/4/2024	RNAV (GPS) RWY 30, Orig-A.
26-Dec-24 ..	TX	Caldwell	Caldwell Muni	4/4748	10/4/2024	RNAV (GPS) RWY 15, Orig-B.
26-Dec-24 ..	OH	Wilmington	Wilmington Air Park	4/4772	10/4/2024	ILS OR LOC RWY 22R, ILS RWY 22R (SA CAT I), ILS RWY 22R (CAT II-III), Amdt 6B.
26-Dec-24 ..	TN	Savannah	Savannah-Hardin County	4/4789	8/12/2024	RNAV (GPS) RWY 19, Orig-A.
26-Dec-24 ..	OK	Norman	University Of Oklahoma Westheimer.	4/4845	9/27/2024	ILS OR LOC RWY 18, Amdt 2A.
26-Dec-24 ..	MN	St Cloud	St Cloud Rgnl	4/5492	10/7/2024	ILS OR LOC RWY 31, Amdt 4.
26-Dec-24 ..	TX	Mason	Mason County	4/5746	10/7/2024	RNAV (GPS) RWY 36, Orig-C.
26-Dec-24 ..	FL	Leesburg	Leesburg Intl	4/5763	8/26/2024	RNAV (GPS) RWY 31, Amdt 1D.
26-Dec-24 ..	SC	Mount Pleasant	Mt Pleasant Rgnl-Faison Fld ..	4/5778	9/16/2024	VOR/DME-A, Amdt 1C.
26-Dec-24 ..	GA	Jasper	Pickens County	4/5891	10/7/2024	RNAV (GPS) RWY 34, Amdt 1.
26-Dec-24 ..	TX	Fort Worth	Perot Fld/Fort Worth Alliance ..	4/5932	9/27/2024	RNAV (GPS) RWY 16R, Amdt 1A.
26-Dec-24 ..	TN	Mc Minnville	Warren County Meml	4/6980	8/12/2024	RNAV (GPS) RWY 5, Orig.
26-Dec-24 ..	TN	Mc Minnville	Warren County Meml	4/6981	8/12/2024	RNAV (GPS) RWY 23, Amdt 1.
26-Dec-24 ..	AK	Savoonga	Savoonga	4/7038	10/10/2024	RNAV (GPS) RWY 23, Amdt 2.
26-Dec-24 ..	KS	Olathe	Johnson County Exec	4/8701	9/27/2024	RNAV (GPS) RWY 36, Amdt 1B.
26-Dec-24 ..	DC	Washington	Washington Dulles Intl	4/8705	9/27/2024	RNAV (GPS) RWY 12, Amdt 1E.
26-Dec-24 ..	DC	Washington	Washington Dulles Intl	4/8706	9/27/2024	VOR/DME RWY 12, Amdt 9E.
26-Dec-24 ..	DC	Washington	Washington Dulles Intl	4/8707	9/27/2024	ILS OR LOC/DME RWY 12, Amdt 9D.
26-Dec-24 ..	SD	Rosebud	Rosebud Sioux Tribal	4/9176	10/15/2024	RNAV (GPS) RWY 34, Orig-A.
26-Dec-24 ..	CT	Danbury	Danbury Muni	4/9274	10/16/2024	LOC RWY 8, Amdt 6B.
26-Dec-24 ..	CT	Danbury	Danbury Muni	4/9275	10/16/2024	RNAV (GPS) Y RWY 8, Orig-B.
26-Dec-24 ..	CT	Danbury	Danbury Muni	4/9276	10/16/2024	RNAV (GPS)-A, Orig-B.
26-Dec-24 ..	MI	Bay City	James Clements Muni	4/9327	10/15/2024	RNAV (GPS) RWY 18, Orig-D.
26-Dec-24 ..	AL	Jackson	Jackson Muni	4/9334	10/15/2024	RNAV (GPS) RWY 19, Orig-A.
26-Dec-24 ..	NC	Raleigh/Durham	Raleigh-Durham Intl	4/9718	8/15/2024	RNAV (GPS) Y RWY 23R, Amdt 2.
26-Dec-24 ..	NC	Raleigh/Durham	Raleigh-Durham Intl	4/9720	8/15/2024	RNAV (RNP) Z RWY 5R, Amdt 3.

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration****14 CFR Part 97**

[Docket No. 31575; Amdt. No. 4139]

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 November 21, 2024. 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 November 21, 2024.

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 Information Services, 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, visit www.archives.gov/federal-register/cfr/ibr-locations or email fr.inspection@nara.gov.

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, Standards Section Manager, Flight Procedures and Airspace Group, Flight Technologies and Procedures Division, Office of Safety Standards, Flight Standards Service, Aviation Safety, Federal Aviation Administration. Mailing Address: FAA Mike Monroney Aeronautical Center, Flight Procedures and Airspace Group, 6500 South MacArthur Blvd., STB Annex, Bldg. 26, Room 217, Oklahoma City, OK 73099. Telephone (405) 954–1139.

SUPPLEMENTARY INFORMATION: This rule amends 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 97.20. The applicable FAA Forms are 8260–3, 8260–4, 8260–5, 8260–15A, 8260–15B, when required by an entry on 8260–15A, and 8260–15C.

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, pilots 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 or 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 Air Missions (NOTAM) as an emergency action of immediate flights 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.

Lists of Subjects in 14 CFR Part 97

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

Issued in Washington, DC, on November 8,
2024.

Thomas J. Nichols,

*Standards Section Manager, Flight
Procedures and Airspace Group, Flight
Technologies and Procedures Division, Office
of Safety Standards, Flight Standards Service,
Aviation Safety, Federal Aviation
Administration.*

Adoption of the Amendment

Accordingly, pursuant to the
authority delegated to me, 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.

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

Effective 26 December 2024

Bloomfield, IA, 4K6, Takeoff Minimums and
Obstacle DP, Amdt 1
Bloomington/Normal, IL, BMI, ILS OR LOC
RWY 2, Amdt 1
Bloomington/Normal, IL, BMI, ILS OR LOC
RWY 20, ILS RWY 20 (CAT II), Amdt 4
Bloomington/Normal, IL, BMI, ILS OR LOC
RWY 29, Amdt 12
Bloomington/Normal, IL, BMI, LOC BC RWY
11, Amdt 13
Bloomington/Normal, IL, BMI, RNAV (GPS)
RWY 2, Amdt 1
Bloomington/Normal, IL, BMI, RNAV (GPS)
RWY 20, Amdt 2
Quincy, IL, UIN, LOC BC RWY 22, Amdt 8
Quincy, IL, UIN, RNAV (GPS) RWY 22, Amdt
2
Columbus, IN, BAK, ILS OR LOC RWY 23,
Amdt 9
Columbus, IN, BAK, RNAV (GPS) RWY 14,
Amdt 2
Beloit, KS, K61, Takeoff Minimums and
Obstacle DP, Amdt 1B
Somerville, NJ, SMQ, RNAV (GPS) RWY 12,
Amdt 1
Shirley, NY, HWV, ILS OR LOC RWY 6,
Amdt 2D
Shirley, NY, HWV, RNAV (GPS) RWY 6,
Amdt 2D
Shirley, NY, HWV, RNAV (GPS) RWY 15,
Orig-C
Shirley, NY, HWV, RNAV (GPS) RWY 33,
Orig-C
Shirley, NY, HWV, RNAV (GPS)-A, Orig-B
Shirley, NY, HWV, VOR RWY 6, Amdt 4B

Lajitas, TX, T89, MARFA TWO, Graphic DP
Lajitas, TX, T89, RNAV (GPS) RWY 7, Orig
Lajitas, TX, T89, RNAV (GPS) Y RWY 25,
Orig
Lajitas, TX, T89, RNAV (GPS) Z RWY 25,
Orig
Lajitas, TX, T89, Takeoff Minimums and
Obstacle DP, Orig
San Angelo, TX, SJT, VOR Y OR TACAN Y
RWY 3, Amdt 1
Spanish Fork, UT, SPK, RNAV (GPS) Y RWY
12, Amdt 2
Spanish Fork, UT, SPK, RNAV (GPS) Z RWY
12, Amdt 2
Melfa, VA, MFV, LOC RWY 3, Amdt 2
Melfa, VA, MFV, RNAV (GPS) RWY 21,
Amdt 2
Melfa, VA, MFV, VOR RWY 3, Amdt 2B,
CANCELED
Beckley, WV, BKW, RNAV (GPS) RWY 1,
Amdt 2
Beckley, WV, BKW, RNAV (GPS) RWY 10,
Amdt 2
Beckley, WV, BKW, RNAV (GPS) RWY 19,
Amdt 2
Beckley, WV, BKW, RNAV (GPS) RWY 28,
Amdt 2
Beckley, WV, BKW, VOR RWY 10, Amdt
13A, CANCELED
Lewinsburg, WV, LWB, RNAV (GPS) RWY 22,
Amdt 2

[FR Doc. 2024–27062 Filed 11–20–24; 8:45 am]

BILLING CODE 4910–13–P

**DEPARTMENT OF HOUSING AND
URBAN DEVELOPMENT****24 CFR Part 203**

[Docket No. FR–6353–N–03]

RIN 2502–AJ66

**Modernization of Engagement With
Mortgagors in Default: Partial
Extension of Compliance Date**

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

ACTION: Final rule; partial extension of
compliance date.

SUMMARY: This document extends the
compliance date for certain provisions
of HUD’s final rule entitled
“Modernization of Engagement with
Mortgagors in Default” that require
mortgagees to conduct meetings with all
mortgagors in default. This requirement
includes borrowers who do not reside in
the mortgaged property and with
mortgagees where the relevant property
is not within 200 miles of the
mortgagee, its servicer, or a branch
office, which were excepted under
HUD’s existing regulation for
conducting meetings with mortgagors in
default. The compliance date for these
provisions is extended until July 1,

2025. HUD is taking this action to
permit mortgagees sufficient time to
update their mortgage servicing
processes and procedures to comply
with the policy that will be established
in a forthcoming mortgagee letter
entitled “Modernization of Engagement
with Borrowers in Default.”

DATES: The compliance date for the final
rule amending 24 CFR 203.604,
published August 2, 2024, at 89 FR
63082 as it applies to certain mortgagors
and properties is extended until July 1,
2025. See **SUPPLEMENTARY INFORMATION**
for more information.

FOR FURTHER INFORMATION CONTACT:

Elissa Saunders, Director, Office of
Single Family Asset Management, Office
of Housing, Department of Housing and
Urban Development, 100 South Charles
Street, Bank of America Building, Tower
II, 11th Floor, Baltimore, MD 21201;
telephone number 202–402–2378 (this
is not a toll-free number). HUD
welcomes and is prepared to receive
calls from individuals who are deaf or
hard of hearing, as well as individuals
with speech or communication
disabilities. To learn more about how to
make an accessible telephone call,
please visit [https://www.fcc.gov/
consumers/guides/telecommunications-
relay-service-trs](https://www.fcc.gov/consumers/guides/telecommunications-relay-service-trs).

SUPPLEMENTARY INFORMATION:**I. Background**

On August 2, 2024, HUD published a
final rule entitled “Modernization of
Engagement with Mortgagors in
Default” (FR–6353–F–02), available at
89 FR 63082. The final rule revises
requirements in 24 CFR 203.604 for
mortgages insured pursuant to part 203,
except for mortgages insured on Indian
Land pursuant to section 248 of the
National Housing Act. The effective date
of the final rule is January 1, 2025.

**II. Partial Extension of Final Rule
Compliance Date**

Mortgagees are not required to comply
until July 1, 2025, with the provisions
of the Modernization of Engagement for
Mortgagors in Default final rule that
require mortgagees to conduct meetings
with mortgagors who do not reside in
the mortgaged property and where the
relevant properties are not within 200
miles of the mortgagee, its servicer, or
a branch office, which mirror the two
exceptions currently codified in 24 CFR
203.604(c).

As revised by the Modernization of
Engagement with Mortgagors in Default
final rule, 24 CFR 203.604(a)(3) will
require that “[a] reasonable effort to
arrange a meeting with the mortgagor
shall consist of, at a minimum, two

verifiable attempts to contact the mortgagor utilizing methods determined by the Secretary.”

Mortgagees have repeatedly stated that they require sufficient time to update their processes and procedures, including making updates to their information technology, staff training, internal standard operating procedures, revisions to contracts, and mortgagor-facing documents and communication. Mortgagees have also stated the need for adequate time to update their internal quality controls, hire additional staff, align their procedures for HUD’s new requirements with requirements from other Federal agencies, establish new contracts for specific outreach methods, and update internal documentation requirements, among other things.

Given that HUD has not yet provided guidance on complying with the revised requirements to 24 CFR 203.604(a)(3) to enable Mortgagees to begin adjusting their processes and procedures, HUD is partially extending the compliance period for the Modernization of Engagement with Mortgagors in Default final rule until July 1, 2025, to permit mortgagees to continue to rely upon two exceptions to the meeting requirements that exist in § 203.604(c) as it is currently codified.

The two additional exceptions that mortgagees may continue to rely upon are that a meeting with the mortgagor is not required if:

(1) The mortgagor does not reside in the mortgaged property; and

(2) The mortgaged property is not within 200 miles of the mortgagee, its servicer, or a branch office of either.

HUD believes that this partial extension of the compliance period will allow mortgagees sufficient time to implement the guidance in the forthcoming Modernization of Engagement with Borrowers in Default Mortgagee Letter¹ and to ensure mortgagee compliance with the revised requirements in 24 CFR 203.604. Mortgagees may optionally elect to comply with the entirety of the Modernization of Engagement with Mortgagors in Default final rule beginning on January 1, 2025, the effective date of the rule.

Julia R. Gordon,

Assistant Secretary for Housing, Federal Housing Commissioner.

[FR Doc. 2024–27077 Filed 11–20–24; 8:45 am]

BILLING CODE 4210–67–P

¹ When the Modernization of Engagement with Borrowers in Default Mortgagee Letter is published, it will be accessible at https://www.hud.gov/program_offices/administration/hudclips/letters/mortgagee until incorporated into the Single Family Housing Policy Handbook 4000.1.

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 100

[Docket No. USCG–2024–0870]

Special Local Regulations; Marine Events Within the Eleventh Coast Guard District

AGENCY: Coast Guard, DHS.

ACTION: Notification of enforcement of regulation.

SUMMARY: The Coast Guard will enforce a special local regulation on the waters of Mission Bay, CA, during the Mission Bay Parade of Lights on December 14, 2024. This special local regulation is necessary to provide for the safety of the participants, crew, sponsor vessels of the event, and general users of the waterway. During the enforcement period, persons and vessels are prohibited from entering, transiting through, or anchoring within this regulated area unless authorized by the Captain of the Port Sector San Diego or their designated representative.

DATES: The regulations in 33 CFR 100.1101 will be enforced for the location identified in Table 1 to § 100.1101, Item number 6, from 5:30 p.m. through 8 p.m. on December 14, 2024.

FOR FURTHER INFORMATION CONTACT: If you have questions about this notification of enforcement, call or email Lieutenant Shelley Turner, Waterways Management, U.S. Coast Guard Sector San Diego, CA; telephone (619) 278–7656, email MarineEventsSD@uscg.mil.

SUPPLEMENTARY INFORMATION: The Coast Guard will enforce the special local regulations in 33 CFR 100.1101 for the location identified in Item No. 6 in Table 1 to § 100.1101, from 5:30 p.m. until 8 p.m. on December 14, 2024, for the Mission Bay Parade of Lights in Mission Bay, CA. This action is being taken to provide for the safety of life on the navigable waterways during the event. Our regulation for recurring marine events in the San Diego Captain of the Port Zone, § 100.1101, Item No. 6 in Table 1 to § 100.1101, specifies the location of the regulated area for the Mission Bay Parade of Lights, which encompasses portions of Mission Bay. Under the provisions of § 100.1101, persons and vessels are prohibited from entering, transiting through, or anchoring within this regulated area unless authorized by the Captain of the Port, or his designated representative.

The Coast Guard may be assisted by other Federal, State, or local law enforcement agencies in enforcing this regulation.

In addition to this notification of enforcement in the **Federal Register**, the Coast Guard will provide the maritime community with advance notification of this enforcement period via the Local Notice to Mariners and marine information broadcasts.

P.C. Dill,

Captain, U.S. Coast Guard, Captain of the Port Sector San Diego.

[FR Doc. 2024–27125 Filed 11–20–24; 8:45 am]

BILLING CODE 9110–04–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 165

[Docket Number USCG–2024–0404]

RIN 1625–AA00

Safety Zone; Hackensack River, Kearny and Secaucus, NJ

AGENCY: Coast Guard, DHS.

ACTION: Temporary interim rule and request for comments.

SUMMARY: The Coast Guard is establishing a temporary safety zone for certain waters of the Hackensack River. This action is necessary to provide for the safety of life on these navigable waters near the Portal Bridge during construction between November 2024 and December 2025. When enforced, entry of vessels or persons into this zone is prohibited unless specifically authorized by the Captain of the Port New York or a designated representative.

DATES:

Effective date: Effective November 21, 2024, through 11:59 p.m. on December 31, 2025.

Comments due date: Comments and related material must be received by the Coast Guard on or before February 19, 2025.

ADDRESSES: To view documents mentioned in this preamble as being available in the docket, go to <https://www.regulations.gov>, type USCG–2024–0404 in the search box and click “Search.” Next, in the Document Type column, select “Supporting & Related Material.”

FOR FURTHER INFORMATION CONTACT: If you have questions about this rule, call or email Jeffrey Yunker, Waterways Management Division, U.S. Coast Guard

Sector New York; telephone 718–354–4195, email Jeffrey.M.Yunker@uscg.mil.

SUPPLEMENTARY INFORMATION:

I. Table of Abbreviations

APA Administrative Procedure Act
CFR Code of Federal Regulations
COTP Captain of the Port New York
DHS Department of Homeland Security
FR Federal Register
NPRM Notice of proposed rulemaking
PNB Portal North Bridge
RNA Regulated Navigation Area
§ Section
U.S.C. United States Code

II. Background Information and Regulatory History

In partnership with New Jersey Transit, Amtrak plans to replace the Amtrak Portal Bridge across the Hackensack River, mile 5.0, at Little Snake Hill, New Jersey. On April 2, 2024, Skanska Traylor Portal North Bridge (PNB) Joint Venture notified the Coast Guard that it is requesting three 14-day periods of waterway closures on the Hackensack River to install three new bridge spans for the replacement Portal North Bridge. The purpose of the requested 14-day period is to position and secure a 400-foot-long bridge span over the waterway. The bridge span will be set on temporary shoring north of the existing bridge and a 100-foot-wide crane barge will then lift the bridge span from the temporary shoring using anchor lines and tugboats. The crane barge will move into the new bridge alignment position using anchor lines and tugboats, jack the new bridge span, set the new span onto the temporary supports, and slide the bridge span into the final position. Once the bridge span is set, the crane barge, support barges, and anchor lines will be removed out of the channel to prepare for the subsequent bridge span erection. This procedure will occur three times during separate 14-day periods of time.

After determining that establishment of safety zones was necessary to provide for the safety of life, property, and the environment during the anticipated construction of the bridge, on August 1, 2024, the Coast Guard published a notice of proposed rulemaking (NPRM) titled *Safety Zone; Hackensack River, Kearny and Secaucus, NJ* (89 FR 62689). There we explained the basis for the NPRM and invited comments on our proposed regulatory action related to the heavy lift operations during this bridge construction project. During the comment period that ended September 3, 2024, we received two comments.

The NPRM proposed an effective date of November 15, 2024, for the safety zone. However, due to project delays we

are making the effective date November 21, 2024.

Additionally, separate from this rulemaking, the contractor held a mariners meeting on September 18, 2024, after the comment period closed on September 3, 2024. The purpose of the meeting was to provide a more detailed presentation of the operations required to deliver the new bridge spans by barge, position the barge carrying the three individual bridge spans and the crane barge that will conduct the heavy lift operations to position the new bridge spans on the new bridge, and then remove the barges from the navigable channel. The two companies that submitted written comments to the NPRM were in attendance at the meeting and agreed that all vessel traffic must cease operations during the erection process of the three new bridge spans.

Under 5 U.S.C. 553(d)(3), the Coast Guard finds that good cause exists for making this rule effective less than 30 days after publication in the **Federal Register**. Delaying the effective date of this rule would be impracticable and contrary to public interest because prompt action is needed to respond to the potential safety hazards associated with three separate bridge span float-ins and heavy lift operations installing the spans at the new Portal Bridge North.

Although this regulation is published as an interim rule with prior notice and comment, continued public comment is nevertheless desirable to ensure that the safety zone is both workable and reasonable throughout its effective period. Accordingly, persons wishing to comment may do so by submitting written comments as set out under **ADDRESSES** in this preamble. Commenters should include their names and addresses, identify the docket number for the regulation, and give reasons for their comments. If the Coast Guard determines that changes to the temporary interim rule are necessary, we will publish a temporary final rule or other appropriate document.

III. Legal Authority and Need for Rule

The Coast Guard is issuing this rule under the authority in 46 U.S.C. 70034. The Captain of the Port New York (COTP) has determined that potential hazards associated with the heavy lift operations while installing three new bridge spans between November 2024 and February 2025 will be a safety concern for users of the waterway between the New Jersey Turnpike/I–95 Fixed Bridge (River Mile 5.3) and 150 feet south of the existing Portal Bridge (River Mile 5.0). The purpose of this rule is to ensure safety of vessels and

the navigable waters in the safety zone in light of these hazards before, during, and after the heavy lift operations.

IV. Discussion of Comments, Changes, and the Rule

As noted above, we received two comments on our NPRM published August 1, 2024. We provide a detailed discussion below in response to each comment in turn.

We received one comment from Vinik Marine Services, LLC dated September 3, 2024. The comment letter included the following three specific concerns:

1. *Lack of Transparency*: The commenter stated that the NPRM is misleading because it does not address the horizontal clearance reduction of the existing bridge from 91.5 feet to 52.5 feet because the existing swing bridge will not have the capability to fully open due to the location of the new bridge.

Coast Guard Response: The commenter's concern regarding the horizontal clearance is outside the scope of this rulemaking regarding the establishment of a safety zone. The reduction in the horizontal clearance of the existing bridge is addressed in a separate rulemaking by the First Coast Guard District Bridge Program under Docket number USCG–2024–0412 published on October 3, 2024, in the **Federal Register** (89 FR 80436). In that case, the proposed regulation would modify the existing bridge operation regulations under 33 CFR 117, whereas this rulemaking project is for the blockage of the Hackensack River in vicinity of the existing Portal Bridge, which necessitates creation of a safety zone under 33 CFR 165. While both actions are related to the construction of the new Portal Bridge, they are two distinct regulatory actions with different impacts on the public. Comments for this rulemaking and related material were due to the Coast Guard before the conclusion of the comment period on November 4, 2024. The Coast Guard anticipates that the proposed rule for the bridge operation regulation (USCG–2024–0412) will be effective on or about February 1, 2025.

2. *Financial Impact on Hackensack River Small Business Marine Contractors*: The commenter stated the proposed river closures could significantly strain the Hackensack River marine contractors potentially leading to employee layoffs and a significant drop in revenue. Additionally, the difficulty in serving customers effectively could lead to losing business to other transportation modes like trucking, damage business reputation, and create an inability to

fulfill contractual obligations with government agencies. Finally, the commenter stated that Coast Guard provided no basis for the assertion that this rulemaking would not impact small businesses.

Coast Guard Response: During a mariners meeting held on September 18, 2024, by Skanska Traylor Portal North Bridge (PNB) Joint Venture, which was not part of this rulemaking project, all attendees, including Vinik Marine and Spectraserv, agreed that all vessel traffic must cease operations during the erection process of the three new bridge spans due to the presented hazards. Closing the waterway via a safety zone during these hazardous operations is necessary to ensure safety of waterway users, specifically the construction barge workers. While we acknowledge some financial impact may occur because of this safety zone, the need to ensure safety of human life is paramount. Planning efforts by Skanska Traylor Joint Venture have reduced the potential financial impact while maximizing safety. Specifically, the Skanska Traylor Joint Venture has requested three 14-day waterway closures during heavy lift operations to accommodate any possible weather or schedule delays. After setting the first bridge span, Skanska Traylor stated that they will reevaluate whether the 14-day period can be modified to resume marine traffic and minimize impacts to waterway users. Therefore, while some financial impact may occur as asserted by the commenter, the Coast Guard determines the impact to not be significant due to the limited duration the safety zone will be enforced and opportunity for further reduction in the enforcement period after reevaluation by Skanska Traylor.

3. Overall Impact: The commenter stated the COTP has mischaracterized this action as a safety zone when it is attempting to implement a “Regulated Navigation Area” (RNA) under 33 CFR 165 and the COTP does not have the legal authority to do that. The commenter further stated that establishing an RNA would allow the District Commander to balance the needs of vessel owners and operators with that of the construction project company and the bridge owner—something the COTP has not done. The commenter stated this is a fundamental failure by the COTP to follow the Administrative Procedures Act (APA) and exemplified the lack of transparency and accountability regarding how this construction is being carried out and the lack of notice to and involvement of the maritime industry.

Coast Guard Response: Having found the hazards presented during heavy lift operations at the Portal Bridge and the need to ensure public safety, the COTP is acting within his authority and discretion to create and enforce a safety zone in this case. A safety zone limits access to the area and ensures that vessels maintain a safe distance from the construction site, significantly minimizing risk. An RNA on the other hand, is intended to be responsive to areas of high vessel congestion or ongoing construction and is unable to ensure the same level of access control and safety for waterway users. The commenter’s claims that the COTP is not adhering to the APA due to lack of notice and participation by the maritime industry are inaccurate. The Coast Guard published an NPRM for this safety zone, which provided the public with 33 days during which to submit public comments. Additionally, this temporary interim rulemaking continues its commitment to providing sufficient notice and opportunity for public comment.

We received a second comment from Spectraserv Inc stating they do not object to the proposed three 14-day window closures on the Hackensack River to install the three new bridge spans. However, Spectraserv did object to all unscheduled closures or hindrances to navigation created by the contractor’s repeated inability or unwillingness to shift the construction equipment clear of the channel for scheduled routine transits. This comment is outside the scope of this rulemaking to establish a safety zone.

After considering the comments discussed above, the Coast Guard determined that no changes should be made to the regulatory text of this rule from the proposed language in the NPRM other than to highlight how we will make notice of enforcement periods and to delay the effective period starting date until November 21, 2024, because of project delays. As written, the Coast Guard believes that the rule ensures consistency, sufficient notice, and improved safety while minimizing impact on vessel transits.

As noted in our NPRM, the original waterway closure dates were scheduled to begin on November 15, 2024, December 10, 2024, and January 13, 2025. On October 7, 2024, the bridge owner’s representative notified the Coast Guard that two hurricanes in the Gulf of Mexico have delayed the heavy lift barge fit-out and delivery by nine days. This barge is being used to deliver the three new bridge spans to the project work site on the Hackensack River. The bridge owner’s representative stated any

impacts to the second bridge span delivery schedule have not yet been determined.

The first of three 14-day windows of full waterway closures has been delayed and is now anticipated to begin November 21, 2024, through December 4, 2024. For this reason, we are changing the effective dates in the regulatory text of this rule from the proposed rule in the NPRM. The anticipated dates for the second and third, 14-day windows of full waterway closures remain December 10, 2024, through December 23, 2024, and January 13, 2025, through January 26, 2025. The Coast Guard will make notice of each enforcement period of the safety zone via the Local Notice to Mariners and issue a Broadcast Notice to Mariners via marine channel 16 (VHF-FM) as soon as practicable. In addition, as discussed in the NPRM, the rule will remain effective through December 31, 2025, in case the project is delayed due to unforeseen circumstances. If the project is completed before December 31, 2025, enforcement of the safety zone will be suspended, and notice given via Local Notice to Mariners. The First Coast Guard District Local Notice to Mariners can be found at: <http://www.navcen.uscg.gov>. Additionally, a 90-day comment period will run concurrently with this temporary interim rule to ensure that the regulation is both workable and reasonable. The safety zone will only be enforced during periods when heavy lift operations at the new bridge are in progress. All dates are tentative and subject to change due to weather, supply chain delays, or other unforeseen circumstances as noted above caused by two previous hurricanes in the Gulf of Mexico.

If the Coast Guard determines that changes to the temporary interim rule are necessary, we will publish a temporary final rule or other appropriate document to address these changes.

V. Regulatory Analyses

We developed this rule after considering numerous statutes and Executive orders related to rulemaking. Below we summarize our analyses based on a number of these statutes and Executive orders, and we discuss First Amendment rights of protestors.

A. Regulatory Planning and Review

Executive Orders 12866 and 13563 direct agencies to assess the costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits. This rule has not been designated a

“significant regulatory action,” under section 3(f) of Executive Order 12866, as amended by Executive Order 14094 (Modernizing Regulatory Review). Accordingly, this rule has not been reviewed by the Office of Management and Budget (OMB).

This regulatory action determination is based on the size, location, duration and time of year of the safety zone. The bridge owner and contractor are coordinating the full waterway closures with the upstream Bergen County Utilities Authority who may transport treated sewage sludge via tug and barge or overland trucks. The safety zone is only in effect on the navigable waters of the Hackensack River between the New Jersey Turnpike/I-95 Fixed Bridge (River Mile 5.3) and 150 feet south of the existing Portal Bridge (River Mile 5.0) and for a limited duration of 14-day periods to accommodate any delays or inclement weather. Further, Skanska Traylor stated that they will reevaluate whether modification of these periods is possible to resume marine traffic and minimize impacts to waterway users. The Coast Guard will notify the public of the enforcement of this rule through appropriate means, which may include, but are not limited to, publication in the Local Notice to Mariners and Broadcast Notice to Mariners via VHF-FM marine channel 16.

B. Impact on Small Entities

The Regulatory Flexibility Act of 1980, 5 U.S.C. 601–612, as amended, requires Federal agencies to consider the potential impact of regulations on small entities during rulemaking. The term “small entities” comprises small businesses, not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations of less than 50,000. The Coast Guard received no comments from the Small Business Administration on this rulemaking. The Coast Guard certifies under 5 U.S.C. 605(b) that this rule will not have a significant economic impact on a substantial number of small entities.

While some owners or operators of vessels intending to transit the area in which the safety zone will be established may be small entities, for the reasons stated in section V.A above, this rule will not have a significant economic impact on any vessel owner or operator.

Under section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996 (Pub. L. 104–121), we want to assist small entities in understanding this rule. If the rule would affect your small business,

organization, or governmental jurisdiction and you have questions concerning its provisions or options for compliance, please call or email the person listed in the **FOR FURTHER INFORMATION CONTACT** section.

Small businesses may send comments on the actions of Federal employees who enforce, or otherwise determine compliance with, Federal regulations to the Small Business and Agriculture Regulatory Enforcement Ombudsman and the Regional Small Business Regulatory Fairness Boards. The Ombudsman evaluates these actions annually and rates each agency’s responsiveness to small business. If you wish to comment on actions by employees of the Coast Guard, call 1–888–REG–FAIR (1–888–734–3247). The Coast Guard will not retaliate against small entities that question or complain about this rule or any policy or action of the Coast Guard.

C. Collection of Information

This rule will not call for a new collection of information under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520).

D. Federalism and Indian Tribal Governments

A rule has implications for federalism under Executive Order 13132, Federalism, if it has 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. We have analyzed this rule under that Order and have determined that it is consistent with the fundamental federalism principles and preemption requirements described in Executive Order 13132.

Also, this rule does not have tribal implications under Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, because it does not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes.

E. Unfunded Mandates Reform Act

The Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1531–1538) requires Federal agencies to assess the effects of their discretionary regulatory actions. In particular, the Act addresses actions that may result in the expenditure by a State, local, or tribal government, in the aggregate, or by the private sector of \$100,000,000 (adjusted for inflation) or more in any one year. Though this rule

will not result in such an expenditure, we do discuss the effects of this rule elsewhere in this preamble.

F. Environment

We have analyzed this rule under Department of Homeland Security Directive 023–01, Rev. 1, associated implementing instructions, and Environmental Planning COMDTINST 5090.1 (series), which guide the Coast Guard in complying with the National Environmental Policy Act of 1969 (42 U.S.C. 4321–4370f), and have determined that this action is one of a category of actions that do not individually or cumulatively have a significant effect on the human environment. This rule involves a safety zone from the New Jersey Turnpike/I-95 Fixed Bridge (River Mile 5.3) and 150 feet south of the existing Portal Bridge (River Mile 5.0) on the Hackensack River. It is categorically excluded from further review under paragraph L60(a) of Appendix A, Table 1 of DHS Instruction Manual 023–01–001–01, Rev. 1. A Record of Environmental Consideration supporting this determination is available in the docket. For instructions on locating the docket, see the **ADDRESSES** section of this preamble.

G. Protest Activities

The Coast Guard respects the First Amendment rights of protesters. Protesters are asked to call or email the person listed in the **FOR FURTHER INFORMATION CONTACT** section to coordinate protest activities so that your message can be received without jeopardizing the safety or security of people, places or vessels.

List of Subjects in 33 CFR Part 165

Harbors, Marine safety, Navigation (water), Reporting and recordkeeping requirements, Security measures, Waterways.

For the reasons discussed in the preamble, the Coast Guard amends 33 CFR part 165 as follows:

PART 165—REGULATED NAVIGATION AREAS AND LIMITED ACCESS AREAS

■ 1. The authority citation for part 165 continues to read as follows:

Authority: 46 U.S.C. 70034, 70051, 70124; 33 CFR 1.05–1, 6.04–1, 6.04–6, and 160.5; Department of Homeland Security Delegation No. 00170.1, Revision No. 01.3.

■ 2. Add § 165.T01–0404 to read as follows:

§ 165.T01–0404 Safety Zone; Hackensack River, Kearny and Secaucus, NJ.

(a) *Location.* The following area is a safety zone: All the navigable waters of the Hackensack River between the New Jersey Turnpike/I–95 Fixed Bridge (River Mile 5.3) and 150 feet south of the existing Portal Bridge (River Mile 5.0).

(b) *Definitions.* As used in this section, *designated representative* means a Coast Guard Patrol Commander, including a Coast Guard coxswain, petty officer, or other officer operating a Coast Guard vessel and a Federal, State, and local officer designated by or assisting the Captain of the Port New York (COTP) in the enforcement of the safety zone.

(c) *Regulations.* (1) Under the general safety zone regulations in subpart C of this part, you may not enter the safety zone described in paragraph (a) of this section unless authorized by the COTP or the COTP's designated representative.

(2) To seek permission to enter, contact the COTP or the COTP's representative via VHF Channel 16 or by phone at (718) 354–4353 (Sector New York Command Center). Those in the safety zone must comply with all lawful orders or directions given to them by the COTP or the COTP's designated representative.

(d) *Enforcement period.* This section is effective from November 21, 2024, through December 31, 2025, but will only be enforced during periods when heavy lift operations at the new bridge are in progress. The Coast Guard will make notice of this safety zone via the Local Notice to Mariners and issue a Broadcast Notice to Mariners via marine channel 16 (VHF–FM) as soon as practicable. In addition, if the project is completed before December 31, 2025, enforcement of the safety zone will be suspended, and notice given via Local Notice to Mariners.

Jonathan A. Andrechik,

Captain, U.S. Coast Guard, Captain of the Port Sector New York.

[FR Doc. 2024–27429 Filed 11–19–24; 4:15 pm]

BILLING CODE 9110–04–P

ENVIRONMENTAL PROTECTION AGENCY
40 CFR Part 52

[EPA–R04–OAR–2023–0220; FRL–10407–02–R4]

Air Plan Approval; Georgia; Second Period Regional Haze Plan

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is approving the regional haze State Implementation Plan (SIP) revision submitted by Georgia Department of Natural Resources, Environmental Protection Division (GA EPD), dated August 11, 2022 (“Haze Plan” or “2022 Plan”), as satisfying applicable requirements under the Clean Air Act (CAA or Act) and EPA’s Regional Haze Rule (RHR) for the regional haze program’s second planning period. Georgia’s SIP submission addresses the requirement that states must periodically revise their long-term strategies (LTS) for making reasonable progress toward the national goal of preventing any future, and remedying any existing, anthropogenic impairment of visibility, including regional haze, in mandatory Class I Federal areas (hereinafter referred to as “Class I areas”). The SIP submission also addresses other applicable requirements for the second planning period of the regional haze program. EPA is taking this action pursuant to sections 110 and 169A of the Act.

DATES: This rule is effective December 23, 2024.

ADDRESSES: EPA has established a docket for this action under Docket Identification No. EPA–R04–OAR–2023–0220. All documents in the docket are listed on the *regulations.gov* website. Although listed in the index, some information may not be publicly available, *i.e.*, Confidential Business Information (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 through *www.regulations.gov* or in hard copy at the Air Regulatory Management Section, Air Planning and Implementation Branch, Air and Radiation Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street SW, Atlanta, Georgia 30303–8960. EPA requests that, if at all possible, you contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section to schedule your inspection. The Regional Office’s official hours of business are Monday through Friday, 8:30 a.m. to 4:30 p.m., excluding Federal holidays.

FOR FURTHER INFORMATION CONTACT:

Estelle Bae, Air Permitting Section, Air Planning and Implementation Branch, Air and Radiation Division, Region 4, U.S. Environmental Protection Agency, 61 Forsyth Street SW, Atlanta, Georgia

30303–8960. The telephone number is (404) 562–9143. Ms. Bae can also be reached via electronic mail at *bae.estelle@epa.gov*.

SUPPLEMENTARY INFORMATION:

I. Background

On August 11, 2022, GA EPD submitted a revision to its SIP to address regional haze for the second planning period.^{1 2} GA EPD made this SIP submission to satisfy the requirements of the CAA’s regional haze program pursuant to CAA sections 169A and 169B and 40 Code of Federal Regulations (CFR) 51.308. EPA has determined that the Georgia regional haze SIP submission for the second planning period meets the applicable statutory and regulatory requirements and is thus approving Georgia’s submission into its SIP.

Through a notice of proposed rulemaking (NPRM), published on June 3, 2024 (89 FR 47481), EPA proposed to approve Georgia’s Haze Plan as satisfying the regional haze requirements for the second planning period contained in the CAA and 40 CFR 51.308. EPA described its rationale for proposing approval of the Haze Plan in the June 3, 2024, NPRM. Comments on the June 3, 2024, NPRM were due on or before July 3, 2024. EPA received two sets of comments on the NPRM. One set of comments received is not relevant to this action, and the other set of comments is addressed below. Both sets of comments are available in the docket for this action.

II. Response to Comments

In response to the NPRM, EPA received a comment letter signed by the National Parks Conservation Association (NPCA), Sierra Club, the Coalition to Protect America’s National Parks, and the Southern Environmental Law Center. Collectively, these groups will be referred to as the “Commenters.” In general, the Commenters state in their comment letter that Georgia, in its SIP submittal, and EPA, in its proposed approval of the SIP submittal, failed to

¹ The August 11, 2022, SIP submission, with exception of the supporting modeling files and CBI, is included in the docket for this rulemaking. Due to size and compatibility limitations of the Federal Docket Management System, the supporting modeling files for Georgia’s Regional Haze Plan are instead available at the EPA Region 4 office. To request these files, please contact the person listed in this rulemaking under the section titled **FOR FURTHER INFORMATION CONTACT**.

² On November 1, 2023, Georgia supplemented its August 11, 2022, Haze Plan by submitting the final permits for each of the three sources selected for an emissions control analysis. This supplemental submission, received November 1, 2023, along with GA EPD’s November 17, 2023, clarification email, is included in the docket for this action.

satisfy the requirements of the Act and the RHR. The Commenters thus request that EPA disapprove Georgia's SIP revision. Summaries of the significant comments received from the Commenters and EPA's responses to these comments are below.

Comment 1: The Commenters state that in 2021 they informed the Visibility Improvement State and Tribal Association of the Southeast (VISTAS) and EPA via letter of "significant errors" in the visibility modeling conducted by VISTAS for the VISTAS states—including Georgia—and that EPA did not acknowledge these errors in the NPRM. These alleged errors are addressed in Comments 1.a through 1.c below.

Comment 1a: The Commenters contend that the VISTAS modeling significantly underpredicted the contribution of sulfates to visibility impairment at Class I areas on the 20 percent most impaired days and that this underprediction, while prevalent across all seasons, was largest during the summer months.³ The Commenters also assert that these errors resulted in the modeling not meeting VISTAS' model performance goals and modeling acceptance criteria for a number of Class I areas. The Commenters further assert that although Georgia claims that it corrected for this underprediction through the use of relative response factors (RRFs), neither Georgia nor EPA assessed whether use of RRFs adequately corrected for errors in the modeling.

Response 1.a: Regarding the 2021 letter described by the Commenters,⁴ EPA disagrees with the Commenters that there are significant flaws in Georgia's 2028 visibility modeling that resulted in excluding major sources of haze-forming pollution from evaluation via Four-Factor Analyses (FFAs) for the second planning period. As the Commenters state, Georgia relied upon the photochemical visibility modeling performed by VISTAS to project the impact of the State's 2028 sulfur dioxide (SO₂) and nitrogen oxide (NO_x) emissions on visibility in both in-state and out-of-state Class I areas. VISTAS performed the modeling in accordance

with the principles described within EPA's "Modeling Guidance for Demonstrating Air Quality Goals for Ozone, PM_{2.5} and Regional Haze" (2018 Modeling Guidance).⁵ In 2018, EPA approved⁶ the Quality Assurance Project Plan prepared by VISTAS for performing the modeling and also reviewed and provided comments on the VISTAS Modeling Protocol. EPA also reviewed the VISTAS final modeling reports and data relied upon by Georgia and found them acceptable.

The Commenters assert that, due to errors, the modeling failed to meet VISTAS' model performance goals and modeling acceptance criteria for a number of Class I areas. Specifically, the Commenters assert that the VISTAS modeling significantly underpredicted the contribution of sulfate to visibility impairment on the 20 percent most impaired days and that the largest underprediction was during the summer months when visibility is most problematic at Class I areas. Figure 6–7 in Georgia's Haze Plan shows the results of the normalized mean bias and normalized mean error statistical model performance tests for sulfates.

Model bias and error, either high or low, is not uncommon in photochemical modeling analyses due to uncertainties in model inputs and the scientific model formulation, and the fact that all air quality models are simplified approximations of the complex phenomena of atmospheric chemistry, fate, and transport of pollutants. Section 6.0 of EPA's 2018 Modeling Guidance discusses uncertainties that may affect model results and provides recommendations to mitigate modeling bias and uncertainty. Georgia acknowledges that model performance is biased low on the 20 percent most impaired days and provided an explanation of why this modeling was appropriate for its regulatory determinations in the Haze Plan. Georgia references the 2018 Modeling Guidance, which states that it is not appropriate to use a "bright-line test" for distinguishing between adequate and inadequate photochemical model performance for a single performance test statistic. EPA's 2018 Modeling Guidance instead recommends using a "weight of evidence" approach for

evaluating model performance holistically.

As discussed in Section 5.2(d) of EPA's "Guideline on Air Quality Models" contained in 40 CFR part 51, Appendix W, there are no specific levels of any model performance metric that indicate acceptable model performance. The decision regarding acceptability is heavily influenced by professional judgment of the reviewing authority, which is EPA in this case. Based upon the overall performance of the model for all pollutants affecting visibility, considered holistically, EPA agrees with Georgia's conclusions that the modeling is acceptable for use in the regional haze SIP analyses, and the model bias was adequately explained by Georgia and therefore the source selection outcomes using the VISTAS' methodology were reasonable.

Just as importantly, Georgia took appropriate steps to correct for this model bias. The Haze Plan explains that the model is applied in a relative sense through the calculation of RRFs following the procedures in 2018 Modeling Guidance for calculating 2028 future year visibility impacts, which helps alleviate concerns about the low bias in the sulfate model predictions. As described in EPA's 2018 Modeling Guidance, RRFs are "the fractional change in air quality concentrations that is simulated due to emissions changes between a base and a future year emissions scenario."⁷

EPA agrees with Georgia that applying the model in a relative sense using the RRFs is an important tool in alleviating the impacts of the sulfate modeling underpredictions in the 2011 baseline year on the model projections for the 2028 future year. Section 4.1 of the 2018 Modeling Guidance provides a detailed explanation of why EPA recommends photochemical modeling be applied in a relative sense and explains that problems posed by model bias are expected to be reduced when using the relative approach. Section 7.2.5.1 of Georgia's Haze Plan explains the calculation of 2028 visibility estimates using the RRF approaches contained in EPA's 2018 Modeling Guidance. Using the RRF approach with an average of five years of Interagency Monitoring of Protected Visual Environments (IMPROVE)⁸ data on the 20 percent most impaired days and 20 percent clearest days along with the relative percent modeled change in all of the particulate matter (PM) species between 2011 and 2028 reduces the influence of

³ Areas statutorily designated as mandatory Class I Federal areas consist of national parks exceeding 6,000 acres, wilderness areas and national memorial parks exceeding 5,000 acres, and all international parks that were in existence on August 7, 1977. CAA 162(a). There are 156 mandatory Class I areas. The list of areas to which the requirements of the visibility protection program apply is in 40 CFR part 81, subpart D.

⁴ Exhibit 10 of the Conservation Groups' comments contains the May 12, 2021, letter regarding the VISTAS regional haze modeling for the second planning period.

⁵ "Modeling Guidance for Demonstrating Air Quality Goals for Ozone, PM_{2.5} and Regional Haze," EPA 454/R-18-009, November 29, 2018, (hereafter "2018 Modeling Guidance") is available at: https://www.epa.gov/sites/default/files/2020-10/documents/o3-pm-rh-modeling_guidance-2018.pdf.

⁶ The April 3, 2018, Quality Assurance Project Plan for the VISTAS II Regional Haze Project is located in Appendix A–1 of the Haze Plan.

⁷ See 2018 Modeling Guidance at p. 103.

⁸ IMPROVE visibility monitoring data is available at: <https://vista.cira.colostate.edu/Improve/>.

the bias in sulfate-modeled (and other PM species) values in the 2011 baseline year. The 2028 visibility impairment projection is derived primarily from the five-year average of actual IMPROVE monitoring data in 2009–2013 that was then scaled in a relative sense by the modeling results. If the model was being applied in an absolute sense, the low bias in the sulfate modeled values would have a larger impact on the 2028 visibility projections. For these reasons, Georgia's use of RRFs adequately minimized the impacts of model bias, and therefore, Georgia's source selection using the VISTAS' methodology was reasonable.

Comment 1.b: The Commenters also discuss several other alleged deficiencies with VISTAS' modeling. They state that VISTAS relied on an "outdated" 2011 baseline year for its 2028 future year emissions projections and assumed that electric generating units (EGUs) would operate in the exact same manner in 2028 as they did in 2011. Thus, the Commenters assert that this model assumption is incorrect because EGUs are likely to have different load utilization in 2028 than in 2011.

Response 1.b: Regarding the Commenters' comments about Georgia's use of a 2011 base emissions inventory year to project emissions out to 2028 (the end of the second planning period), EPA finds the 2011 baseline year acceptable in this instance. Although it is always preferable to use the most recent information available for modeling, the 2011 baseline year inventory used by VISTAS was the latest region-wide inventory available at the time that Georgia's SIP submittal was being developed during the VISTAS technical work, which took place from December 2017 to February 26, 2021.⁹ In EPA's experience, coordination among states such as those in the VISTAS region takes time, and the modeling involved is time-consuming, highly technical, and resource intensive. The modeling generally requires hundreds of hours of time to gather the model input data (e.g., emissions, meteorology, land-use, etc.), prepare modeling protocols, perform the modeling, and analyze the results. The computational resources to run photochemical models are also very large. "Mainframe" clusters of a large number of computer processors are required to run the models, and even using these powerful computers, it takes weeks of computer run-time for a full-

year model simulation. Additionally, EPA's newer 2016-based modeling platform only became available in September 2019, after VISTAS had already invested a considerable amount of time and money into the regional haze modeling analysis.¹⁰

EPA develops the National Emission Inventory (NEI) suitable for use in such models every three years.¹¹ By design, the regional haze program requires states to spend significant time in the planning phase, and this generally necessitates the use of a baseline year that is substantially earlier than the date the state submits its SIP to EPA. Here, it is reasonable that Georgia utilized the 2011 emissions inventory year on which to base the technical work for the following reasons. There is no RHR requirement regarding the baseline year for regional photochemical modeling (nor is photochemical modeling required). GA EPD justifies the use of this particular baseline year and states that the 2011 emissions inventory was the most recently available quality assured statewide emissions inventory when the VISTAS project began for the second planning period. Moreover, prior to using this data, GA EPD discussed the selection of this baseline year emissions inventory and received confirmation from EPA to use this emissions inventory.¹² Given the aforementioned reasons, EPA finds the use of the 2011 baseline year by VISTAS, and thus Georgia, reasonable.

The 2011 emissions inventory was used to estimate emissions of visibility impairing pollutants in 2028 to develop the 2028 projections. VISTAS applied reductions expected from federal and state regulations to the visibility impairing pollutants NO_x, PM, and SO₂. Georgia's 2028 emissions projections are based on the State's technical analysis of the anticipated emissions rates and level of activity for EGUs, other point sources, non-point sources, on-road sources, and off-road sources based on their emissions in the 2011 base year, considering growth and additional emissions controls to be in place by 2028. In addition, the VISTAS emissions inventory for 2028 accounts for post-2011 emission reductions from

promulgated federal, state, local, and site-specific control programs.

Although Georgia used the 2011 year as its emissions inventory base year, as required by the RHR at 40 CFR 51.308(f)(2)(iii), Georgia also examined more recent emissions inventory information for SO₂ and NO_x for the years 2017, 2018, and 2019 and compared these emissions to the 2028 emission projections that were used for modeling purposes in Section 7.6.5 and Tables 7–32 and 7–33 of its Haze Plan. This helps to ensure that the State adequately considered more recent emissions inventory information when developing its LTS. The technical information provided in the docket demonstrates that the emissions inventory in the Haze Plan adequately reflects projected 2028 conditions. Given the aforementioned reasons, EPA finds the use of the 2011 baseline year by VISTAS (and thus Georgia) reasonable.

Comment 1.c: The Commenters state that VISTAS used "outdated" monitoring data for its 2028 future year projections that did not reflect an observed shift in nitrate contribution to visibility impairment in the southeastern United States in the recent past. Consequently, the Commenters assert that Georgia improperly excluded major sources of haze-forming pollution from FFAs.¹³

Response 1.c: Regarding the Commenters' claims that the 2009–2013 modeling base period did not reflect more recent changes in nitrate contributions, EPA discussed its views on this issue in detail in the NPRM. Nitrates are also discussed in Response 3, below. EPA agrees that after the 2009–2013 timeframe, nitrate impacts have become more significant on some of the 20 percent most impaired days, especially taking into account the significant decrease in SO₂ emissions and measured sulfate concentrations as acknowledged in the NPRM. EPA nonetheless agrees with Georgia's conclusion that for the second planning period, sulfates remain the dominant visibility impairing pollutant at the Class I areas affected by Georgia, and therefore, it is reasonable for Georgia to focus on SO₂ emitting sources during this period.¹⁴

¹⁰ See "Technical Support Document for EPA's Updated 2028 Regional Haze Modeling" at: <https://www.epa.gov/visibility/technical-support-document-epas-updated-2028-regional-haze-modeling>.

¹¹ For more information on the NEI, see: <https://www.epa.gov/air-emissions-inventories/national-emissions-inventory-nei>.

¹² See the January 29, 2018, email from EPA (Richard Wayland) regarding use of a 2011 base year by VISTAS for regional haze in the docket for this rulemaking.

¹³ The amount of progress that is "reasonable progress" is based on applying the four statutory factors in CAA section 169A(g)(1) in an evaluation of potential control options for sources of visibility impairing pollutants, which is referred to as a "four-factor analysis."

¹⁴ Out-of-state Class I areas affected by Georgia sources are: Florida, South Carolina, North Carolina, and Tennessee. Figures 2–8 and 2–9 of the Haze Plan provide the 2014–2018 IMPROVE data for the VISTAS Class I areas.

⁹ See "Timeline" for the VISTAS II Regional Haze Project at: <https://www.metro4-sesarm.org/content/vistas-regional-haze-project-intro>.

Comment 2: The Commenters assert that Georgia's source selection process was unreasonable and too restrictive, based, in part, on their concerns summarized in Comment 1.

Additionally, the Commenters state that Georgia's use of VISTAS' multi-step source screening process using Area of Influence (AoI) and Particulate Matter Source Apportionment Technology (PSAT) analysis was unreasonable. They therefore contend that EPA's proposal to approve the State's source selection method is arbitrary and capricious. The Commenters' specific comments on this topic are addressed in Comments 2.a through 2.f, below.

Comment 2.a: The Commenters also claim that the State employed unreasonably high source selection thresholds for AoI, which were too restrictive and resulted in the identification of only five sources at that step. The Commenters assert that by using a percentage source selection threshold (for AoI and PSAT), the calculated threshold in absolute visibility impact terms was higher for Class I areas with the most severe visibility impairment. This in turn, they contend, meant that fewer sources were identified at the AoI step for Class I areas with the worst visibility impairment. The Commenters state that for the areas with the worst visibility impairment, more sources should be selected to make progress toward the natural visibility goal. In addition, the Commenters assert that neither Georgia nor EPA provide any justification for doubling the AoI threshold for out-of-state sources compared to in-state sources.

Response 2.a: Concerning the Commenters' argument that the State's source selection threshold is unreasonable, as explained in the NPRM, the RHR does not require states to consider controls for all sources, all source categories, or any or all sources in a particular source category. Nor does the RHR expressly specify criteria for minimum source selection thresholds.

These flexibilities are, however, not unbounded. The RHR requires that "[t]he State should consider evaluating major and minor stationary sources or groups of sources, mobile sources, and area sources. The State must include in its implementation plan a description of the criteria it used to determine which sources or groups of sources it evaluated and how the four factors were taken into consideration in selecting the measures for inclusion in its long-term strategy."¹⁵ In addition, the technical basis for source selection must also be documented, as required by 40 CFR 51.308(f)(2)(iii). Thus, states must utilize a reasonable source selection methodology,¹⁶ and whatever choices states make regarding source selection should be reasonably explained.¹⁷ Georgia met these requirements. Specifically, Georgia discussed the criteria it used to determine which sources or groups of sources were evaluated by the State, including the use of AoI analysis, photochemical modeling (e.g., PSAT), and associated source selection thresholds for AoI and PSAT tagging in its Haze Plan. Georgia documented its use of these approaches in extensive detail within Section 7.5 of the Haze Plan and Appendices D-1 and D-2 of the Haze Plan (relating to AoI

analysis) and Section 7.6 of the Haze Plan and Appendices E-1a, E-1b, E-2a, E-2b, E-2c, E-2d, E-2e, E-2f, E-3, E-4, E-5, E-6, E-7a, E-7b, and E-8 of the Haze Plan (relating to PSAT modeling).

Georgia's documentation adequately demonstrates why its source selection methodology—including the use of an AoI threshold of two percent¹⁸ for in-state sources for follow-up PSAT tagging, and a one percent PSAT threshold on a pollutant-by-pollutant basis for source selection—is reasonable. For the reasons stated in the NPRM (89 FR 47497), EPA finds that Georgia's source selection methodology was reasonable and resulted in the selection of a reasonable set of sources contributing to visibility impairment at Class I areas affected by Georgia's sources. The State's methods for selecting sources for a control analysis and the State's AoI and PSAT analyses identified sources in Georgia having the highest impact on visibility at Class I areas at the end of the second planning period and identified sources outside of Georgia having the largest impacts on visibility at Class I areas in the State. A specific source selection approach is not required by the RHR.¹⁹

The results of this methodology were reasonable as well. On the whole, SO₂ emissions from the three in-state sources selected by Georgia for FFAs—Georgia Power Company's Plant Bowen ("Plant Bowen"), International Paper's Savannah Mill ("IP-Savannah"), and Brunswick Cellulose—are projected to impact visibility at Class I areas as described in Table 1 below.²⁰

TABLE 1—SULFATE PSAT CONTRIBUTIONS (%) FOR PLANT BOWEN, IP-SAVANNAH, AND BRUNSWICK CELLULOSE AT CLASS I AREAS ON 20% MOST IMPAIRED DAYS *

Class I area **	Plant Bowen	IP-Savannah	Brunswick Cellulose
Cohutta National National Wilderness Area (Cohutta) (GA)	2.13	.....	.....
Okefenokee National Wilderness Area (Okefenokee) (GA)	2.30	1.04	.....
Wolf Island National Wilderness Area (Wolf Island) (GA) ***	2.33	1.54	1.76
Chassahowitzka National Wilderness Area (FL)	2.28	.....	.....
St Marks National Wilderness Area (FL)	4.89	.....	.....
Linville Gorge National Wilderness Area (NC)	1.13	.....	.....
Shining Rock National Wilderness Area (NC)	1.29	.....	.....
Swanquarter National Wilderness Area (NC)	1.03	.....	.....

¹⁵ See 40 CFR 51.308(f)(2)(i).

¹⁶ As explained in the July 8, 2021, EPA memorandum containing "Clarifications Regarding Regional Haze State Implementation Plans for the Second Implementation Period" ("2021 Clarifications Memo"), a reasonable source selection process "should be designed and conducted to ensure that source selection results in a set of pollutants and sources the evaluation of which has the potential to meaningfully reduce their contributions to visibility impairment." See 2021 Clarifications Memo at 3 available at: [https://www.epa.gov/system/files/documents/2021-07/](https://www.epa.gov/system/files/documents/2021-07/clarifications-regarding-regional-haze-state-implementation-plans-for-the-second-implementation-period.pdf)

[clarifications-regarding-regional-haze-state-implementation-plans-for-the-second-implementation-period.pdf](https://www.epa.gov/system/files/documents/2021-07/clarifications-regarding-regional-haze-state-implementation-plans-for-the-second-implementation-period.pdf).

¹⁷ See 89 FR 47481, 47493 (June 3, 2024); see also Sections 2 and 2.1 of 2021 Clarifications Memo.

¹⁸ The State's use of a four percent AoI threshold for out-of-state sources is discussed below in Response 2.a.

¹⁹ Both of these approaches (AoI and PSAT) are example methods in EPA's August 20, 2019, guidance titled: "Guidance on Regional Haze State Implementation Plans for the Second Implementation Period" ("2019 Guidance") which

is available at: https://www.epa.gov/sites/default/files/2019-08/documents/8-20-2019_-_regional_haze_guidance_final_guidance.pdf. See subsection "b) Estimating baseline visibility impacts for source selection" on pages 12–15 of the 2019 Guidance. PSAT is a type of photochemical modeling which is item 4 on page 13 of the 2019 Guidance. VISTAS' AoI analyses involve items 1–3 on page 13 of the 2019 Guidance.

²⁰ No sources met Georgia's Nitrate PSAT threshold of greater than or equal to one percent on the 20 percent most impaired days.

TABLE 1—SULFATE PSAT CONTRIBUTIONS (%) FOR PLANT BOWEN, IP-SAVANNAH, AND BRUNSWICK CELLULOSE AT CLASS I AREAS ON 20% MOST IMPAIRED DAYS *—Continued

Class I area **	Plant Bowen	IP-Savannah	Brunswick Cellulose
Cape Romain National Wilderness Area (SC)	3.53	1.28	.....
Joyce Kilmer-Slickrock National Wilderness Area (TN and NC)	1.11	.....	.....

* Note that fields in the above table left blank indicate that visibility impacts are below one percent.

** The Class I areas listed in Table 1, above, are included because the Georgia facilities in this table have a sulfate PSAT contribution of one percent or more at one or more of these areas.

*** Wolf Island has no IMPROVE monitor. Visibility at Wolf Island is assumed to be the same as the nearest Class I area monitor located at Okefenokee.

Although these three sources are the largest contributors within Georgia to visibility impairment at Class I areas, Table 1 shows Sulfate PSAT visibility impacts from these sources range from approximately one to five percent at the selected Class I areas. This is due to the fact that most anthropogenic impacts to

visibility at these Class I areas come from outside of Georgia. In fact, they primarily come from outside of the VISTAS states. This is illustrated in Table 7–4 of the Haze Plan, which provides the contributions from 2028 SO₂ and NO_x emissions to visibility impairment from all source sectors for

the 20 percent most impaired days in units of inverse megameters (Mm^{–1}). The entries in Table 2, below, show the contributions made from Georgia, all other VISTAS states, and other Regional Planning Organizations to Georgia's Class I areas.

TABLE 2—CONTRIBUTIONS OF 2028 SO₂ AND NO_x EMISSIONS FROM ALL SOURCE SECTORS TO VISIBILITY IMPAIRMENT FOR THE 20 PERCENT MOST IMPAIRED DAYS FOR CLASS I AREAS IN GEORGIA[Mm^{–1}]*

Class I area **	Projected 2028 impairment on 20% most impaired days	GA	All other VISTAS states	CENRAP region ***	LADCO region ***	MANE–VU region ***	WRAP region within VISTAS modeling domain ***
COHU	45.28	1.04	5.19	1.76	6.88	0.87	2.30
OKEF	54.66	2.17	7.57	2.27	3.60	1.01	2.84
WOLF	53.59	2.57	6.56	2.15	3.44	1.15	3.41

* As noted in Georgia's Haze Plan, the columns to the right of "Projected 2028 Impairment on 20% Most Impaired Days" do not add up to the values in the "Projected 2028 Impairment on 20% Most Impaired Days" column due to international emissions and boundary emissions.

*** "COHU" refers to Cohutta; "OKEF" refers to Okefenokee; and "WOLF" refers to Wolf Island.

*** "CENRAP" refers to Central Regional Air Planning Association (which is associated with the Central States Air Resource Agencies (CENSARA)); "LADCO" refers to Lake Michigan Air Directors Consortium; "MANE–VU" refers to Mid-Atlantic/Northeast Visibility Union; "WRAP" refers to Western Regional Air Partnership. See also: <https://www.epa.gov/visibility/visibility-regional-planning-organizations>.

Table 2, above, illustrates that Georgia's in-state emissions account for a relatively small fraction of total visibility impairment at Georgia's Class I areas. This fraction is approximately 2.29 percent for Cohutta, 3.97 percent

for Okefenokee, and 4.79 percent for Wolf Island.²¹

Likewise, the PSAT Tag Results spreadsheet in Appendix E–7A of the Haze Plan shows the visibility impacts on a facility-by-facility basis due to SO₂

emissions. Specifically, Appendix E–7A shows the following SO₂ visibility impacts to Georgia's Class I areas on the 20 percent most impaired days in units of Mm^{–1}.

TABLE 3—SO₂ VISIBILITY IMPACTS TO GEORGIA CLASS I AREAS ON THE 20 PERCENT MOST IMPAIRED DAYS[Mm^{–1}]

Class I area	Plant Bowen contribution	IP-Savannah contribution	Brunswick Cellulose to 20% contribution	Total of Georgia selected sources	Georgia total contribution	All sources (including out-of-state) contribution
COHU	0.282	0.038	0.002	0.322	0.803	15.6
OKEF	0.308	0.140	0.077	0.525	1.669	16.4
WOLF	0.302	0.200	0.228	0.458	2.124	16.2

The above data in Table 3 further supports that Georgia's source selection thresholds and source selection methodology were reasonable.

Specifically, on the 20 percent most impaired days, Georgia's selected in-state sources are responsible for approximately 40 percent of Georgia's

total in-state SO₂ visibility impairment at Cohutta, 31.5 percent of total in-state SO₂ visibility impairment at Okefenokee, and 21.6 percent of total in-

²¹ These percentages were calculated by dividing the "GA" column by the "Projected 2028 20% Most Impaired Days Column" and multiplying by 100.

state SO₂ visibility impairment at Wolf Island.²² States are not required by the RHR to select every source in the state, and the state selected the in-state sources with the largest visibility impacts on in-state and nearby Class I areas. The selection of the above sources captured sufficient visibility-impairing emissions to allow Georgia to ensure that FFAs conducted for this planning period had the potential to meaningfully reduce emissions (and thus, associated visibility impacts at Class I areas) from in-state sources.

Table 3 also shows that most emissions of visibility-impairing sulfates that impact Georgia's Class I areas on the 20 percent most impaired days are emitted from outside of Georgia. The same general pattern holds for the 20 percent least impaired days as well. Georgia does not have jurisdiction through its SIP to regulate sources outside of state boundaries. Georgia did, however, request FFAs from other states for an additional 14 facilities outside of Georgia through the interstate consultation process.²³ The "regional" nature of the regional haze program necessarily requires Georgia to rely on reasonable progress made by other states, just as other states must rely on Georgia to make reasonable progress.

The Commenters also argue that neither Georgia nor EPA provided justification for doubling the AoI threshold for out-of-state sources. In its Haze Plan, Georgia explained that use of an AoI contribution of four percent or more to tag sources for PSAT captures large sources outside of Georgia. When selecting out-of-state sources, 40 CFR 51.308(f)(2)(ii) applies. 40 CFR 51.308(f)(2)(ii) requires states to "consult with those States that have emissions that are reasonably anticipated to contribute to visibility impairment in the mandatory Class I Federal area." The use of the four percent AoI threshold allowed Georgia to identify "emissions that are reasonably anticipated to contribute to visibility impairment" ²⁴ at Class I areas within Georgia that are emitted from out-of-state, and indeed, using this methodology combined with follow-up PSAT tagging and modeling, Georgia sought interstate consultation for 14 such sources.

Turning to the Commenters' other source selection comments, they assert that by using a percentage threshold for AoI and PSAT, the calculated threshold

in absolute visibility impact terms was higher for Class I areas with the most severe visibility impairment, which resulted in fewer sources being evaluated for reasonable progress for the most visibility-impaired Class I areas. Thus, the Commenters assert that the use of a percentage threshold was unreasonable.

EPA disagrees. Regardless of whether a relative or absolute threshold is used, the number of sources selected depends on the chosen value of the threshold. A percentage threshold, rather than one using inverse megameters or deciviews, may capture more sources at areas with less visibility impairment or areas where no or few sources exceed an absolute visibility impairment threshold. When using an absolute value threshold instead of a percentage threshold, Class I areas with less visibility impairment might not have any sources selected at all that impact those areas. Thus, in general, the use of a percentage threshold is consistent with the requirement to make reasonable progress toward remedying visibility impairment in each Class I area. As noted above, states have flexibility to adopt any source selection methodology so long as the methodology is reasonable, and the states' choices are reasonably explained. EPA finds that Georgia's source selection method is reasonable and adequately explained for the reasons discussed above.

Comment 2.b: The Commenters also state in their comments that VISTAS considered sulfate and nitrate separately in model analyses, which the Commenters allege does not align with how these pollutants actually function in the atmosphere. They state that sulfate and nitrate act in combination in the atmosphere, along with other haze precursors, to contribute to visibility impairment. As a result, they argue that VISTAS likely underestimated the overall visibility impact of individual sources in its PSAT analysis.

Response 2.b: Regarding the Commenters' assertion that VISTAS considered sulfate and nitrate separately in model analyses, which led to underestimating the visibility impacts in the PSAT analyses, EPA disagrees. In the AoI screening analysis, VISTAS used the combined sulfate plus nitrate values to select sources to tag for the refined PSAT source apportionment modeling analyses. Section 7.5.5 of the Haze Plan explains how Georgia used the results of the AoI analysis to select sources for further evaluation with PSAT. This section shows that facilities contributing more than two percent (in-state) or four percent (out-of-state) of

sulfate plus nitrate were selected for PSAT tagging. See Tables 7–8 through 7–10 for the specific sources with sulfate plus nitrate values greater than Georgia's AoI source selection thresholds.

Also, contrary to the Commenters' assertion, sulfates and nitrates were modeled together in the PSAT modeling with the other PM species that impact visibility (e.g., direct PM, organic carbon, elemental carbon, etc.). Section 7.6.2 of Georgia's Haze Plan summarizes the results of the PSAT modeling. This section states that: "The adjusted PSAT results were used to calculate the percent contribution of each tagged facility to the total sulfate and nitrate point source (EGU + non-EGU) contribution at each Class I area." Tables 7–16 through 7–18 contain the specific PSAT results for each of Georgia's Class I areas. It is true that Georgia considered the PSAT modeled results for sulfate and nitrate separately to compare against its selected one percent threshold to identify a reasonable number of sources for reasonable progress analyses. EPA agrees with the State that this approach is reasonable for the reasons discussed above and was adequately justified in the Haze Plan.

Comment 2.c: The Commenters state that VISTAS used an outdated 2028 emissions projection to "tag" sources. They note that although VISTAS documented that the initial 2028 emission inventory projections were updated for the final modeling, the associated PSAT modeling did not use the final 2028 inventory. The Commenters state that VISTAS scaled predicted sulfate and nitrate to the corresponding changes in SO₂ and NO_x emissions using a linear relationship between SO₂ and NO_x emissions and sulfate and nitrate concentrations. They argue that there is a non-linear relationship between emissions and sulfate/nitrate concentrations. These factors all are argued by the Commenters to have introduced errors into the VISTAS modeling. Moreover, the Commenters argue the PSAT tagging process was entirely unnecessary, as the AoI step would have already identified the sources that contributed to impairment at Class I areas.

Response 2.c: VISTAS used the original 2028 emissions inventory to perform the PSAT modeling and the original PSAT results were linearly scaled to reflect the updated 2028 emissions. Although linear scaling introduces some uncertainty to the final PSAT results, EPA agrees with VISTAS and Georgia that adjusting the results to account for VISTAS' updated 2028

²² These percentages were calculated by dividing the "Total of Selected Georgia Sources" column by the "Georgia Total Contribution" column and multiplying by 100.

²³ See Haze Plan Section 7.6.

²⁴ 40 CFR 51.308(f)(2)(ii).

emissions inventory using linear scaling is a reasonable approach to account for VISTAS' updated 2028 emissions projections and is a better approach than relying on the original PSAT modeling. Linear scaling of photochemical modeling results to account for changes in emissions is, in most cases, reasonable and is an accepted practice by EPA. As an example, EPA guidance recommends using EPA's Modeled Emission Rates for Precursors (MERPs) for evaluating secondary particulate matter of 2.5 micrometers or less in diameter (PM_{2.5}) impacts in Prevention of Significant Deterioration (PSD) modeling analyses and allows for and recommends scaling of photochemical modeling results based on emissions.²⁵ This guidance recommends an approach where the PM_{2.5} impacts are estimated using an archived national-scale photochemical modeling analysis, performed using Comprehensive Air Quality Model with Extensions (CAMx) and Community Multiscale Air Quality (CMAQ)²⁶ photochemical models, that uses hypothetical emissions sources, and then linearly scaling the photochemical modeling results using the ratio of the PSD project-specific source emissions to the modeled emissions from the hypothetical source (see Equation 1 on page 3 of the referenced April 30, 2024, MERPs memorandum). This approach is widely used and accepted by state air quality agencies and EPA to account for secondarily formed PM_{2.5} from precursor emissions (SO₂ and NO_x) for PSD modeling analyses. Since the VISTAS analyses used for regional haze modeling use linear scaling with CAMx and for the same PM_{2.5} precursors (SO₂ and NO_x) as the MERPs analyses, EPA finds the method of linear scaling of PM precursor emissions conducted by VISTAS to be acceptable practice.

Regarding the Commenters' assertion that the PSAT tagging process was unnecessary because the AoI step already identified the sources that contributed to impairment at Class I areas, EPA disagrees with the premise of this comment. The standard is not whether the state's source selection approach is necessary or required, but rather, whether the approach is reasonable and is reasonably

explained.²⁷ The two-step process of screening with the AoI analysis and then applying the more refined PSAT source apportionment modeling to sources that met the initial AoI screening criteria is a sound technical approach for identifying sources to evaluate for reasonable progress. Elements of Georgia's AoI approach are discussed in EPA's 2019 Guidance as a viable method to assess sources' visibility impacts to Class I areas.²⁸ Georgia, along with many of the VISTAS states, also relied upon the AoI initial screening approach in its first planning period Haze Plan.²⁹ VISTAS used the AoI analysis as an initial screening step because it is a much simpler and less resource intensive approach than using PSAT tagging to model hundreds to thousands of potential sources. The AoI screening approach identified a smaller subset of sources that could undergo refined analysis using PSAT modeling. EPA finds the two-step process of first screening with the AoI analysis followed by use of the more refined PSAT source apportionment modeling to sources is valid and reasonable. Also, as discussed above, states have discretion under the RHR regarding choice of source selection methodology. Georgia's approach is acceptable for these reasons.

Comment 2.d: The Conservation Groups note that Georgia relied on the PSAT modeling results for its multiple in-state sources that are located less than 50 kilometers (km) from a Class I area and claim that PSAT modeling has been shown to be unreliable for sources that are within a short distance from a Class I area, referencing Federal Land Manager (FLM)³⁰ guidance that addresses regional grid models. The Commenters assert that this caused Georgia to improperly screen out sources. Specifically, the Commenters

argue that the FLMs' Air Quality Related Values Work Group (FLAG) Guidance indicates that photochemical grid models are not the preferred model for evaluating visibility impacts from sources less than 50 km from Class I areas and reference the use of direct plume impact models.³¹ According to the Conservation Groups, this guidance shows that regional grid models are not preferred for sources located close to Class I areas and that the grid size used by VISTAS is too small to produce accurate results for those sources.

Response 2.d: The Commenters do not provide any specific model performance information demonstrating that the CAMx model nor the PSAT source apportionment tool have poor model performance for evaluating visibility impacts from sources located within 50 km of any of the Class I areas located in Georgia.

The Commenters take the FLMs' FLAG guidance out of context. The FLAG reference to direct plume models (e.g., Plume Visibility Model)³² is for evaluating visibility impacts under the New Source Review (NSR)/PSD permitting regulations and not for regional haze analyses. EPA's regional haze regulations do not require evaluations of direct plume impacts separate from the photochemical modeling analyses used for regional haze visibility analyses.

The Commenters assert that since the horizontal grid size used in the VISTAS CAMx modeling was 12 km, it is insufficient to resolve the details of emissions plumes from facilities within 50 km of a Class I area and that the model performance degrades substantially at close-in distances. The general statement from the Commenters that model performance substantially degrades within 50 km is not supported by any specific evidence in the comments. Moreover, the Commenters' position is belied by the fact that one of the three sources selected by Georgia—Brunswick Cellulose—is 27.9 km from the nearest Class I area (Wolf Island). EPA thus reaffirms that Georgia's CAMx PSAT modeling was appropriate for selecting sources for reasonable progress analyses.

³¹ Conservation Groups cite to the FLAG Guidance at 2024 Kordzi Report at pp. 7–10.

³² The Plume Visibility Model "PLUVUE" is used for estimating visual range reduction and atmospheric discoloration caused by plumes resulting from the emissions of particles, nitrogen oxides, and sulfur oxides from a single source. See "PLUVUE II" at: <https://www.epa.gov/scram/air-quality-dispersion-modeling-alternative-models>. The User's Guide is available at: <https://goftp.epa.gov/Air/aqmg/SCRAM/models/other/pluvueii/PluvueUG.pdf>.

²⁵ "Clarification on the Development of Modeled Emission Rates for Precursors (MERPs) as a Tier 1 Demonstration Tool for Ozone and PM_{2.5} under the PSD Permitting Program," April 30, 2024, Memorandum from Tyler Fox to Regional Office Modeling Contacts is available at: https://www.epa.gov/sites/default/files/2020-09/documents/epa-454_r-19-003.pdf.

²⁶ See <https://www.epa.gov/cmaq> for further information on CMAQ.

²⁷ See 40 CFR 51.308(f)(2)(i), (iii); 89 FR 47481, 47493 (June 3, 2024); see also Sections 2 and 2.1 of 2021 Clarifications Memo.

²⁸ EPA's 2019 Guidance, pages 12–14, describe components of Georgia's AoI approach, including Q/d, trajectory analyses, residence time analyses, and source apportionment photochemical modeling (e.g., CAMx PSAT).

²⁹ See e.g., 77 FR 1163 published February 27, 2012, for a description of Georgia's AoI approach in the first planning period. On May 4, 2018, EPA fully approved Georgia's first period regional haze plan, effective June 4, 2018. See 83 FR 19637.

³⁰ EPA's regulations define "Federal Land Manager" as "the Secretary of the department with authority over the Federal Class I area (or the Secretary's designee) or, with respect to Roosevelt-Campobello International Park, the Chairman of the Roosevelt-Campobello International Park Commission." See 40 CFR 51.301. The U.S. National Park Service (NPS), U.S. Fish and Wildlife Service (FWS), and U.S. Forest Service (USFS) are collectively referred to as the "Federal Land Managers" or "FLMs" throughout this document.

The Commenters separately argue that Georgia's correlation analysis of the sulfate AoI versus PSAT presented in Section 7.6.3 of the Haze Plan is flawed. The Commenters in the Kordzi Report point out the scatter in the AoI/PSAT ratio data for distances less than 100 km in Figure 7–42 of the Georgia Haze Plan and argue this makes the State's correlation conclusions invalid. Also, the Commenters refer to the scatter in the sulfate fractional bias values in Figure 7–43 in the Haze Plan and argue the AoI versus PSAT correlation is invalid.

EPA disagrees. Georgia's Figure 7–43 has a coefficient of determination (R^2) that appears to have a strong correlation, and the Commenters provided no new information that Georgia's correlation results were flawed. While there is more scatter between the data points less than 100 km from the Class I area, there is clearly a trend that the AoI values are much larger than the PSAT values within 100 km compared to the ratios for further distances. There is logic to this result due to the way the AoI metric is calculated using the Extinction Weighted Residence Times (EWRT) multiplied by the Emissions divided Distance (EWRT $\times$ Q/d). The EWRT is calculated using the frequency that winds (represented by Hybrid Single-Particle Lagrangian Integrated Trajectory (HYSPLIT) back trajectories) pass over a specific geographic area (represented by a modeling grid cell) on the path to the Class I area.³³ For sources located less than 100 km from a Class I area, there is likely to be a higher frequency of the HYSPLIT back trajectories passing over the 12 km grid cell containing the source, thus the EWRT and AoI value will be larger. The CAMx PSAT modeling is a more refined photochemical modeling approach that calculates the atmospheric fate and transport of the PM precursors and their chemical reactions to form visibility impairing pollutants (e.g., ammonium sulfate). Therefore, compared to the AoI screening process, the refined PSAT technique is less likely to overestimate the visibility impacts for sources located within 100 km of the Class I area. Regarding the scatter of the data resulting in the AoI to PSAT fractional bias correlation, EPA acknowledges that there is scatter in the data which is reflected in the 0.72 R^2 value shown in Figure 7–43 in the Haze Plan. However, this level of correlation is not uncommon in these types of modeling data analyses, and the results are

reasonable. For these reasons, Georgia's correlation approach is valid.

The photochemical modeling employed by VISTAS and Georgia is the most refined methodology available for evaluating regional haze visibility impacts. Moreover, Georgia's AoI screening process identified sources located within 50 km of its Class I areas, including the Brunswick Cellulose facility located approximately 30 km from Wolf Island that met the PSAT source selection criteria and underwent an FFA to evaluate reasonable progress. As discussed above, Georgia demonstrated in Section 7.6.3 of the Haze Plan that the AoI screening technique overestimates visibility impacts for sources located within 100 km of a Class I area. Based upon this AoI overestimation, in Section 7.6.4 of the Haze Plan, Georgia explains why sources (with the exception of Brunswick Cellulose which is located 27.9 km from Wolf Island) that are located less than 100 km from its Class I areas were not tagged for PSAT modeling and thus were not selected for FFAs. EPA finds that Georgia adequately justified why the other sources within 100 km of Class I areas were not selected for FFAs.

Comment 2.e: The Commenters also note that EPA stated in guidance³⁴ that use of a source selection threshold that captures only a small portion of a state's contribution to visibility impairment in Class I areas is more likely to be unreasonable. The Commenters assert that to ensure Georgia captured a meaningful portion of in-state sources, a different selection method with a lower threshold should have been used, such as a "Q/d" (emissions (Q) divided by distance to a Class I area (d)). The Commenters assert that utilizing this method with a threshold of five or lower might have resulted in up to 21 sources in Georgia being selected for an FFA.

Response 2.e: Regarding the Commenters' argument that the State should have adopted a different selection method (such as Q/d) with a lower threshold to select more sources, as discussed above, a state is not required to evaluate all sources of emissions in each planning period. Instead, a state may reasonably select a set of sources for an analysis of control measures. Selecting a set of sources for analysis of control measures in each

planning period is also consistent with the RHR, which sets up an iterative planning process and anticipates that a state may not need to analyze control measures for all its sources in a given SIP revision. See 2019 Guidance at 9. Moreover, use of Q/d (which simply involves dividing the quantity of emissions by the distance to a Class I area) does not consider transport direction/pathway, dispersion and photochemical processes, or the particular days that have the most anthropogenic impairment due to all sources. 2019 Guidance at 13. Therefore, compared to photochemical modeling, using a simple Q/d technique as Commenters suggest would have resulted in a less accurate quantification of visibility impacts on Class I areas. As for the use of specific source selection thresholds (including Commenters' suggested Q/d threshold of above five), as discussed in detail above, Georgia's source selection methodology and thresholds were well documented and reasonable.

Comment 2.f: The Commenters also assert that EPA's position that Georgia's source selection method is reasonable given the specific circumstances present in Georgia, including that Georgia is not contributing to visibility impairment at any Class I areas above the Uniform Rate of Progress (URP), is not a valid basis on which EPA can approve the State's selection method.³⁵ Specifically, the Commenters note that the glidepath (i.e., URP) is not a "Safe Harbor" to avoid requiring additional reasonable progress measures for Class I areas. Separately, the Commenters take issue with EPA's statement in the NPRM that Georgia's source selection methodology is also reasonable given the "specific circumstances present in Georgia" which precedes a factual recitation of the improvements in visibility since the 2000–2004 baseline and Georgia's lack of contribution to any Class I area above the URP.

Response 2.f: EPA agrees that the URP is not a "safe harbor" to avoid requiring additional reasonable progress measures. However, being below the URP is relevant to whether a state needs to perform a "robust demonstration" based on the requirements in 40 CFR 51.308(f)(3)(ii)(A) and 40 CFR 51.308(f)(3)(ii)(B). Therefore, the factual

³³ This is explained in much greater detail in Section 7.5 of the Haze Plan.

³⁴ "Clarifications Regarding Regional Haze State Implementation Plans for the Second Implementation Period." <https://www.epa.gov/system/files/documents/2021-07/clarifications-regarding-regional-haze-state-implementation-plans-for-the-second-implementation-period.pdf>. EPA Office of Air Quality Planning and Standards, Research Triangle Park (July 8, 2021).

³⁵ The URP (also commonly referred to as the "glidepath") is the linear rate of progress needed to attain natural visibility conditions, assuming a starting point of baseline visibility conditions in 2004 and ending with natural conditions in 2064. The URP is used as a tracking metric to help States assess the amount of progress they are making toward the national visibility goal over time in each Class I area. See 40 CFR 51.308(f)(1)(vi).

information that all Georgia and nearby Class I areas are below the URP is needed to inform that requirement. Additionally, other information about measured progress towards natural conditions can be relevant in evaluating the source selection process and LTS. For example, significant improvements in visibility at impacted Class I areas since the beginning of the second planning period (starting in 2019) is relevant context to whether a state is making progress towards the national goal and how many additional sources needed to be analyzed in order to determine what is necessary for reasonable progress in the second planning period. Therefore, what progress the state has already achieved in the second planning period is a relevant factor that EPA may consider regarding the reasonableness of a state's source selection thresholds. Even ignoring the fact that the visibility at Class I areas impacted by Georgia has greatly improved, EPA would still reach the same conclusion that Georgia's source selection methodology and thresholds for this second planning period are reasonable for the reasons stated earlier in this Response.

Comment 3: The Commenters assert that EPA incorrectly endorses Georgia's decision to exclude consideration of NO_x controls in any FFAs. They contend that VISTAS modeling did not accurately reflect the shift in the 20 percent most impaired days and the corresponding increase in the contribution of nitrate to visibility impairment at Southeastern Class I areas such as Cohutta, especially in winter months and at coastal sites. The Commenters state that EPA's expectation is that states will, at a minimum, consider both SO₂ and NO_x in this planning period, and that there

are multiple sources of significant NO_x emissions that Georgia should have analyzed for NO_x controls.

Response 3: EPA disagrees with this comment. The RHR does not prescribe which visibility impairing pollutants must be evaluated in the FFAs. EPA's 2019 Guidance on page 11 states: "When selecting sources for analysis of control measures, a state may focus on the PM species that dominate visibility impairment at the Class I areas affected by emissions from the state and then select only sources with emissions of those dominant pollutants and their precursors." Section 2.2 of EPA's 2021 Clarifications Memo recommends that states which do not evaluate SO₂ and NO_x in both source selection and control evaluations show why such consideration of these pollutants would be unreasonable, especially if the state considered both of these pollutants in the first planning period.³⁶

Georgia followed these recommended approaches in the development of its Haze Plan. Georgia considered both SO₂ emissions (via sulfate's visibility impacts) and NO_x emissions (via nitrate's visibility impacts) in the source selection process. As part of the Haze Plan, GA EPD presented the results of PSAT modeling conducted by VISTAS to estimate the projected impact of statewide SO₂ and NO_x emissions across all emissions sectors in 2028 on total light extinction for the 20 percent most impaired days in all Class I areas in the VISTAS modeling domain. The modeling showed that SO₂/sulfate visibility impacts from point sources were in general much larger than NO_x/nitrate impacts. Applying the modeling results to individual sources resulted in relatively large sulfate visibility impacts for a small number of in-state SO₂ sources, but much smaller nitrate

impacts from NO_x emissions. Therefore, several sources were selected for SO₂ control analysis determinations, but no sources in Georgia met the same source selection threshold for nitrate, and therefore Georgia did not select any sources for a NO_x emissions control evaluation. Contrary to the Commenters' assertion that Georgia made a "decision" to exclude consideration of NO_x controls in any FFA, it was Georgia's objective application of its source selection process in combination with data and modeling showing that SO₂ and not NO_x is the dominant visibility impairing pollutant that resulted in Georgia selecting only sources for SO₂ emissions control analyses.

This approach was reasonable. IMPROVE monitoring data shows that ammonium sulfate remains the dominant visibility impairing pollutant at Georgia's Class I areas as well as at those Class I areas outside of the State that are impacted by Georgia as discussed in Section 2.5.2 of the Haze Plan (particularly Figures 2–4 through 2–6 for the 2009–2013 period and Figures 2–7 through 2–9 for the 2014–2018 period). Recent 2015–2019 IMPROVE monitoring data cited within the Haze Plan identifies the relative contributions of PM species contributing to the total visibility impairment at the Georgia Class I areas, which are shown in Table 4, below. In spite of increased nitrate contributions on the 20 percent most impaired days in more recent years (as the Commenters note, often on winter days), as indicated in Table 4, ammonium nitrate contributions to regional haze at the State's Class I areas remain relatively low at 8 to 15 percent of the total visibility impairment as compared to ammonium sulfate at 55 to 58 percent.

TABLE 4—§2015–2019 SPECIATED IMPROVE MONITORING DATA FOR GEORGIA'S CLASS I AREAS

	Ammonium sulfate (%)	Ammonium nitrate (%)	Organic carbon (%)	Coarse mass (%)	Elemental carbon (%)	Fine sea salt (%)	Fine soils (%)
Cohutta	55	15	19	5	5	0	1
Okefenokee	58	8	19	6	5	2	1
Wolf Island	58	8	19	6	5	2	1

Furthermore, in Tables 7–5 through 7–7 of the Haze Plan, the State provided a calculation of the sulfate and nitrate EWRT used in the AoI analysis for Cohutta and Okefenokee for the 20 percent most impaired days from 2011 to 2016, demonstrating that the sulfate

EWRT is significantly higher than the nitrate EWRT. This further supports the importance of focusing on SO₂ emissions reductions for this planning period.

The State's rationale for focusing on SO₂ controls in the FFAs is summarized

in Georgia's SIP submittal and the NPRM. *See* Haze Plan, Section 7.10; 89 FR 47491, 47493–47494. EPA gave careful consideration to Georgia's rationale and reaffirms that Georgia's justification for not evaluating sources selected for SO₂ emission control

³⁶ Georgia considered SO₂ for FFAs conducted in the first planning period.

analyses for a separate NO_x emission control analysis is reasonably justified for this planning period. The trend of increasing nitrate contribution to visibility impairment as a total percent of all visibility impairment at Class I areas over time highlighted by the Commenters is something that will continue to be evaluated in future planning periods. If the data warrants further consideration of NO_x/nitrate in future planning periods, EPA expects that Georgia will address potential NO_x controls in future regional haze SIP revisions.

Comment 4: The Commenters assert that EPA ignores that Georgia unreasonably excluded sources from FFAs. The Commenters state that EPA must require Georgia to prepare FFAs for 16 additional EGU and non-EGU industrial sources identified by U.S. National Park Service (NPS) and the Commenters which have emissions that likely contribute to impairment in Class I areas in Georgia and other states.

The Commenters describe four of these facilities in greater detail. These specific arguments are addressed in Comments 4.a through 4.c, below.

Comment 4.a: Regarding Georgia Power—Plant Scherer (Plant Scherer), the Commenters state that this facility is not well controlled for NO_x and that NO_x emissions “can be cut in half at no capital cost whatsoever by simply requiring Georgia Power to operate its existing SCRs continuously throughout the year.” The Commenters also state that although the SO₂ emission rate at each Plant Scherer unit is often very low, that at times the SO₂ emission rates are as much as ten times higher, and that the current controls are not consistently achieving the level of control that they are capable of. Therefore, the Commenters assert that EPA must require Georgia to prepare an FFA for this facility.

Response 4.a: As discussed in Response 2, Georgia’s source selection methodology was reasonable and was adequately documented in its Haze Plan. The fact that certain sources, including the 16 sources identified by the Commenters, were not selected for FFAs for either SO₂ or NO_x for this planning period is the result of the reasonable application of Georgia’s source selection process and source selection thresholds. In other words, if sources were selected by the State, they were selected because the data supported the selection of that source. The inverse is also true regarding sources that were not selected. As discussed in Response 3, NO_x impacts were considered by the State, but no sources were selected for NO_x controls

(including these sources highlighted by the Commenters) because visibility impacts did not exceed the State’s source selection threshold. To the extent that the 16 sources identified by Commenters were not selected by Georgia, the Responses to Comments 2 and 3 generally address why these sources were not selected and why EPA agrees with the State that it was reasonable for this planning period to not select these sources. To summarize, Georgia selected a sufficient number of sources under Georgia’s jurisdiction to ensure that sources responsible for the largest visibility impacts to Class I areas completed FFAs for this planning period. Georgia has discretion under the RHR to determine its source selection methodology and Georgia’s source selection process, and the sources that Georgia selected were reasonable and the Haze Plan complied with the CAA and RHR for this planning period. While Georgia could have used its discretion to select other sources in addition to those screened in during its source selection process, including some or all of the sources that the Commenters highlight, Georgia was not required to do so.

Throughout the Commenters’ discussion of these 16 sources, however, the Commenters raise several additional points that have not yet been fully addressed in prior responses. Regarding the comment that Plant Scherer is not well-controlled for NO_x, this was not a relevant consideration for Georgia’s source selection process. Plant Scherer did not meet Georgia’s two percent combined sulfate plus nitrate AoI threshold for visibility impacts and therefore was not selected for further PSAT analysis during the State’s initial screening process. Specifically, Georgia’s (through VISTAS’ modeling) AoI analysis found that Plant Scherer’s combined sulfate and nitrate impacts would be 0.79 percent for Cohutta, 0.71 percent for Okefenokee, and 0.56 percent for Wolf Island. See Haze Plan, Appendix E–7b. These numbers fell below Georgia’s two percent AoI threshold for visibility impacts, and therefore, the State did not consider this source for further PSAT analysis (or an FFA). By way of comparison, Georgia calculated Plant Bowen’s (another Georgia Power facility) combined nitrate and sulfate AoI impacts as 20.74 percent for Cohutta, 14.67 percent for Okefenokee, and 11.78 percent for Wolf Island, which is why Plant Bowen was considered for further PSAT tagging and was ultimately selected for an FFA for SO₂, while Plant Scherer was not. EPA agrees with Georgia’s combined nitrate

and sulfate AoI calculations and finds the State’s methodology and the results of this methodology reasonable.

Regarding the Commenters’ comments that variability in the emissions at Plant Scherer warrant an emission limit of 0.01 to 0.02 pound (lb)/million British thermal units (lb/MMBtu), as noted above, Georgia did not select Plant Scherer for an FFA because the visibility impacts from this source were well below Georgia’s source selection thresholds. As Plant Scherer was not selected for an FFA, consistent with the requirements under the RHR, Georgia does not have to address the limits at the source as suggested by the Commenters.

Comment 4.b: Regarding Georgia Power—Plant Wansley (Plant Wansley), the Commenters state that while the facility has ceased to operate, nothing in the SIP submission prevents Plant Wansley from restarting operations with corresponding increases in emissions in the future. Separately, the Commenters express concerns that the documentation of the shutdown of Plant Wansley described in the NPRM does not adequately prevent Plant Wansley from restarting operations. The Commenters assert that this shutdown must be incorporated into the Haze Plan.

Response 4.b: Even if EPA were to assume that Plant Wansley had not shut down, Georgia still would not have selected this source because the combined sulfate and nitrate AoI impacts based on VISTAS’ 2028 projections for this facility, which project emissions without this shutdown, are 1.09 percent for Cohutta, 0.67 percent for Okefenokee, and 0.77 percent for Wolf Island, all of which are well below the State’s two percent AoI threshold. Therefore, even if the shutdown documentation for Plant Wansley was inadequate as asserted by the Commenters (which is not the case, as explained below), Georgia satisfied its RHR obligations under 40 CFR 51.308(f)(2) and considered and reasonably explained the methodology by which it selected sources for FFAs that contribute to visibility impairment in Class I areas.

However, Georgia did not just revoke the Part 70 operating permit for Plant Wansley as stated by the Commenters. Rather, Georgia’s December 28, 2022, letter to Georgia Power states that it revoked “all Georgia Air Quality Permits previously issued to this facility,” which would include both the facility’s preconstruction permits and the facility’s Part 70 permit that contains applicable requirements (including those originating from the

preconstruction permits). Restarting the facility—a concern raised by the Commenters—could not be accomplished without the submission of an application for a permit, as specified in Paragraph 391–3–1–.03 of the Georgia Rules for Air Quality Control³⁷ and issuance of an entirely new preconstruction permit, which would likely need to be a major source NSR permit. These major NSR permits generally require Best Available Control Technology for a PSD Permit or Lowest Achievable Emission Rate for a Nonattainment New Source Review permit. The Commenters appear to agree and state that “Any attempt to restart a boiler at Plant Wansley would require a new construction or major modification permit including either a prevention of significant deterioration (PSD) or new source review (NSR) analysis.”

Comment 4.c: In regards to Transcontinental Gas Pipe Line Co., LLC, Compressor Station 120, the Commenters state that this facility emitted 2,283.57 tons of NO_x in 2020 and likely impacts 12 Class I areas, and that there are likely feasible and cost-effective controls available to reduce this facility’s NO_x emissions. Therefore, the Commenters assert that EPA must require Georgia to conduct an FFA of potential controls for Compressor Station 120. Regarding CEMEX Southeast, LLC, the Commenters state that this facility emits 1,424.37 tons per year (tpy) of NO_x and 130.87 tpy of SO₂ and likely impacts eight Class I areas, and that there are likely available controls that could reduce haze-forming emissions from CEMEX Southeast, LLC that Georgia failed to consider in its SIP revision.

As for the 12 additional sources identified by the Commenters, all 12 of the listed sources have reported NO_x and/or SO₂ emissions in the 2020 NEI and, according to the Commenters’ analysis, have a Q/d value above five for multiple Class I areas in the Southeast. For example, the Commenters state that Rome Linerboard Mill has a Q/d value of as high as 28.80 for Cohutta in Georgia and that NPS has noted in its consultation materials that the facility ranked third for haze contributions to VISTAS Class I areas based on cumulative AoI screening results and was in the top 80 percent of total AoI impact for five Class I areas. Additionally, Commenters assert that Georgia-Pacific Cedar Springs LLC is another paperboard mill that Georgia did not select but should have selected.

The Commenters state that this facility emits 2,461.26 tpy of NO_x and 338.2 tpy of SO₂ and likely impacts 16 Class I areas.

Response 4.c: For the same reasons as stated above in Responses 2 and 3 regarding the adequacy of Georgia’s source selection methodology, EPA also disagrees that Georgia should have selected Transcontinental Gasoline Company LLC—Compressor Station 120; CEMEX Southeast, LLC; Green Power Solutions; International Paper Co.—Temple Inland Rome Linerboard Mill (Temple-Inland—Rome Lumber Mill); Georgia Pacific Cedar Springs LLC; Interstate Paper LLC; Georgia Pacific Consumer Products LP—Savannah River Mill; Rayonier Performance Fibers LLC; PCA Valdosta Mill; C–E Minerals Plants 1, 2, and 6; Graphic Packaging Macon Mill; Weyerhaeuser NR Port Wentworth; Pinova, Inc.; and Thermal Ceramics. GA EPD identified and evaluated these sources as part of its AoI screening approach and did not select them for FFAs because they did not meet Georgia’s source selection thresholds.³⁸

Comment 5: The Commenters assert that Georgia’s cost effectiveness analyses are arbitrary and that “[a]lthough EPA acknowledges that Georgia relied on the Arkansas Excel document for its cost-effectiveness determinations, EPA does not address whether it was reasonable for Georgia to do so.” Additionally, they state that “to provide a reasoned basis for its decisions, Georgia must first establish a threshold, or explain and justify some other objective measure, for determining cost effectiveness that is in line with other states’ chosen measures and apply that threshold consistently across its Four-Factor Analyses.”

According to the Commenters, there are three specific problems with Georgia’s reliance on the Arkansas Excel spreadsheet. First, the Commenters assert that this spreadsheet does not consider that Round one cost-effectiveness measures were considered alongside visibility benefits and cite to EPA’s 2021 Clarifications Memo’s statement that “a state should not use visibility to summarily dismiss cost-effective potential controls.”³⁹ Second, the Commenters state that they expect that with each successive planning period, the cost of controls should increase because the lowest cost emission reductions would have already

been implemented, and therefore, the Commenters assert that relying on first planning period costs to guide second planning period costs is improper. Third, Commenters state that the “Arkansas” spreadsheet fails to include the high end of first round cost-effectiveness values up to \$10,000/ton.” In addition to this last point, the Commenters assert that “Arkansas wrongfully included [in its spreadsheet] some cost-effectiveness data that is too old to escalate according to EPA’s Control Cost Manual.”

The Commenters instead suggest that Georgia should have adopted a firm cost threshold such that controls below the threshold would be selected and controls above the threshold would not be selected. Alternatively, the Commenters state that Georgia “should have explained or justified some other objective measure.” The Commenters also contend that EPA must reject Georgia’s use of this approach because it would be inconsistent with EPA’s reasoning in its proposal to partially disapprove Arizona’s SIP revision in which Arizona used a cost threshold of \$6,500/ton. Finally, the Commenters state (in the Kordzi Report) that data from Florida River Power Plants 1 and 2 are missing from this spreadsheet and should have been included and considered.

Response 5: There is no requirement in the CAA or the RHR for states to establish bright line cost effectiveness thresholds when evaluating control costs in FFAs. The CAA and the RHR instead require states to evaluate the costs of compliance, and EPA’s 2019 Guidance recommends that states follow the recommendations in EPA’s “Air Pollution Control Cost Manual” (CCM)⁴⁰ to facilitate apples-to-apples comparisons of different controls options for the same source, and comparisons across different sources. 2019 Guidance at 31.

As described in Section 7.7 of the Haze Plan, for the cost of compliance factor, Georgia EPD did not set a specific cost per ton threshold, but rather analyzed each facility using the information in EPA’s CCM and 2019 Guidance to determine whether a given control measure is cost-effective based on a number of factors, including the historical range of cost/ton values. The historical cost information was derived from an Excel spreadsheet assembled by Arkansas Department of Environmental Quality that compared the cost of

³⁷ Georgia Rule 391–3–1–.03. “Permits. Amended” is available at: <https://rules.sos.ga.gov/GAC/391-3-1-.03>.

³⁸ See “Individual VISTAS Class I Areas Results” available at: <https://www.metro4-sesarm.org/content/task-5-area-influence-analysis>.

³⁹ “Round one” and “Round two” refer to the first and second planning periods, respectively.

⁴⁰ EPA’s “Air Pollution Control Cost Manual” is available at: <https://www.epa.gov/economic-and-cost-analysis-air-pollution-regulations/cost-reports-and-guidance-air-pollution>.

compliance from the first planning period for SO₂ and NO_x in dollars per ton for various types of industrial emission units (e.g., EGU Boiler, Industrial Boiler, Kiln, Smelter, all Non-EGU). The spreadsheet was updated with VISTAS data (Appendix G–4) and presents the maximum and minimum cost/ton and various statistical percentile values. While Georgia did not choose a bright-line cost effectiveness threshold, Georgia's use of this spreadsheet was an objective measure by which Georgia determined the reasonableness of control costs for this second planning period.

EPA acknowledges the Arkansas cost spreadsheet includes Best Available Retrofit Technology (BART) control determination costs that considered the visibility benefits of the controls pursuant to the CAA and RHR under 40 CFR 51.308(e)(1)(ii)(A).⁴¹ However, this fact does not change EPA's position that Georgia's use of this spreadsheet was reasonable. First, Georgia did not consider visibility in making its control determinations for this planning period. Just as importantly, while EPA agrees in general with the Commenters that data from the first planning period is necessarily an imperfect yardstick by which to determine the reasonableness of control measures for this second planning period—in part because the first planning period included BART determinations whereas the second planning period does not—the information is nonetheless highly relevant. Moreover, Georgia did not set a cost threshold based on the low-end or mean (or median) cost of first planning period controls. In fact, all controls rejected by Georgia were more costly than the 98th percentile of all first planning periods costs. This also addresses the Commenters' contention that with each planning period, control costs should increase.

Finally, regarding the Commenters' third concern with Georgia's use of the Arkansas spreadsheet that the spreadsheet may include missing data, EPA has reviewed the concern raised in the Kordzi⁴² report that the Florida Crystal River Power Plant Units 1 and 2 determinations were excluded from this spreadsheet. According to the Kordzi Report cited by the Commenters,

the Crystal River Power Plant Units 1 and 2 determinations required the source to either (1) install dry flue gas desulfurization (FGD) and SCR at a cost-effectiveness of \$10,000/ton for SO₂ BART and \$8,224/ton for NO_x BART or (2) retire by December 31, 2020. This is not accurate. While both options were considered in the Florida first planning period regional haze NPRM, the final rule selected only the shutdown option based upon the Florida Department of Environmental Protection's decision to adopt this shutdown in a SIP supplement. *See* 78 FR 53,262 (August 29, 2013). For this reason, there was no add-on control adopted, and therefore no cost to consider. Although EPA was not involved in the preparation of the Arkansas spreadsheet, this may explain why the Crystal River Power Plant facility was not included in the spreadsheet. In any event, EPA concludes that Georgia's decision not to consider this facility was reasonable.

Regarding the Commenters' assertions that Georgia's approach is unreasonable when compared to states such as Colorado and Nevada, which elected to set cost effectiveness thresholds of \$10,000/ton of pollutant removed, and to Arizona, which elected to set a cost effectiveness threshold of \$6,500/ton of pollutant removed, Georgia was not required by the CAA or RHR to adopt a similar bright-line cost effectiveness threshold. Moreover, the Commenters themselves do not suggest a specific bright-line threshold, let alone provide rationale to support such a threshold. Georgia applied its chosen methodology in a way that is reasonable by rejecting controls with cost-effectiveness values above the 98th percentile of first planning period costs.

As for the Commenters' position that approval of Georgia's plan would be inconsistent with the rationale within EPA's proposed disapproval of Arizona's plan regarding the importance of adequate state justification, EPA disagrees. In EPA's proposed disapproval of Arizona's regional haze SIP, EPA stated that Arizona "did not provide an adequate justification for how this threshold resulted in a reasonable set of control measures," and in several instances in the notice of proposed rulemaking, EPA noted that Arizona ignored its own threshold without justification. *See* 89 FR 47,429 (May 31, 2024). That is quite different than Georgia, which did not use a bright-line threshold at all and instead consistently applied the statistical methods in the Arkansas spreadsheet to only reject control costs that exceed the 98th percentile of first planning period costs identified within that spreadsheet.

Comment 6: The Commenters assert that EPA shirks its duty to review Georgia's source-specific FFAs. The Commenters state that EPA proposes to merely "rubber stamp" the State's SIP submission, without engaging in any meaningful, independent, analysis of Georgia's FFAs for the three facilities the State selected. Additionally, the Commenters assert that "[d]espite EPA's stated expectations for this planning period, Georgia does not require any of the sources to adopt additional control measures to make reasonable progress."

Response 6: EPA's proposed approval of Georgia's Haze Plan is a proper exercise of EPA's authority under the CAA. Congress crafted the CAA to provide for states to take the lead in developing implementation plans, but balanced that decision by requiring EPA to review the plans to determine whether a SIP meets the requirements of the CAA. When reviewing SIPs, EPA must consider not only whether the state considered the appropriate factors in making decisions, but acted reasonably in doing so. In undertaking such a review, EPA does not usurp the state's authority but ensures that such authority is reasonably exercised.

Contrary to the comment that the Agency "shirks" its CAA obligations, EPA has performed its duties with diligence. EPA carefully evaluated the Haze Plan and the associated record and engaged in a thorough analysis of each control option, including each of the underlying cost assumptions used in the calculations. Georgia conducted extensive technical work in support of its SIP submittal, and therefore, EPA independently evaluated each FFA, including costs, and compared each FFA's control determination against the CCM. In the Technical Support Document (TSD) to the NPRM, EPA documented the cost assumptions that the State relied upon in its FFAs for transparency to the public.

Each of the FFAs are discussed in more detail in the responses to comments that follow, but EPA notes that Georgia did adopt important control measures into the SIP as necessary for reasonable progress for the second planning period, including the coal burning prohibition at IP-Savannah. While that facility had voluntarily elected to stop burning coal at the No. 13 Power Boiler, this prohibition was not federally enforceable and permanent until incorporated into the Georgia SIP. In the absence of placing this prohibition into the SIP, the facility could have lawfully restarted burning coal at any time, which is inconsistent with making reasonable progress under the CAA and RHR. EPA's specific

⁴¹ 40 CFR 51.308(e)(1)(ii)(A): "... the State must take into consideration . . . the remaining useful life of the source, and the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology."

⁴² Joe Kordzi, A Review of EPA's Proposed Approval of the Georgia Regional Haze State Implementation Plan (June 2024) (hereinafter referred to as "Kordzi Report") included in the docket for this action as Exhibit 1 in the Conservation Group letter (July 3, 2024).

analyses for each FFA are addressed in responses to comments below that address each of the three facilities selected by Georgia.

Comment 7: The Commenters assert that “Plant Bowen’s SO₂ emission rates have increased since round one of regional haze, which is contrary to the intent of the Regional Haze Program.” The Kordzi Report describes how, although Plant Bowen was reviewed for BART in the first round of regional haze planning, Georgia relied on the Clean Air Interstate Rule (CAIR) to satisfy BART for SO₂ and NO_x for EGUs and did not include any enforceable mechanism to ensure Plant Bowen’s emissions did not increase, citing to projected emissions from Plant Bowen and Q/d values.

Response 7: Although the combined SO₂ emission rates at Plant Bowen for Units 1–4 have increased since the first planning period as discussed below, focusing only on these emission rates from these units ignores the significant declines in total facility-wide SO₂ emissions from this facility. EPA also does not agree with the Commenters that an increase in emission rates within permitted levels during the first planning period, on its own, is contrary to the intent of the regional haze program.

In 2010, after wet scrubbers had been installed to control SO₂ emissions at Plant Bowen’s four units, this facility’s annual average SO₂ emission rates were approximately 0.068 lb/MMBtu based on Clean Air Markets Program Data (CAMPD) reviewed by EPA. In 2023, the annual average emission rate was 0.13 lb/MMBtu. This increase was primarily due to a change in coal used at the facility from Central Appalachian bituminous coal (CAPP coal) to Illinois Basin coal (IB coal), with IB coal containing a higher sulfur content.⁴³ These coal types are discussed in more detail in EPA’s responses to later comments regarding Plant Bowen’s FFA along with discussion as to why switching back to CAPP coal is not cost effective.

While emission rates are an important consideration because FFAs generally yield emission controls that result in updated emission rates, in this instance, only considering emission rates as the Commenters propose would ignore an important aspect of the problem. Here, the total amount of SO₂ emissions is also important. The first regional haze planning period spanned the period from 2000–2018, with SIPs due in 2007. Plant Bowen’s SO₂ annual emissions in

2007 were approximately 197,000 tpy prior to the installation of wet scrubbers to control SO₂ emissions. Plant Bowen installed wet scrubbers between 2008 and 2010 at Units 1 through 4. After these wet scrubbers were installed, Plant Bowen’s total facility-wide SO₂ emissions dropped to approximately 7,618 tpy in 2010, and in 2023, SO₂ total emissions from Plant Bowen were 7,143 tpy.⁴⁴ EPA acknowledges that there is year-to-year variability in Plant Bowen’s emission rates and total emissions due to changes in demand for electricity, sulfur content of the fuel used at Plant Bowen, and scrubber efficiency. However, the general trend at this facility has been a significant reduction in total SO₂ emissions during the first planning period. Contrary to the Commenters’ assertions, the fact that SO₂ emission rates have varied to some extent at this facility during the first planning period is not contrary to the RHR.

Comment 8: As a general matter, the Commenters contend that EPA did not scrutinize Georgia’s analysis of Plant Bowen and did not consider the comments submitted by the Commenters to Georgia, including the Stamper report.⁴⁵ Specifically, the Commenters assert that Georgia greatly overstated the costs of switching back to lower sulfur CAPP coal for three primary reasons.

Response 8: EPA disagrees with the Commenters. Regarding the Commenters’ assertion that EPA did not scrutinize the FFA or consider the Commenters’ state-level comments provided to Georgia, that is not correct. EPA evaluated Georgia’s entire SIP submittal, including the FFAs, the state-level comments, and the State’s responses to those comments.

Comment 8.a: First, the Commenters argue that Georgia’s assumption of an SO₂ rate of 0.07 lb/MMBtu when burning CAPP coal was improper because Plant Bowen averaged 0.05 lb/MMBtu or lower for many years when combusting CAPP coal.

Response 8.a: The Commenters are incorrect. The data submitted by the Commenters in the Kordzi Report contains emission data for Plant Bowen Units 1 through 4 including for the years 2010 through 2014. As previously

stated, Plant Bowen began to transition to IB coal in 2014. EPA was not able to reproduce the 0.05 lb/MMBtu average in the Kordzi Report. Based on the information submitted by the Commenters, the actual average SO₂ emissions in lb/MMBtu across all four boilers from 2010–2013 is 0.065 lb/MMBtu (*i.e.*, prior to any switch to IB coal), not 0.05 lb/MMBtu as stated by the Commenters. The average for all four boilers from 2010 through 2014 is 0.069 lb/MMBtu. These numbers are very close to the SO₂ emission rate of 0.07 lb/MMBtu assumed by Georgia if Plant Bowen were to switch to CAPP coal. EPA further confirmed these numbers by reviewing information from EPA’s CAMPD.⁴⁶

Comment 8.b: Second, the Commenters argue that Georgia assumed in its analysis that CAPP coal has a higher sulfur content than most of the CAPP coal that Plant Bowen previously burned.

Response 8.b: This is not correct based on the data provided by the Commenters. The statement cited by the Commenters in the Kordzi Report states that “Bowen’s estimate assumes a coal sulfur content of 1.1 percent. As shown above, this is slightly higher than most of the previous CAPP coal it burned.” However, taking a simple average of the sulfur content of all coal combusted across all four boilers contained within Table 2 of the Kordzi Report yields an average of 1.08 percent sulfur content for CAPP coal combusted from 2010–2013 and 1.19 percent for CAPP coal combusted from 2010–2014. Again, these numbers are very close to what Georgia relied upon for the Plant Bowen FFA, and EPA agrees with Georgia’s assumption regarding the sulfur content of CAPP coal given the averages discussed above.

Comment 8.c: Third, the Commenters—and specifically the Kordzi Report provided as an attachment to the comments—state that based upon publicly available Energy Information Agency (EIA) Form 923 data, railroad-transportable CAPP coal with a sulfur content of 1.05 percent or less is available to purchase from Kentucky, Virginia, and West Virginia at delivered prices (*i.e.*, including both fuel costs and transportation costs) that are lower per MMBtu than what Plant Bowen currently pays for IB coal of a higher sulfur content. Based on this information, the Commenters argue that EPA must reject Georgia’s FFA for Plant Bowen.

⁴⁶ CAMPD data is available at: <https://campd.epa.gov/>.

⁴³ See Appendix G–1b, at p. 13 (noting that Plant Bowen switched to IB coal in 2014).

⁴⁴ Facility and unit emissions and emissions rate data is from EPA’s CAMPD available at: <https://campd.epa.gov/>.

⁴⁵ The July 25, 2022, Stamper Report, “Review and Comments on Reasonable Progress Four-Factor Analyses Evaluated as Part of the Georgia Regional Haze Plan for the Second Implementation Period,” is included as Exhibit 2 of Appendix H–3a of the Haze Plan which is included in the docket for this action.

Response 8.c: EPA also disagrees with the Commenters' contention that Plant Bowen could purchase CAPP coal from mines in Kentucky, Virginia, and/or West Virginia at prices that are less expensive than the higher sulfur IB coal that Plant Bowen primarily relies upon. Table 4 within the Kordzi Report contains information obtained from EIA Form 923 for the year 2023, which includes coal production and sale information such as coal mine name, quantity sold, average heat content of the coal, average sulfur content of the coal, fuel cost in cents per MMBtu, total cost of each purchase of coal, and whether the purchase was pursuant to a contract or was made on the spot market. Based upon this data, the Kordzi Report tabulated the total cost of coal per MMBtu from mines that met the following criteria: the mines were only within Kentucky, Virginia, or West Virginia; the mines were capable of transporting coal by railroad; and the coal sold by the mine had sulfur content below 1.05 percent. Based upon this data, the Commenters conclude that the average cost of such coal is \$4.89/MMBtu. The Commenters also conclude that this is less expensive than the average cost of Plant Bowen's coal purchases in 2023, which the Commenters assert is \$5.33/MMBtu.

First, EPA reviewed the unredacted fuel cost information contained in the technical appendix submitted by Georgia to EPA prior to publishing the NPRM, and EPA affirms that the information in that technical appendix supports the State's and EPA's conclusions that procuring CAPP coal would be significantly more costly than Plant Bowen's current purchases of IB coal. Second, there is inadequate supply of coal fitting the type preferred by the Commenters to supply a facility as large as Plant Bowen. According to the EIA 923 form data cited by the Commenters, in 2012, Plant Bowen purchased 4,737,780 tons of coal. In that same year, 32,145,400 tons of coal were sold meeting the criteria preferred by the Commenters (from Kentucky, Virginia, or West Virginia; no greater than 1.05 percent sulfur content; and railroad-transportable). But in 2023, only 4,900,885 tons of coal meeting the criteria preferred by Commenters were sold to all facilities combined. In other words, if Plant Bowen were to switch to CAPP coal, the demand for CAPP coal created by Plant Bowen alone would almost exceed the entire supply of such coal put into commerce in 2023.

Comment 8.d: Additionally, the Commenters assert that Plant Bowen's cost-effectiveness calculation contains an annual fuel cost of \$86 million to

switch to CAPP coal that is "completely undocumented." Commenters argue that although Plant Bowen claimed this fuel cost as a trade secret and therefore submitted it to EPA as CBI, EPA is required to review this information and declare whether EPA finds that this information meets the documentation requirements contained in 40 CFR 51.308(f)(2)(iii). The Commenters assert that some of the information may not be CBI, including certain fuel cost data, and that EPA must evaluate whether this information is CBI to provide the public with sufficient information to fully evaluate the proposal.

Response 8.d: The costs for switching to CAPP coal were included in the Haze Plan under Appendix A and Appendix B to Appendix G–1b. Georgia Power submitted this cost information under a claim of business confidentiality and provided redacted versions of its proposed four factor analysis, including Appendix B to Appendix G–1b for public release.

Under the CAA and EPA's regulations, a company may assert a business confidentiality claim covering information furnished to EPA. *See* 40 CFR 2.203(b). Once a claim is asserted, the Agency must consider the information to be confidential and must treat it accordingly unless the Agency finds in a CBI determination that the material is not CBI. *See* 40 CFR 2.205, 2.301(g). Under 40 CFR 2.204(a), EPA is required to make a CBI determination when the Agency (1) learns that it is responsible for responding to a request under the Freedom of Information Act (FOIA) (5 U.S.C. 552) for the release of business information; (2) desires to determine whether business information in its possession is entitled to confidential treatment, even though no request for release of the information has been received; or (3) determines that it is likely that EPA eventually will be requested to disclose the information at some future date and thus will have to determine whether the information is entitled to confidential treatment. EPA's regulations set forth the specific procedures that EPA must follow when making a CBI determination. 40 CFR 2.204, 2.205, and 2.301(g). Under the regulations, EPA must provide the affected businesses with notice and, usually, an opportunity to comment on the impending CBI determination or release, including an opportunity to justify their CBI claims. *See, e.g.,* 40 CFR 2.204(e), 2.209(d), and 2.301(g)(2). Considering the nature of the comments regarding a switch to CAPP coal, the mechanism by which the Commenters requested that EPA make a CBI determination (*i.e., via rulemaking*

comment instead of via FOIA), EPA's review of the CBI information in evaluating the reasonableness of the FFA, and EPA's refutation of the Commenters' concerns regarding the costs of switching to CAPP coal, EPA is exercising its discretion under 40 CFR 2.204(a) to not perform a CBI determination at this time. Therefore, EPA is obligated to protect the confidentiality of that information, which precludes the Agency from publicly posting this in the docket at [regulations.gov](https://www.regulations.gov).

Plant Bowen submitted a signed affidavit⁴⁷ to substantiate its CBI claim and provided a public disclosure version of Technical Appendix A and Technical Appendix B to Appendix G–1b of the Haze Plan, with the CBI information redacted. As noted in the public disclosure materials, the redacted information consists of material including "2019 IRP Capacity Planning Documentation," "Delivered Fuel Cost Estimates for PRB and CAPP Coals," "CSX Transportation Contract Language," "CSX Pricelist Information," and variable operating and maintenance costs for switching to CAPP coal such as including the costs from "hydrated lime adjustment," "ammonia adjustment," "fuel additive adjustment," and "activated carbon adjustment" as it relates to CAPP coal. Upon review of the assumptions and information contained in Appendix G used in the cost analyses, including the unredacted information, EPA finds the cost-effectiveness calculations for switching to CAPP coal to be appropriately documented and reasonable based on the available information, justifications, and support for each assumption used in the cost calculation.

Comment 9: The Commenters state that in 2014, Plant Bowen switched from lower-sulfur CAPP coal to IB coal, which they state has a high sulfur content. The Commenters assert that Georgia greatly overstated the costs of switching to Powder River Basin (PRB) coal. Instead of requiring a switch to PRB coal, the Commenters contend that EPA accepted Georgia's and Georgia Power's claims at face value that such a switch would be cost prohibitive. The Commenters argue that Georgia Power's cost analysis contains several problems that cause it to be overinflated.

First, the Commenters argue that Georgia Power wants to earn a 6.04 percent rate of return for electricity that it must purchase to make up for lost capacity. In referencing the Stamper

⁴⁷ The affidavit is located in Appendix G–1b of the Haze Plan.

report, they contend that this cost should not be a capital expense but rather should be treated as an operating expense (such as fuel costs) that is not entitled to such returns.

Second, the Commenters argue that Georgia does not make a fair comparison by assuming operating time will increase at the same time it will need to purchase \$51 million worth of electricity to cover lost capacity. The Commenters contend that the FFA does not account for revenue from additional sales of electricity due to increased hours of operation. Additionally, the Commenters argue that the FFA already accounts for an increase in fuel costs in a different line item in the cost analysis, so they argue that Georgia Power is at least, in part, double counting the increased fuel usage of PRB coal.

The Commenters state that even assuming the switch to PRB coal will decrease maximum hourly generating capacity, Georgia Power's cost analysis appears to overstate the need (and cost) for replacement energy. The Commenters contend that based on 2019 plantwide generation rates, Georgia Power would need to purchase only 134,982 megawatt-hour (MWh) to make up for the switch to PRB coal. The Commenters cite to Table A2.2 of the FFA for the proposition that Georgia Power estimated that the switch "would require the purchase of approximately 8,000,000 MWh of energy to replace the deficit" as a result of the assumption that the capacity penalty would apply during all hours of operation. In contrast, the Commenters provide an exhibit that they argue demonstrates that switching to PRB would only impact the peak hours of plant operation, which equates to 5.8 percent of the time according to the Commenters. Even assuming above-average energy prices (\$40/MWh), the Commenters assert that with the switch to PRB coal, the company would consequently need to only spend \$5 million annually, instead of Georgia Power's assumed \$51.7 million.

The Commenters also assert that to the extent that Georgia Power suggests it needs to purchase or build replacement capacity to meet peak demands and reserve margin requirements, the FFA fails to provide the "robust" technical support for this position. As with the energy deficit discussed above, the Commenters contend that Georgia Power fails to establish that it actually has a projected capacity need in any such year. Additionally, the Commenters assert that Georgia Power fails to provide any documentation for current "market rate" or "cost of new construction." As a

result, the Commenters contend it is impossible to verify the needed capacity replacement and cost associated with switching to PRB. The Commenters state that EPA must review Georgia Power's cost assumptions and confirm that the Company's capacity penalty calculations are appropriate.

The Commenters also state that Georgia refuses to make available for public review the calculations and supporting documentation for the cost analysis of switching to PRB coal. The Commenters assert that Georgia and EPA are obligated by the documentation requirements of 40 CFR 51.308(f)(2)(iii) to review this information and declare whether they have found it acceptable, but neither Georgia nor EPA has indicated if they have reviewed the information and found it acceptable. The Commenters argue that a failure by EPA to make an independent determination as to whether this information satisfies the requirements for CBI violates the CAA and the RHR.

Finally, the Commenters contend that Georgia's calculated costs of \$6,424/ton of SO₂ reduced to switch to PRB coal is cost effective, and this cost-effectiveness value is lower than thresholds used by other states such as Colorado (\$10,000/ton), New Mexico (\$7,000/ton), and Arizona (\$6,500/ton). Moreover, the Commenters state that cost effectiveness should be lower to reflect that switching to PRB coal would result in 46 percent lower NO_x emission rates without changing Plant Bowen's use of NO_x controls. They argue that the NO_x reductions of switching to PRB coal would result in a cost-effectiveness of \$4,749/ton of combined SO₂ and NO_x removed.

Response 9: EPA disagrees with the Commenters' argument that EPA did not scrutinize GA EPD's analysis of Plant Bowen and did not consider the public comments submitted at the state level.

Regarding the Commenters' argument that in 2014 Plant Bowen switched from lower-sulfur CAPP coal to IB coal which has a higher sulfur content, EPA acknowledges that the sulfur content for IB coal is higher and SO₂ emissions have increased with the switch to IB coal. This switch is also discussed in Response 8.

EPA disagrees with the Commenters' argument that Georgia greatly overstated the costs of switching to 100 percent PRB coal. With a fuel switch to PRB coal, there would be a 27 percent facility derate based on the average heat content of PRB coal ((8,800 British thermal units per pound (Btu/lb)) in comparison to the current coal being used at Plant Bowen, which is IB coal

with an average heat content of 12,002 Btu/lb.⁴⁸ This derate resulting from the reduced heat content of PRB coal would result in Plant Bowen having 27 percent less total electricity generation capacity. This is a real cost that Georgia was correct to account for in the FFA.

Through a letter to GA EPD dated August 8, 2022, Georgia Power responded directly to similar comments submitted by the Commenters to GA EPD. This letter was included as part of Georgia's submittal and is located within Appendix G-1e to the Haze Plan. Within that letter, Georgia Power explained that "[t]he capacity penalty costs in the Plant Bowen FFA represented the costs to replace the derated unit capacity to meet the reserve margin required in the Southern Company system." Georgia Power also cited to the FFA, which notes that "Plant Bowen Units 1-4 provide capacity value by supporting system reliability and by avoiding costs associated with replacement capacity that would be required to meet customer peak demands and reserve margin requirements in the absence of such Plant Bowen units. Without these units, Georgia Power would have to procure short-term and long-term replacement capacity in order to restore Georgia Power and the Southern Company system to a comparable level of reliability that the system currently holds."

The Commenters conflate two distinct electric generation concepts: capacity and generation. They are not the same. Nor are the financial costs and revenues associated with each the same. According to the EIA, "[e]lectricity generation capacity is the maximum electric output an electricity generator can produce under specific conditions."⁴⁹ "Electricity net generation," on the other hand, "is the amount of gross electricity generation a generator produces minus the electricity used to operate the power plant."⁵⁰ It is this incorrect conflation of concepts that leads the Commenters to incorrectly conclude that Georgia Power could make up for any lost capacity at Plant Bowen by simply purchasing 134,982 MWh of electricity annually. In general, the electrical grid can experience high periods of demand for short durations. This is known as "peak" electricity demand. To ensure reliability of the electrical grid, electric utilities must have sufficient capacity available to

⁴⁸ See Section 4.4.1.1 on p. 15 of the Haze Plan in Appendix G-1b.

⁴⁹ <https://www.eia.gov/tools/faqs/faq.php?id=101&t=3>.

⁵⁰ *Id.*

ensure that these peak loads can be met. The Commenters' suggestion that Georgia Power could simply purchase 134,982 MWh of generated electricity does not account for the need for Georgia Power to also have adequate capacity available for the grid, even at times of peak demand. Georgia Power refers to this concept as the "reserve margin" in its August 8, 2022, letter.

EPA agrees with Georgia's assessment that requiring PRB coal would result in a capacity derate, and that this capacity derate would impact electrical reliability by reducing peak available capacity to a sufficient extent that Georgia Power would have to "procure short-term and long-term replacement capacity." Over the long-term, this would likely result in the need for Georgia Power to construct new generation capacity equivalent to the capacity derate, which would be a capital cost and not an operating expenditure. EPA thus does not agree with the Commenters that this capacity derate was mis-classified within the FFA as an operating expense. Plant Bowen Units 1 and 2 each have a maximum capacity of 724 megawatts (MW), and Units 3 and 4 have a maximum capacity of 892 MW. See Haze Plan Appendix G–1b, Note 1 to Table A2.2. Combined, these four units have a maximum capacity of 3,232 MW if combusting IB coal. A 27 percent derate of these units associated with a switch to PRB coal would reduce the maximum capacity of Plant Bowen to 2,359 MW. The difference between these two numbers is 873 MW, which is the total capacity that Georgia Power would no longer have available to put onto the grid.

Moreover, according to a recent IRP Update submitted by Georgia Power to the Georgia Public Service Commission (GA PSC), "the Company's current projections reflect load growth of 6,600 MW through the winter of 2030/2031, which is approximately 17 times greater than that previously forecasted."⁵¹ Due to this projected growth, Georgia Power requested that the GA PSC approve the construction of 1,400 MW of new generation capacity at Plant Yates, the authority to develop, own, and operate up to 1,000 MW of battery energy storage systems, the long term purchase of 750 MW of capacity from Mississippi Power through a power purchase agreement, and the long term purchase of 230 MW of capacity from Santa Rosa

Energy Center through a power purchase agreement.⁵²

On April 26, 2024, the GA PSC issued an order in which it took action on Georgia Power's IRP Update filing. In that order, the GA PSC approved much of Georgia Power's IRP Update filing, with certain modifications subject to a stipulation adopted by the GA PSC. Critically, within the GA PSC's April 26, 2024, order, the GA PSC stated the following as a finding of fact:

Substantial empirical evidence shows that the load projected by the Company is indeed coming to Georgia. There is a large economic development pipeline made up of businesses seeking to locate in Georgia, and the Company has continued to see progress from large load customers included in its forecast, as well as accelerated customer load ramps and other tangible evidence of growth. The number of committed Georgia Power customers continues to increase. As of the 2023 IRP Update filing, the Company had already been chosen to serve over 3,600 MW of load from the approximately 17,000 MW pipeline of economic development, nearly 3,000 MW of which is already under construction. (Rebuttal Hearing Tr. 2031.) Since the 2023 IRP Update filing in October of 2023, the economic development pipeline has grown from 17,000 MW to 21,000 MW, and Georgia Power has been selected to serve an additional 2,602 MW. The large load customers included in the Company's forecast are moving forward and making progress without material delay. The Stipulation will allow Georgia Power to reliably serve both its existing customers and the new ones.⁵³

On August 29, 2024, the GA PSC took further action within this IRP Update docket by granting Georgia Power a certificate of convenience and public necessity for the construction of Plant Yates Units 8–10, and the PSC noted that "time is of the essence and the Commission declines to accept any further delay in putting these assets in place," and "[i]n light of . . . the state of Georgia's recent extraordinary economic growth, and its citizens and business' pressing need for economical and reliable energy to meet this growth, the Commission agrees with the Company and Staff that certification of Plant Yates Units 8–10 is reasonable and appropriate."⁵⁴ Plant Yates Units 8–10 would provide Georgia Power with approximately 1,400 MW of additional generation capacity.

These recent actions by the GA PSC are highly relevant to the Commenters' assertions. Specifically, the Commenters

argue that the Plant Bowen FFA's conclusion is unsubstantiated regarding the need for Georgia Power to construct or otherwise acquire additional generation capacity to replace the 873 MW of lost capacity if Plant Bowen were required to utilize lower sulfur, lower heat content PRB coal. Based on the recent factual findings of the GA PSC, which EPA acknowledges, EPA does not agree with the Commenters. While requiring Plant Bowen to switch to PRB coal would reduce SO₂ emissions, it would do so at the expense of generation capacity, and the need to construct or procure new generation capacity was therefore properly considered within the FFA. EPA therefore agrees with Georgia's conclusions that this capacity derate should be classified as a capital expenditure since it would result in the need to construct or procure access to new capital, *i.e.*, 873 MW of generation capacity. EPA also agrees that the financial and energy costs associated with this capacity derate are not reasonable under the RHR. 40 CFR 51.308(f)(2)(i).

The CBI filings provided by Georgia Power as part of the Plant Bowen FFA further support EPA's conclusion. Regarding the Commenters' request that EPA determine whether these materials are in fact CBI, for the same reasons stated in Response 8, EPA is exercising its discretion to not make a formal CBI determination regarding the redacted materials contained within the Plant Bowen FFA at this time and disagrees with the Commenters' assertion that EPA is required to make such a determination here. Nonetheless, throughout this rulemaking process, EPA has reviewed the unredacted indirect costs that GA EPD submitted in Technical Appendix B of Appendix G–1b of the Haze Plan (along with all other components of the Haze Plan). As requested by Commenters, EPA confirms that it reviewed this CBI information during the review of the Haze Plan and finds that it provides adequate technical justification in support of the submittal. Because the capacity derate would result in the need for Georgia Power to construct or procure new long-term generation capacity, EPA also agrees that Georgia Power would reasonably be entitled to a rate of return on this capital, which Georgia Power substantiated in its FFA.⁵⁵

⁵² *Id.* at pp. 15–25.

⁵³ GA PSC Order Adopting Stipulated Agreement, at pp. 7–8, available at: <https://psc.ga.gov/search/facts-document/?documentId=218484>.

⁵⁴ GA PSC Order Granting Certification of Plant Yates Units 8–10, available at: <https://psc.ga.gov/search/facts-document/?documentId=219790>.

⁵¹ Georgia Power "2023 Integrated Resource Plan Update," at p. 1, available at: <https://georgiapower.com/content/dam/georgia-power/pdfs/company-pdfs/2023-irp-update-main-document.pdf>.

⁵⁵ The Commenters also incorrectly note that Georgia Power is entitled to a 6.04 percent rate return. This 6.04 percent figure is identified in Table A1.2 as Georgia Power's firm-specific interest rate as authorized by the Georgia Public Service

The Commenters contend that there is a mismatch in assumptions in the FFA because the FFA assumes operating time will increase if combusting PRB coal at the same time as Plant Bowen would need to purchase \$51 million worth of electric generating capacity to cover lost capacity due to the derate associated with reduced heat content of PRB coal. The Commenters are incorrect. The Plant Bowen FFA states that “the level of unit capacity derate does not impact the annual SO₂ emissions reduction since the analysis assumes that the 2019 baseline annual heat input is achievable at this derated unit capacity with an increased amount of operating time.” The FFA properly assumed an increase in operating time when comparing SO₂ emissions if combusting PRB coal compared to IB coal because those emissions are based on projected 2028 emissions. The 2028 emission projections, in turn, are based in part upon projections about the quantity of electricity that will actually be generated. The Plant Bowen FFA reasonably increased operating hours in 2028 when modeling SO₂ emissions if operating on PRB coal to ensure that the same quantity of electricity was generated in both the PRB scenario and the IB coal scenario. Again, the concept of total generation capacity of the plant that is available to provide load to the grid as needed is separate and distinct from electricity that is actually generated and placed onto the grid. EPA thus disagrees that there is a “mismatch” in assumptions in the FFA.

Regarding the comment that the cost of \$6,424/ton of SO₂ reduced associated with a switch to PRB coal is cost-effective because it is lower than thresholds used by other states (Colorado—\$10,000/ton, New Mexico—\$7,000/ton, and Arizona—\$6,500/ton), EPA disagrees. Flexibility afforded to states has long been a hallmark of the regional haze program. *See, e.g.*, 82 FR 3078, 3088 (January 10, 2017) (“While these final revisions to the RHR continue to provide states with considerable flexibility in evaluating the four reasonable-progress factors, we expect states to exercise reasoned judgment when choosing which sources, groups of sources or source

categories to analyze.”); 2019 Guidance at p. 4 (“States have discretion to balance these factors and considerations in determining what control measures are necessary to make reasonable progress.”). Inherent in this flexibility is that different states may choose bright-line cost effectiveness thresholds, and some may instead choose to adopt a different methodology to determine whether controls are cost effective (*i.e.*, Georgia’s approach). For those states that do choose to use bright-line cost-effectiveness thresholds, those thresholds may differ from state-to-state. Different states will take different approaches to comply with the RHR, and various methods of complying with the rule may be reasonable depending on a number of facts and circumstances (*e.g.*, number of sources in the state; magnitude of emissions of visibility impairing pollutants from sources in the state; visibility impairment at impacted Class I areas).

Due to this flexibility, EPA disagrees with the premise of the Commenters’ assertion, which appears to be that cost effectiveness thresholds in one state should be determinative of whether controls are cost-effective in another state. Taken to its logical conclusion, the Commenters’ position seems to be that EPA’s determinations regarding the approvability of bright-line cost-effectiveness thresholds in states such as Colorado, New Mexico, and Arizona should serve to set a nationwide cost-effectiveness floor. The RHR requires no such thing, and indeed, the Commenters cite to no legal authority for their position.

As discussed in Response 5, Georgia relied on a spreadsheet of first planning period costs developed by Arkansas with input from other states and supplemented with VISTAS-specific data. Georgia determined based on that spreadsheet that a cost of \$6,424/ton of SO₂ removed, as determined for the 2019 cost year, would exceed the 98th percentile of all costs incurred by sources to control emission in the first planning period. On this basis, Georgia determined that a cost of \$6,424/ton of SO₂ removed was not a reasonable cost of control. EPA reaffirms that Georgia’s conclusions were reasonable under the CAA and RHR.

While the Commenters state that a switch to PRB coal would result in 46 percent lower NO_x emission rates and taking the NO_x reductions into account would result in a cost-effectiveness of \$4,749/ton for SO₂ and NO_x, combined, because the facility did not exceed Georgia’s Aol/PSAT threshold for NO_x, Georgia did not conduct a control analysis for NO_x due to its

determination that SO₂ is the dominant pollutant in this planning period for Class I areas impacted by Georgia sources. For the reasons discussed earlier in Response 3, EPA has concluded that Georgia’s approach is reasonable. As set forth in that response, PSAT source apportionment modeling clearly demonstrates that contributions from Georgia’s point source NO_x emissions are significantly below Georgia’s source selection thresholds. As stated in Tables 7–16, 7–17, and 7–18 of the Haze Plan, the modeled visibility impacts on a pollutant-by-pollutant basis for Plant Bowen were as follows: 2.13 percent SO₂ and 0.07 percent NO_x for Cohutta; 2.77 percent for SO₂ and 0.01 percent for NO_x for Okefenokee; and 2.35 percent for SO₂ and 0.14 percent for NO_x for Wolf Island, which results in SO₂ visibility impacts approximately 17 times greater than NO_x visibility impacts at each of the Georgia Class I areas. The nitrate impacts from this facility are far below Georgia’s source selection thresholds. As EPA has consistently stated, “When selecting sources for analysis of control measures, a state may focus on the PM species that dominate visibility impairment at the Class I areas affected by emissions from the state and then select only sources with emissions of those dominant pollutants and their precursors.” 2019 Guidance, at p. 11. Additional rationale can be found in the Response 3, which discusses the dominant nature of SO₂ emissions in Georgia on visibility impairment at Class I areas compared to NO_x emissions.

Comment 10: The Commenters assert that EPA must require Georgia to consider year-round operation of the Selective Catalytic Reduction (SCR) systems at each of Plant Bowen’s emissions units within the FFA. They state that ignoring NO_x pollution and controls and EPA’s proposal to approve Georgia’s decision are not supported by the record. Instead, they argue EPA must require Georgia to evaluate options to reduce NO_x emissions at Plant Bowen. The Commenters argue that although Plant Bowen is equipped with low NO_x burners, separated overfire air, and SCR, Plant Bowen operates the SCR optimally only during ozone season, that they “severely underperform,” and that year-round operation of SCR could cut NO_x emissions in half. The Commenters therefore state that EPA must require Georgia to evaluate readily implementable NO_x controls, such as year-round SCR systems operation on a 30-boiler operating day average NO_x

Commission. This is not the same as the rate of return that Georgia Power is entitled to. The rate of return that Georgia Power is entitled to is identified in the same rate case cited in support of Table A1.2. That rate of return (referred to by the Georgia Public Service Commission as “return on equity”) is set forth in the Georgia Public Service Commission’s December 31, 2019, Short Order Adopting Settlement Agreement as Modified and ranges from 9.5 percent to 12.0 percent. This order is available at <https://psc.ga.gov/search/facts-document/?documentId=179339>.

emission limit of between 0.05 lb/MMBtu and 0.07 lb/MMBtu.

Response 10: EPA finds the Commenters' assertions that EPA must require Georgia to analyze year-round operation of the SCR systems at Plant Bowen's Units 1–4 unfounded because, as discussed in Response 3 and in the NPRM, EPA agrees with Georgia's decision to focus on SO₂ controls in this planning period given, among other things, IMPROVE monitoring data from the 2014–2018 and 2015–2019 five-year periods showing that ammonium sulfate is the dominant visibility impairing pollutant contributing to regional haze at the Class I areas impacted by Plant Bowen. As also discussed in Response 9, the modeled visibility impacts on a pollutant-by-pollutant basis for Plant Bowen show that modeled visibility impacts from SO₂ are 17 times higher compared to modeled visibility impacts from NO_x in each of the Class I areas in Georgia. Based on these modeled visibility impacts, Plant Bowen did not meet Georgia's source selection threshold for NO_x due to low NO_x impacts. Therefore, EPA finds that Georgia appropriately focused on evaluating SO₂ emissions controls only for Plant Bowen for this planning period.

Comment 11: The Commenters contend that EPA cannot approve the incorporation of Plant Bowen's Permit No. 4911–015–0011–V–04–3 (2023 Permit Amendment) into Georgia's SIP due to an unlawful startup, shutdown, and malfunction (SSM) exemption and emergency affirmative defense provisions in Plant Bowen's 2019 title V renewal permit 4911–015–0011–V–04–0 (2019 title V Permit) that could apply to the SO₂ regional haze SO₂ emission limit. The Commenters state the "Excess Emission" permit condition (*i.e.*, Condition 8.14.4 of the 2019 title V permit) could allow Plant Bowen to exceed its regional haze SO₂ limit contained in the 2023 Permit Amendment during SSM events. Additionally, the Commenters argue that Plant Bowen's "emergency" affirmative defense provision (*i.e.*, condition 8.13.2 of the 2019 title V permit) would allow Plant Bowen to argue an affirmative defense in any enforcement action brought for an alleged violation of the facility's SO₂ regional haze limit contained in the 2023 permit amendment. Thus, the Commenters assert that EPA's proposal to incorporate Plant Bowen's 2023 Permit Amendment into Georgia's SIP violates the CAA and the RHR.

Response 11: EPA disagrees with the Commenters. The Agency is incorporating the 2023 Permit

Amendment into the Georgia SIP and is not incorporating into the SIP any portion of the 2019 title V Permit. Therefore, the provisions of the 2023 Permit Amendment will be federally enforceable via the SIP as specifically provided for in that permit, which contains work practice requirements that apply during startup and shutdown. *See* 2023 Permit Amendment, Condition 3.3.8. Additionally, Condition 8.14.4 of Plant Bowen's 2019 title V Permit, referenced by the Commenters, is substantively the same as Georgia Rule 391–3–1–.02(2)(a)7 of the State's federally approved SIP. Because this rule is already in Georgia's SIP and further because EPA is not adopting Condition 8.14.4 into the SIP in this action, the Commenters' concerns are without merit. Likewise, Condition 8.13.2 of Plant Bowen's 2019 title V Permit, also referenced by the Commenters, is derived from Georgia Rule 391–3–1–.03(10)(d)7, which is a rule that is currently approved into Georgia's title V rules. Specifically, that rule states that "40 CFR part 70.6(g) is hereby incorporated and adopted by reference." On July 21, 2023, EPA removed 40 CFR 70.6(g) from the Code of Federal Regulations as "inconsistent with the EPA's interpretation of the enforcement structure of the Clean Air Act." *Id.* In accordance with the EPA's July 21, 2023, rulemaking, Georgia is likewise required to remove this provision from the State's title V rules. *See* 88 FR 47029. Upon removal of this rule from Georgia's title V program, Georgia would then be obligated to remove conditions such as Plant Bowen's Condition 8.13.2 from the facility's title V permit. EPA also disagrees that the Condition 8.13.2 would allow Plant Bowen to argue an affirmative defense in any enforcement action brought for an alleged violation of the facility's SO₂ regional haze limit contained in the 2023 permit amendment. Rather, an affirmative defense may only be argued for *emergencies* that meet the specific criteria of paragraphs a. through d. of Condition 8.13.2.

Comment 12: The Commenters assert that EPA cannot approve Georgia's FFA for Brunswick Cellulose and must require the facility to install cost-effective controls. They state that due to the facility's "significant" NO_x emissions, EPA must require Georgia to conduct an FFA for NO_x controls. In addition, the Commenters argue that Georgia's FFA, as it pertains to SO₂ controls, is "riddled with errors that EPA neither acknowledges nor addresses."

The Commenters state that NPS found that Georgia did not follow EPA's CCM in its analyses of wet scrubber and dry sorbent injection (DSI) controls for the No. 4 Power Boiler and No. 5 and 6 Recovery Furnaces. The Commenters thus contend that to meet its regional haze requirements, as well as the requirement that EPA must act consistently across SIP actions, EPA must determine that these deviations from EPA's CCM in its analyses of controls for Brunswick Cellulose violate the CAA and RHR.

The Commenters also assert that Georgia inappropriately rejected a wet scrubber for the No. 4 Power Boiler. They contend that "based even on Georgia's flawed analyses for Brunswick, a wet scrubber would likely reduce SO₂ emissions from the No. 4 Power Boiler by 141 tpy at a cost-effectiveness of \$10,330/ton of pollution reduced," which they argue is within the range of cost thresholds adopted by other states.

Response 12: Regarding the Commenters' assertion that EPA cannot approve GA EPD's FFA for Brunswick Cellulose and must require the facility to conduct NO_x control analyses given its NO_x emissions and to install cost-effective controls for NO_x, *see* Response 2 and Response 3. In the Haze Plan, GA EPD evaluated Brunswick Cellulose's contributions to visibility impairment at Class I areas and concluded that SO₂ contributions to visibility impairment from this facility exceeded State's AoI and PSAT screening thresholds and that NO_x emissions did not exceed the State's screening thresholds. Therefore, Brunswick Cellulose was selected for an SO₂ FFA, but not for a NO_x FFA. As discussed in Response 2 and Response 3, Georgia's approach was reasonable and complies with the RHR.

Regarding the Commenters' arguments that GA EPD's FFA of SO₂ controls for Brunswick Cellulose is "riddled with errors" and not properly substantiated, the Commenters do not discuss any errors with any specificity. Instead, the Commenters cite to the NPS's June 22, 2022, letter to GA EPD,⁵⁶ in which NPS noted that "the indirect operating costs do not reflect the most recent CCM wet scrubber chapter methods." The Commenters omit, however, that NPS also "agree[d] with several revisions made to the cost analyses." While the Commenters focus on several concerns raised by NPS regarding Georgia's rationale, the Commenters omit that in spite of these concerns, NPS agreed with Georgia's

⁵⁶ Haze Plan, Appendix H–1b, NPS Regional Haze SIP feedback for Georgia EPD (June 22, 2022).

ultimate conclusion that “[g]iven that the fuel switch is estimated to result in a cost savings (even at higher natural gas prices), the NPS reviewers concur that the incremental costs of selecting a scrubber system in lieu of a fuel switch are not justified from a cost standpoint.”

Based on EPA’s evaluation of Brunswick Cellulose’s cost analyses, EPA noted several discrepancies, including the addition of property tax values to the total indirect operating costs. As alluded to in the NPS letter cited by the Commenters, these discrepancies were addressed prior to Georgia’s final SIP submittal. The State’s final SIP submittal to EPA included a revised cost calculation which was nearly identical to EPA’s calculations. In the Haze Plan, the State’s cost per ton calculation was marginally lower than EPA’s calculation due to EPA’s use of a lower 3.25 percent bank prime interest rate, as recommended by the CCM. Although EPA recognizes that GA EPD’s cost calculations produced slightly lower values compared to EPA’s own evaluation in accordance with the CCM, the differences in the total cost per ton of SO₂ removed would not have changed the outcome of the FFA. In Appendix G–3 of the Haze Plan, GA EPD included documentation and explained the assumptions that the State used in the Brunswick Cellulose FFA, including the use of the current bank prime rate, a 30-year equipment life, and control efficiency assumptions used in the scrubber and DSI cost analyses. EPA thus does not agree with the Commenters that the FFA was not properly substantiated.

The Commenters also argue that Georgia inappropriately rejected a cost-effective control for the No. 4 Power Boiler (\$10,330/ton of SO₂ reduced for the installation of a wet scrubber), considering the cost-effectiveness is within the range of cost thresholds adopted by other states for the second planning period. Commenters raised a very similar argument regarding Plant Bowen, and for the same reasons that EPA disagreed with the Commenters’ position in Response 9 (regarding Plant Bowen), EPA disagrees here as well. Furthermore, the \$10,330/ton value exceeds the highest state cost threshold identified by the Commenters (\$10,000/ton for Colorado).

As discussed in Response 5, Georgia relied on a spreadsheet of first planning period costs developed by Arkansas with input from other states and supplemented with VISTAS-specific data. Georgia determined based on that spreadsheet that a cost of \$10,330/ton of SO₂ removed would exceed the 98th percentile of all costs incurred by

sources to control emission in the first planning period. On this basis, Georgia determined that a cost of \$10,330/ton of SO₂ removed for the installation of a wet scrubber at Brunswick Cellulose was not a reasonable cost of control. Given that the State is not required to set a bright-line cost threshold by the RHR, the discretion afforded to the state to determine whether costs are reasonable, and the even-handed and consistent methodology applied by Georgia to determine whether control costs were reasonable for this planning period, EPA reaffirms that Georgia’s conclusions were reasonable under the CAA and RHR.

Comment 13: The Commenters assert that, at a minimum, Brunswick Cellulose’s existing measures for the No. 5 and 6 Recovery Furnaces are necessary for reasonable progress. The Commenters note that EPA has explained that a state can demonstrate that a source will continue implementing its existing measures such that they are not necessary for reasonable progress “based on data and information on: (1) The source’s past implementation of its existing measures and its historical emission rate, (2) the source’s projected emissions and emission rate, and (3) any enforceable emissions limits or other requirements related to the source’s existing measures.” The Commenters state that the expected emission ranges provided by Georgia for these furnaces are “very wide, with the top of the range being more than double the bottom.” Additionally, the Commenters state that nothing in the SIP revision demonstrates that emissions will remain the same at these units. The Commenters state that EPA explains that Georgia submitted a supplement to its SIP revision providing that the No. 5 Recovery Furnace’s emissions fluctuated from 2016 to 2020 and argued that “the emission rate for the unit is within a consistent range limited by the Permit.” The Commenters therefore contend that EPA’s own justification for its determination underscores that existing permit limits for the facility are necessary to make reasonable progress.

Response 13: EPA disagrees with the Commenters. EPA requested supplemental information from Georgia regarding emissions for the No. 5 Recovery furnace, which has higher emissions than the No. 6 Recovery Furnace. Based on 2016 to 2020 emissions data provided by Georgia to EPA that was cited in the NPRM and included in the docket, emissions at the No. 5 Recovery Furnace ranged from 0.125 to 0.152 tons SO₂/1,000 gallons of No. 6 fuel oil burned, demonstrating a

reasonably consistent SO₂ emission rate during this time period. The increase in total SO₂ emissions discussed by the Commenters is attributable to increased fuel oil burned in the unit and is not attributable to an inconsistent emission rate. Based on 2016 to 2020 emissions data, SO₂ emissions decreased from 21.7 tpy in 2016 to 7.8 tpy in 2020. Because emissions remain consistent at the No. 5 Recovery Furnace, EPA is not requiring Georgia to adopt existing measures for this emission unit into the SIP. This position is also consistent with EPA’s 2021 Clarifications Memo. See 2021 Clarifications Memo, at p. 9. Regarding the No. 6 Recovery Furnace, EPA likewise requested supplemental information from Georgia. This supplemental information is in the docket.⁵⁷ While there is somewhat more variability in the emissions rate for this unit, the unit’s SO₂ emissions are extremely low, and therefore existing measures at this unit are not necessary for reasonable progress.

Comment 14: The Commenters assert that the Brunswick Cellulose permit that EPA proposes to incorporate into Georgia’s SIP does not include practically enforceable emission limits. More specifically, they argue the Brunswick Cellulose permit does not contain sufficient measures to ensure the facility complies with the 15 tpy SO₂ limit for the No. 4 Power Boiler and the No. 6 fuel oil burning condition during adverse wood/bark conditions. The Commenters contend that the permit states that Brunswick Cellulose “shall use emission factors” but does not specify what emission factors Brunswick Cellulose must use.⁵⁸ The Commenters note that in an April 24, 2024, email from GA EPD to EPA, GA EPD stated that Brunswick Cellulose will use an AP–42 emission factor of 157 S lb/Mgal (where S is the fuel sulfur content by weight as a percentage per million gallons of fuel).⁵⁹ However, the Commenters contend that AP–42 factors

⁵⁷ See October 29, 2024, GA EPD email and attached file transmitting supplemental emissions information for the Brunswick Cellulose No. 6 Recovery Furnace.

⁵⁸ Ga. Dept. Nat. Res., Air Quality—Part 70 Operating Permit, Brunswick Cellulose LLC, Permit No. 2631–127–0003–V–07–3 at 3 (Oct. 25, 2023), Document No. EPA–R04–OAR–2023–0220–0011 (providing that Condition 6.2.52 “demonstrate[s] compliance with Condition 3.2.25”) [hereinafter “Brunswick Permit”].

⁵⁹ Email from James Boylan, Chief, Air Prot. Branch, Ga. Env’t Prot. Div., to Estelle Bae, Air Permits Sec., Air Planning and Implementation Branch, Air and Radiation Div., Env’t Prot. Agency Region 4 (Apr. 15, 2024), Document No. EPA–R04–OAR–2023–0220–0109; Ga. Env’t Prot. Div., Response to EPA Regional Haze Questions at 1 (April 14, 2024), Document No. EPA–R04–OAR–2023–0220–0110.

do not reliably predict emissions and therefore are insufficient to determine compliance. The Commenters note that EPA has cautioned that the AP-42 factors “are not likely to be accurate” and “[u]se of these factors as source-specific permit limits . . . is not recommended.”⁶⁰ The Commenters further argue that since neither EPA nor Georgia can rely on these AP-42 factors to establish or demonstrate compliance, the 15 tpy SO₂ emission limit is not practically enforceable and EPA’s proposal to incorporate it into the SIP violates the CAA and the RHR.

Response 14: EPA disagrees with the Commenters. GA EPD’s April 24, 2024, clarification email stated that the facility used the 157 S lb/Mgal emission factor contained within Table 1.3–1 of AP-42 in its title V permit application.⁶¹ The use of interpretive letters to clarify ambiguity or perceived ambiguity in the provisions in a SIP submission is a permissible, and sometimes necessary, approach under the CAA.⁶² So long as the interpretive letters and EPA’s reliance on them is properly explained and documented, regulated entities, regulators, and the public can readily ascertain the existence of interpretive letters relied upon in EPA’s approval that would be useful to resolve any perceived ambiguity. By virtue of being part of the stated basis for EPA’s approval of that provision in a SIP submission, interpretive letters necessarily establish the correct interpretation of any arguably ambiguous SIP provision. In other words, the rulemaking record should reflect the shared state and EPA understanding of the meaning of a provision at issue at the time of the approval, which can then be referenced should any question about the provision arise in a future enforcement action. In

this action, EPA is approving the Brunswick Cellulose emission limit and incorporating it into the SIP based on Georgia’s interpretation that the phrase “shall use emissions factors” in Condition 6.2.52 means that the source shall use an emissions factor of 157 S lb/Mgal to calculate SO₂ emissions from the unit for comparison with the 15 tpy emission limit.⁶³ EPA will include an entry for this Brunswick Cellulose permit in the Georgia source-specific SIP table at 40 CFR 52.570(d) with text in the explanation column stating that “shall use emissions factors” refers to the use of a 157 S lb/Mgal, from AP-42, Chapter 1, Section 1.3: Fuel Oil Combustion. For these reasons, EPA views the use of this emissions factor as a federally-enforceable requirement which renders the emission limit practically enforceable.

As for the Commenters’ argument regarding the use of AP-42 as the basis for this emissions factor, the Commenters seem to suggest that AP-42 emission factors can never be used in permitting. While AP-42 emission factors should be used with caution because source-specific data is always more reliable than industry-wide averages compiled in AP-42, EPA has consistently stated that “AP-42 emission factors may be used to demonstrate compliance with emission limits in certain circumstances” and that “[w]hether and how a permit must account for uncertainty in AP-42 emission factors (including the AP-42 emission factor at issue here) is a fact-specific decision, as with essentially all other decisions concerning compliance assurance.”⁶⁴

The Commenters do not raise any specific facts to suggest that the use of AP-42 emission factors here is inappropriate. Instead, they simply assert that EPA has “cautioned” against the use of such emission factors in permitting, and the Commenters then make a blanket statement that therefore such emission factors cannot be used in permitting at all. As applied here, the

Commenters contend that the use of an AP-42 emission factor rendered the 15 tpy emission limit practically unenforceable and therefore unlawful under the CAA and RHR.

EPA disagrees. The AP-42 emission factor used by GA EPD, which is located in Table 1.3–1 of AP-42, is rated “A” by EPA, which is the best rating available and means that the test quality data used by EPA to develop this emission factor was “performed by a sound methodology and are reported in enough detail for adequate validation.”⁶⁵ An “A” rating also means that the “Factor is developed from A- and B-rated source test data taken from many randomly chosen facilities in the industry population. The source category population is sufficiently specific to minimize variability.”⁶⁶ The 157 S lb/Mgal AP-42 emission factor, is a commonly used and appropriate representation of the SO₂ emitted from a fuel-burning unit, as SO₂ emissions are almost entirely dependent on the sulfur content of the fuel, conservatively assuming that 95 percent of the fuel sulfur is converted to SO₂.⁶⁷ Scenarios where EPA has raised concerns about the use of AP-42 emission factors generally involve scenarios such as synthetic minor permitting limits used to avoid major source permitting where the synthetic minor limit is near the major source threshold. For example, EPA is aware of many scenarios where permitting agencies have imposed emission limits of 249 tpy to avoid the 250 tpy potential to emit major source PSD threshold in CAA 169(1). In such instances, precision in any emission factors used to develop the emission limit and to ensure compliance with the limit are essential because small errors in such emission factor relative to the source’s actual emission could result in a facility exceeding pertinent major source thresholds. As noted by Commenters, EPA issued a compliance alert to this effect in November of 2020.⁶⁸ The circumstances discussed in that compliance alert, however, are not present here because under the regional haze program, there is not a specific numeric threshold, such as a PSD major source threshold, that is applicable. Under the specific factual circumstances

⁶⁰ EPA, “Enforcement Alert: Reminder About Inappropriate Use of AP-42 Emission Factors,” Publication No. EPA 325–N–20–001 (Nov. 2020), available at: <https://www.epa.gov/sites/default/files/2021-01/documents/ap42-enforcementalert.pdf>.

⁶¹ Permit No. 2631–127–0003–V–07–3, Condition 6.2.52, requires the source to use the emission factors and the records required by Condition 6.2.51 to ensure compliance with the 15 tpy SO₂ emission limit specified in Condition 3.2.25 for the No. 4 Power Boiler. On April 15, 2024, GA EPD supplemented its August 11, 2022, Haze Plan by providing clarification on the specific emission factor that the source will use for calculating compliance with Condition 3.2.25. This April 15, 2024, email containing the supplemental clarification is included in the docket for this action.

⁶² See, e.g., Discussion of interpretive letters in “State Implementation Plans: Response to Petition for Rulemaking; Restatement and Update of EPA’s SSM Policy Applicable to SIPs; Findings of Substantial Inadequacy; and SIP Calls To Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown and Malfunction,” 80 FR 33840, 33884–89 (June 12, 2015).

⁶³ On October 16, 2024, GA EPD provided a letter to EPA with an interpretation of the phrase “The Permittee shall use emissions factors” in Condition 6.2.52. GA EPD stated in this letter that this phrase in Permit Condition 6.2.52 means that Brunswick Cellulose will use the same AP-42 emission factor as was used to calculate emissions for their permit application. The emission factor used by Brunswick Cellulose for No. 6 Fuel Oil in No. 4 Power Boiler (U700) is 157 S lb/Mgal, where S is the fuel content as a percentage. This emission factor was taken from Table 1.3–1 of AP-42. This October 16, 2024, letter containing the supplemental clarification of the emission factor is included in the docket for this rulemaking action.

⁶⁴ Intercontinental Terminals Company, LLC Pasadena Terminal, Title V Order No. VI–2023–13, at p. 15.

⁶⁵ AP-42, Introduction, p. 9.

⁶⁶ *Id.*

⁶⁷ See AP 42, Fifth Edition, Volume I Chapter 1: External Combustion Sources, 1.3: Fuel Oil Combustion, available at: https://www.epa.gov/sites/default/files/2020-09/documents/1.3_fuel_oil_combustion.pdf.

⁶⁸ See EPA Reminder About Inappropriate Use of AP-42 Emission Factors, available at: <https://epa.gov/sites/default/files/2021-01/documents/ap42-enforcementalert.pdf>.

present here, EPA finds that GA EPD's use of this AP-42 emission factor was appropriate and that the Commenters' concerns that deviations in Brunswick Cellulose's actual emissions from those assumed in the emission factor are without merit.

Comment 15: The Commenters assert that the most recently renewed Brunswick Cellulose title V permit (April 2023) is also affected by the same SSM exemption and affirmative defense provisions that were detailed above in the 2019 Plant Bowen title V permit. The Commenters contend that the Brunswick Cellulose SSM exemption also states that the exemption does not apply to "sources" subject to New Source Performance Standards requirements, and so, it is not clear whether that provision applies to Brunswick Cellulose's 15 tpy limit for the No. 4 Power Boiler. However, the Commenters state if that provision applies to the 15 tpy limit, it renders the 15 tpy limit unlawful and not practically enforceable for the same reasons raised by the Commenters regarding the identical permit conditions for Plant Bowen. The Commenters thus assert that EPA's proposal to incorporate the 15 tpy limit into Georgia's SIP violates the CAA and RHR.

Response 15: EPA disagrees with the Commenters for the same reasons stated in Response 11.

Comment 16: The Commenters assert that the Brunswick Cellulose title V permit that EPA would be adopting into Georgia's SIP does not contain necessary reporting requirements, but instead only requires the facility to maintain documents "kept as part of the record" reflecting its fuel use and emission calculations. The Commenters note that the permit makes reference to a requirement that Brunswick Cellulose report its excess emissions, exceedances, or excursions in accordance with "the report required in Condition 6.1.4" of the permit. However, the Commenters state that the permit as included in EPA's docket does not contain Condition 6.1.4., and thus, the Commenters argue that the provisions EPA proposes to incorporate into the SIP do not meet the requirements of the CAA or the RHR.

Response 16: Permit condition 6.1.7, as incorporated, requires Brunswick Cellulose to report excess emissions, exceedances, or excursions from the 15 tpy SO₂ emission limit and fuel burning limitations in accordance with permit condition 6.1.4. Permit condition 6.1.4 requires Brunswick Cellulose to submit a written report each quarter that contains any excess emissions,

exceedances, or excursions, and any monitor malfunctions during each quarterly reporting period. If none of these occurred, Brunswick Cellulose must still submit a report stating that there were no excess emissions, exceedances, excursions, or monitor malfunctions during the quarterly reporting period. Condition 6.1.4. exists in a federally enforceable title V permit and is referenced in the reporting requirement in Condition 6.1.7 that is being approved into the SIP.

Comment 17: The Commenters assert that EPA shirks its duty to review Georgia's source-specific FFA for IP-Savannah. The control measure at IP-Savannah that Georgia determined is necessary to make reasonable progress is a requirement that the facility no longer burn coal at its No. 13 Power Boiler. The Commenters contend that EPA cannot approve Georgia's reliance on the cessation of coal burning at the No. 13 Power Boiler because it is not a new control and will not reduce IP-Savannah's emissions. The Commenters note that IP-Savannah ceased burning coal at the No. 13 Power Boiler in 2017, three years before the facility submitted its FFA to the State and five years before Georgia finalized its SIP revision, and contend that the measure is therefore neither "new" nor "additional." The Commenters state that EPA's conclusion that the control would achieve any emission reductions, let alone more reductions than other controls analyzed, is misleading at best. The Commenters contend that IP-Savannah's baseline emissions for its control analysis used 2018 and 2019 emissions and that because these years already accounted for the cessation of coal burning, EPA's assertion that this control measure would achieve additional reductions in SO₂ is "inappropriate double counting." Nonetheless, the Commenters agree with EPA and GA EPD that this measure should be adopted into Georgia's SIP, but the Commenters state that cessation of coal combustion at the No. 13 boiler should be classified as an existing measure.

Response 17: EPA disagrees with the Commenters' argument that IP-Savannah's cessation of burning coal at the No. 13 Power Boiler in 2017 is neither "new" nor "additional." Although IP-Savannah stopped burning coal voluntarily in 2017, IP-Savannah was still permitted to burn coal and the facility did not physically modify the No. 13 Power Boiler to remove the capability to burn coal. This restriction is a new control for regional haze purposes because incorporating it into Georgia's SIP will result in the permanent cessation of coal combustion at the No. 13 Power Boiler.

Without this incorporation into the SIP, the source could request a permit modification to begin combusting coal again, which would be inconsistent with the requirement to achieve reasonable progress under the CAA and RHR. The removal of coal as a fuel in the No. 13 Power Boiler will result in the permanent reduction of approximately 2,662 tpy of SO₂ emissions reductions per year (see column "SO₂ tpy Reductions" in Table 7-35 of the Haze Plan). EPA finds that the selected control option is necessary for reasonable progress for the second period and is therefore adopting this measure into the SIP. In response to the Commenters' assertion of the "inappropriate double counting" of SO₂ reductions, the characterization of the whether these are "additional" reductions is irrelevant. The cessation of coal burning is simply a measure that EPA is adding to the SIP and is a part of the LTS.

Comment 18: Instead of the cessation of burning coal, the Commenters assert that EPA must require IP-Savannah to install cost-effective circulating dry scrubber (CDS) or DSI controls. The Commenters argue that Georgia's analysis of these controls for the No. 13 Power Boiler contain multiple errors and unsupported costs, which are detailed below.

First, the Commenters contend that the facility's 20-year "economic life" deviates from the CCM, where the remaining useful life for these controls is 30 years. Second, the Commenters contend that IP-Savannah provided only vague statements or justifications in support of its retrofit factor, that this retrofit factor was at the top of EPA's recommended range, and that Georgia should have used an average retrofit factor of one when considering CDS and DSI controls. The Commenters also similarly contend that the capacity factor of 59 percent for the No. 13 Power Boiler is unsupported in the FFA, and that Georgia and EPA should have not accepted this number without further documentation. The Commenters state that information in the facility-submitted FFA indicates that the actual capacity factor is very likely much higher at 76.4 percent. The Commenters state that Georgia did not require or provide any documentation to support (1) IP-Savannah's argument that it would have to expand its solid waste disposal site to accommodate CDS or DSI controls, or (2) the cost of expanding the waste disposal site. The Commenters contend that the facility's claimed costs for waste disposal are not reliable, as the facility escalated the costs for expanding its disposal site

from 2007 to 2021 dollars despite the fact that the CCM states that costs should not be escalated more than five years.

The Commenters also assert that beyond the above-described alleged cost analysis errors for CDS and DSI, Georgia accepted an unreasonably low 90 percent removal efficiency for CDS from the facility-submitted cost analysis. According to the Commenters, the CCM states that CDS systems can achieve at least 95 percent and possibly over 98 percent removal efficiency. They further contend that Georgia acknowledged in the SIP revision that CDS systems can achieve 98 percent control in its response to comments, but the State still stated, without any support or explanation, that “it supports IP-Savannah’s choice to use 90 percent as an appropriate efficiency factor.”

Separately, the Commenters assert that Georgia accepted the same waste disposal cost for both CDS and DSI even though IP-Savannah’s calculated waste rate for CDS was significantly lower than that for DSI. Therefore, they argue that Georgia should have used a lower waste disposal cost in its analysis for CDS. In total, the Commenters contend that each of these alleged errors resulted in artificially inflated control costs for CDS and DSI and, therefore, artificially inflated cost-effectiveness values. The Commenters state that, according to the Stamper report attached to the Commenters’ comments, by correcting some of the noted errors identified by the Commenters in Georgia’s analysis, CDS and DSI are cost-effective controls at \$3,790/ton and \$5,920/ton of SO₂ removed, respectively.

Related to these points, the Commenters assert that Georgia violated the RHR’s requirement that it adequately document and support the technical basis for its control determinations, and that EPA does not acknowledge or address any of the many errors in Georgia’s control analyses. They also contend that in response to comments, Georgia admits that “the costs associated with [CDS and DSI] were not looked at in depth due to [the removal of coal burning] being an obvious path forward.” The Commenters contend that EPA’s argument that Georgia followed a reasonable cost analysis method and followed the CCM is unsupported. The Commenters state that in proposed rulemaking on the Arizona regional haze SIP, EPA proposes to conclude the FFAs for numerous sources were unreasonable because the State based its control determinations on, among other things, inappropriate emission rates for the controls analyzed and

unsubstantiated deviations from the CCM. The Commenters therefore state that EPA must treat the errors in Georgia’s SIP revision consistently with how it has proposed to treat these same errors in Arizona’s SIP revision.⁶⁹

Response 18: EPA disagrees with the Commenters’ argument that the Agency must require Georgia to “correct” its cost analyses, or “correct” those analyses itself, and require the installation of either CDS or DSI on the No. 13 Power Boiler at IP-Savannah to make reasonable progress. Georgia’s selection of cessation of coal combustion as a control met the requirements of the RHR and was consistent with EPA’s recommended process to select controls discussed in the 2019 Guidance and the 2021 Clarifications Memo. Georgia was not required to select multiple controls for IP-Savannah’s No. 13 Power Boiler and applied its reasonable discretion to require IP-Savannah to implement the most cost-effective control. Moreover, even if assuming the Commenters’ technical arguments above regarding items such as retrofit factors, capacity factors, removal efficiency, and waste rate are accurate (EPA has not made a determination on those points), the cost of the other potential controls would still be positive, whereas cessation of coal combustion has a negative cost while still resulting in substantial permanent emission reductions. Because Georgia was not required to select multiple controls for the No. 13 Power Boiler and further because EPA agrees with Georgia’s selection of cessation of coal combustion as reasonable for this planning period, the Commenters’ comments regarding other potential control options are without merit.

EPA also disagrees with the Commenters’ argument that EPA did not evaluate the CDS and DSI in depth due to the removal of coal burning being an obvious path forward. EPA evaluated each assumption used in the cost analyses as part of the pre-hearing process and throughout the Haze Plan development process.

Comment 19: The Commenters further assert that even using Georgia’s cost analyses, following the cessation of burning coal, CDS (removing 3,674 tpy of SO₂ at a cost of \$5,564/ton) and DSI (removing 2,653 tpy of SO₂ at a cost of \$6,245/ton) to control emissions from the No. 13 Power Boiler are cost effective because “[t]hese costs are well within the range of costs that other states have determined are cost effective for the second planning period.” The

Commenters argue that EPA’s proposal to approve Georgia’s determination that these controls are not cost effective based on the State’s application of the Arkansas cost spreadsheet is arbitrary and capricious.

Response 19: Commenters raised a very similar argument regarding Plant Bowen, and for the same reasons stated in Response 9 (regarding Plant Bowen), EPA disagrees here as well. As discussed in Response 5 and as noted by the Commenters, Georgia relied on a spreadsheet of first planning period costs developed by Arkansas with input from other states and supplemented with VISTAS-specific data. Georgia determined based on that spreadsheet that costs of \$5,564/ton of SO₂ removed for CDS and \$6,245/ton of SO₂ removed for DSI would exceed the 98th percentile of all costs incurred by sources to control emission in the first planning period. On this basis, Georgia determined that these were not reasonable costs to control emissions for this planning period. Given that the State provided a detailed documentation and justification, and is not required to set a bright-line cost threshold by the RHR, the discretion afforded to the State to determine whether costs are reasonable, the consistent methodology applied by Georgia to determine whether control costs were reasonable for this planning period, and the flexibility discussed in Response 9, EPA reaffirms that Georgia’s conclusions were reasonable under the CAA and RHR.

Georgia selected the most cost-effective control option for IP-Savannah, which is the permanent cessation of coal combustion at the No. 13 Power Boiler. The selection of this control is consistent with EPA’s recommended process to select controls as discussed in the 2019 Guidance and the 2021 Clarifications Memo. The selection of the most cost-effective control is also consistent with Georgia’s approach to selection of controls. In short, Georgia was not required to select multiple controls for IP-Savannah’s No. 13 Power Boiler and applied its reasonable discretion to require IP-Savannah to implement the most cost-effective control. This approach is consistent with the CAA’s and RHR’s requirements that the state selects emission controls based upon four factors, including cost. See CAA section 169A(g)(1); 40 CFR 51.308(f)(2)(i).

Comment 20: The Commenters also assert that Georgia and EPA failed to consider other available controls to reduce IP-Savannah’s haze-forming emissions, namely packed bed scrubbers. The Commenters contend

⁶⁹ See CAA 301(a)(2) and 40 CFR 56.5(a).

that packed bed scrubbers are a common SO₂ control option for many industrial sources, including paperboard mills like IP-Savannah, and that these scrubbers are demonstrated to achieve up to 99.99 percent control efficiency. The Commenters note that the CCM includes a module for assessing packed bed scrubber controls, and the Commenters conclude that while the record does not contain sufficient information to provide a cost analysis for these packed bed scrubbers, examples provided in the CCM indicate that packed bed scrubbers are likely a highly cost-effective control option for IP-Savannah.

Response 20: EPA disagrees with the Commenters that GA EPD did not consider packed bed scrubbers in IP-Savannah's FFA. Packed tower scrubbers (also known as packed bed or packed column scrubbers) are a type of wet scrubber, and wet scrubbers were explicitly considered in IP-Savannah's FFA and were rejected by GA EPD as not feasible due to the additional offsets to the facility's water use and freshwater demand. *See* Haze Plan, Appendix G–2b, at p. 2–7 and 2–8. Thus, for the reasons stated in Responses 17 and 18, EPA disagrees.

Packed tower scrubbers can achieve high removal efficiencies, handle high liquid rates, and have relatively lower water consumption requirements than other types of gas absorbers. However, packed towers may also have high system pressure drops, high clogging and fouling potential, and extensive maintenance costs due to the presence of packing materials. Installation, operation, and wastewater disposal costs may also be higher for packed bed scrubbers than for other absorbers.⁷⁰ In addition to pump and fan power requirements and solvent costs, packed towers have operating costs associated with replacing damaged packing.

Wet scrubbers such as packed tower scrubbers have water use and water discharge requirements that can make these controls not feasible in certain situations. According to GA EPD, treated wastewater from IP-Savannah is discharged to the Savannah River. IP-Savannah's 2019 National Pollutant Discharge Permit currently limits this facility's wastewater discharge, and the facility has since committed to meet biologically based Ultimate Oxygen Demand limits which represent an approximately 85 percent reduction from its current permit limits. The facility is also limited on how much

groundwater can be withdrawn, and its water withdrawal permit limits will be lower starting in 2025, which will cause any projects requiring additional water use to be offset by water-savings projects.⁷¹ Thus, a wet scrubber, which would represent 10 percent of the facility's freshwater demand, was deemed not feasible by GA EPD. EPA agrees with GA EPD that adding a packed tower scrubber to control SO₂ emissions from IP-Savannah would not be reasonable based upon Georgia's technical determinations that this control is not feasible. Because this control is not feasible, neither GA EPD nor EPA performed a cost analysis for this control option.

EPA disagrees that Georgia did not consider other available control options for reducing SO₂. Georgia also evaluated the feasibility of a dry scrubber for the No. 13 Power Boiler. While a dry scrubber does not have the same additional needs for water as a wet scrubber, EPA agrees with Georgia's determination that a dry scrubber was considered not technically feasible due to costs from the additional solid waste and wastewater generated and the expansion of the existing mill-owned landfill.

Comment 21: The Commenters argue that IP-Savannah is a significant source of NO_x pollution. The commenters contend that EPA must require Georgia to conduct an FFA for NO_x controls on the facility's emission units to ensure that the State requires a reasonable range of controls to make progress.

Response 21: For the reasons stated in Response 2 and Response 3, EPA disagrees with the Commenters. In the Haze Plan, GA EPD evaluated IP-Savannah's contributions to visibility impairment at Class I areas and concluded that SO₂ contributions to visibility impairment from this facility exceeded State's AoI and PSAT screening thresholds and that NO_x contributions did not exceed the State's screening thresholds. Therefore, IP-Savannah was selected for an SO₂ FFA but not for a NO_x FFA. As discussed in Response 3, Georgia's approach was reasonable and complies with the RHR.

Comment 22: The Commenters assert that EPA ignores that the IP-Savannah title V permit that Georgia proposes to incorporate into its SIP does not include necessary reporting requirements. The Commenters argue that IP-Savannah's permit, as reproduced in EPA's docket, only includes provisions requiring the facility to "measure and record" information reflecting fuel use for the

No. 13 Power Boiler. The permit makes reference to a requirement that IP-Savannah report its excess emissions, exceedances, or excursions in accordance with "the report required in Condition 6.1.4" of the permit. However, the Commenters state that the permit does not contain Condition 6.1.4, and therefore the provisions EPA proposes to incorporate into the SIP do not include necessary reporting provisions and do not meet the requirements of the CAA or RHR.

Response 22: Permit condition 6.1.7, as incorporated, requires IP-Savannah to report excess emissions, exceedances, or excursions in accordance with permit condition 6.1.4, as it relates to the burning of coal in the No. 13 Power Boiler. Permit condition 6.1.4 requires IP-Savannah to submit a written report each quarter that contains any excess emissions, exceedances, or excursions, and any monitor malfunctions during each quarterly reporting period. If none of these occurred, IP-Savannah must still submit a report stating that there were no excess emissions, exceedances, excursions, or monitor malfunctions during the quarterly reporting period. Condition 6.1.4 exists in a federally enforceable title V permit and is also referenced in the portions of the permit being approved into the SIP.

Comment 23: The Commenters assert that EPA ignores that Georgia's SIP does not address measures necessary to prevent future impairment as is required at Class I areas by the CAA and RHR. The Commenters contend that EPA has historically relied on new source permitting programs, "like the [PSD] and [NSR] programs," to address the CAA's prevention of future impairment mandate, but these programs "have changed dramatically over the decades." The Commenters state that current PSD rules, as well as the nonattainment NSR rules, now exempt many modifications at existing major sources that were previously subject to PSD review. As a result, the Commenters state that the PSD and NSR rules do not provide as comprehensive Class I area visibility protections as they previously did. The Commenters thus contend that it is imperative that Georgia's LTS include measures to prevent future visibility impairment from new sources, as well as new modifications at existing sources of haze pollution.

More specifically, the Commenters assert that Georgia does not discuss anywhere in its SIP revision (1) the programs it has in place to address any potential future increases in emissions or (2) any pending air permit applications for sources that may contribute to future impairment at Class

⁷⁰ See https://www.epa.gov/sites/default/files/2021-05/documents/wet_and_dry_scrubbers_section_5_chapter_1_control_cost_manual_7th_edition.pdf.

⁷¹ See Section 7.8.1. International Paper—Savannah Mill in the 2022 Plan.

I areas in Georgia or other states. As an example, the Commenters state that Georgia is currently reviewing a permit application and draft permit from Twin Pines Minerals which proposes to locate a mine just three miles from Okefenokee. Although Twin Pines Minerals' permit application indicates that the mine's emissions would be relatively low, the Commenters state that the application is missing information on emission sources and potential emission levels. As a result, the Commenters state that it is nearly impossible for the public to determine exactly what kind of impact the proposed mine may have on air quality at Okefenokee. The Commenters state that the SIP revision does not address this facility, or any other proposed new sources or modifications. They assert that this underscores the need for the State to address measures to prevent future impairment to ensure that it is meeting the CAA's natural visibility goal. Furthermore, they state that nowhere in EPA's proposed approval does the Agency acknowledge or address the fact that Georgia's SIP revision entirely omits any discussion of measures to prevent future impairment. Finally, they contend that EPA's proposal to approve Georgia's SIP is therefore arbitrary and capricious, in violation of the CAA and RHR.

Response 23: Contrary to the Commenters' assertions, there is no requirement in the CAA or for states' second planning period regional haze plans to assess and/or adopt emission reduction measures into the SIP for hypothetical new emissions sources that do not yet exist (e.g., those which have not yet been constructed and/or are not yet in operation) to prevent future visibility impairment at Class I areas. Nor do the Commenters cite to legal authority suggesting that the CAA or RHR require this. Instead, the Commenters cite to CAA section 169A(a)(1); 40 CFR 51.300(a), and 40 CFR 51.308(f)(2)(iv)(B).

None of these statutes and regulations support the Commenters' assertions. CAA section 169A(a)(1) states the "national goal" underlying the regional haze program "the prevention of any future, and the remedying of any existing, impairment of visibility in mandatory class I Federal areas which impairment results from manmade air pollution." In support of this goal, Congress required EPA to "promulgate regulations to assure (A) reasonable progress toward meeting the national goal specified in paragraph (1), and (B) compliance with the requirements of this section." EPA has done so by promulgating the RHR, which the

Commenters also cite to. 40 CFR 51.300(a), cited by the Commenters, is entitled "Purpose and applicability" and restates the national goal from CAA section 169A(a)(1). This provision, while providing important context to the RHR, contains no independent requirements that states must meet and therefore does not support the Commenters' position.

The remaining citation to the RHR provided by the Commenters, 40 CFR 51.308(f)(2)(iv)(B), similarly does not support the Commenters' position. That provision states in full as follows: "The State must consider the following additional factors in developing its long-term strategy: Measures to mitigate the impacts of construction activities." Contrary to the Commenters' assertions, Georgia plainly addressed this requirement in its Haze Plan. *See* Haze Plan, at p. 221 (noting that "Measures to mitigate the impacts of construction activities" are addressed in Section 7.9.2 of the Haze Plan); *see also* Haze Plan Section 7.9.2 (discussing "Dust and Fine Soil from Construction Activities").

At bottom, the RHR addresses "the prevention of any future" visibility impairment by ensuring that reasonable progress measures are adopted into states' SIPs. In this way, the RHR renders such measures permanent, which necessarily prevents future visibility impairment from those emission sources. Because neither the CAA nor RHR requires further measures to address future construction, the Commenters' comments regarding the Twin Pines Minerals permit are acknowledged, but are not relevant.

Comment 24: The Commenters argue that EPA's proposal to approve Georgia's RPGs violate the CAA and RHR. The Commenters maintain that in EPA's SIP planning sequence, states first identify their LTS controls, which is followed by the development of RPGs. However, the Commenters contend that EPA fails to acknowledge that Georgia's established RPGs for its three in-state Class I areas are based on VISTAS modeling results which were conducted in 2020. They comment this was completed before conducting FFAs or finalizing the State's LTS controls in 2022. Therefore, the Commenters assert that Georgia impermissibly reversed the SIP planning sequence and that Georgia's RPGs are based on modeling results which do not meet the RHR requirement that RPGs must be based on enforceable SIP measures. The Commenters argue that Georgia's response to comments ignored the problems raised regarding the RPGs and that Georgia's response that the State's

RPGs "are representative of all known control measures necessary to make reasonable progress" is unfounded.

Additionally, the Commenters assert that Georgia "cherry-picked" a statement from EPA's 2019 Guidance in response to the concerns raised, i.e., EPA's statement that states may conduct modeling to establish RPGs before "the outcome of some final state decisions on emission control measures [are] known." The Commenters state Georgia ignored other parts of EPA's 2019 Guidance explaining that if a state conducted modeling for RPGs before finalizing LTS control determinations, the state must adjust its RPGs to reconcile the scenarios before the SIP revision with the RPGs is submitted. The Commenters argue that nothing in Georgia's SIP revision or EPA's proposal indicates that Georgia made adjustments to its RPGs after its FFA and finalizing its LTS, which the Commenters argue is contrary to EPA's 2019 Guidance. Thus, the Commenters contend that EPA must not approve Georgia's RPGs for its three Class I areas and must require that Georgia adjust those goals to properly reflect enforceable emission limitations adopted in the LTS portion of Georgia's SIP.

Response 24: EPA disagrees that Georgia's RPGs must be disapproved on the basis that they do not reflect any new measures resulting from the three FFAs. EPA reiterates that the process for establishing RPGs for each Class I area is prescribed in the RHR and its amendments and discussed in related guidance.^{72 73 74} The RPGs established by the states with Class I areas are not directly enforceable but will be considered by the Administrator in evaluating the adequacy of the measures in the implementation plan in providing for reasonable progress towards achieving natural visibility conditions at that area. *See* 40 CFR 51.308(f)(3)(iii). As explained in footnote 34 of the NPRM of the Georgia Haze Plan, RPGs are intended to reflect the projected impacts of the measures all contributing

⁷² *See* 40 CFR 51.308; 64 FR 35714, July 1, 1999; and 82 FR 3078, January 10, 2017.

⁷³ *See* "Guidance on Regional Haze State Implementation Plans for the Second Implementation Period" available at: www.epa.gov/visibility/guidance-regional-haze-state-implementation-plans-second-implementation-period. EPA Office of Air Quality Planning and Standards, Research Triangle Park (August 20, 2019).

⁷⁴ *See* "Clarifications Regarding Regional Haze State Implementation Plans for the Second Implementation Period" available at: www.epa.gov/system/files/documents/2021-07/clarifications-regarding-regional-haze-state-implementation-plans-for-the-second-implementation-period.pdf. EPA Office of Air Quality Planning and Standards, Research Triangle Park (July 8, 2021).

states include in their LTS. However, due to the timing of analyses, control determinations by other states, and other ongoing emissions changes, a particular state's RPGs may not reflect all control measures and emissions reductions that are expected to occur by the end of the planning period.

Because the air quality modeling to calculate RPGs is resource intensive and time consuming, EPA does not always expect the modeling to be repeated after a subsequent change in the content of a state's own LTS or another state's LTS that impacts the host state's Class I area(s). 2019 Guidance at 47–48.

Adjustment of the RPGs once modeling is completed to reflect new FFA outcomes is not required. However, the 2019 Guidance provides recommendations for addressing the timing of RPG calculations when states are developing their LTS on disparate schedules and for adjusting RPGs using a post-modeling approach. The outcome of a state's source selection process and subsequent evaluation of technically feasible and cost-effective emissions controls as part of FFAs determine what constitutes the state's LTS for that particular planning period. If a state's source selection process and evaluation of technically feasible and cost-effective controls results in a LTS that includes the enforceable emissions limitations, compliance schedules and other measures that are necessary to make reasonable progress, then the requirements of the RHR are satisfied for that planning period. Any additional emissions reductions resulting from new FFA measures not included in the 2028 RPGs serve to provide further assurance that the State's Class I areas and those areas affected by the State's sources will achieve their 2028 RPGs.

Comment 25: The Commenters assert that EPA's proposal to approve Georgia's state-to-state consultations violates the CAA and RHR. They specifically mention EPA's 2017 amendments to the RHR stating "states must exchange their four factor analyses and the associated technical information that was developed in the course of devising their long-term strategies."

The Commenters contend that EPA treats the consultation process as a box-checking exercise. Additionally, they argue that EPA's proposal and TSD only recites what Georgia provided regarding its consultation, without conducting an independent analysis, and that EPA only mentioned that Georgia documented its consultation with other states. The Commenters assert that Georgia failed to independently assess whether additional controls on out-of-state sources are needed to achieve

reasonable progress. Therefore, both Georgia and EPA will need to independently evaluate all information in the record, as well as provide an explanation for their final determinations.

The Commenters state that Georgia recognizes that sources from other states are projected to impact visibility in Georgia's Class I areas, and the State requested FFAs from Florida, South Carolina, Kentucky, Tennessee, Ohio, Indiana, and Pennsylvania. However, the Commenters state that few of the out-of-state sources are adopting new control measures as a result of the FFAs. Furthermore, the Commenters assert that Georgia failed to critically evaluate whether additional controls are warranted from out-of-state sources to ensure reasonable progress.

The Commenters assert that EPA must require that Pennsylvania optimize or upgrade controls at the Keystone Generating Station (Keystone Station). The Commenters state that the Keystone Station is not exempt from an FFA simply because it has systems (FGD and SCR) in place that meet the Mercury and Air Toxics Standards rule. Additionally, the Commenters contend that the scrubbers currently in place are underperforming and do not achieve at least 95 percent control efficiency, let alone the 98 percent control efficiency that a modern wet scrubber system is capable of continuously achieving. The Commenters state that of the control measures that Keystone Station did consider in FFA, running one more level of recycle pumps would be cost-effective (\$413/ton of NO_x), and must be required. The Commenters argue that modern SCR systems have been shown to operate at an average monthly NO_x emission rate of 0.05 lb/MMBtu or lower, whereas the current SCR systems in Units 1 and 2 of the Keystone Station in 2019 have higher NO_x emissions rates of 0.104 and 0.103 lb/MMBtu, respectively. In response to the Keystone Station's assertion that optimization of the current SCR systems will be addressed in a future case-by-case NO_x reasonably available control technology (RACT) analysis, the Commenters contend that a future RACT analysis is not an off-ramp from the regional haze requirements that apply now. Furthermore, the Commenters argue that the outcome of the RACT analysis will likely be different and less stringent because the analysis applies a different set of factors. Therefore, the Commenters assert that EPA must require Pennsylvania to direct the Keystone Station to evaluate additional cost-effective control measures, and the agency must ensure

that the accuracy of cost-effectiveness arguments regarding the new controls are supported and documented.

The Commenters also assert EPA must require that Ohio direct the Gavin Power Plant (Plant Gavin) to optimize or upgrade controls. The Commenters argue that Ohio failed to show that NO_x emissions from Plant Gavin are effectively controlled since the State did not show that an FFA for NO_x control on the facility would be futile. Furthermore, the Commenters contend that nothing in the RHR itself permits the states to exclude sources from an FFA on the basis that they are "effectively controlled." Moreover, the Commenters argue that Plant Gavin's FFA of SO₂ controls contain errors, and that there are feasible and cost-effective controls available that can reduce SO₂ emissions from the facility. The Commenters maintain that because Plant Gavin likely contributes to the impairment to both Georgia's and Ohio's Class I areas, EPA must require Ohio to perform an FFA of NO_x controls and implement available and cost-effective SO₂ controls for Plant Gavin.

The Commenters further assert that EPA cannot approve Georgia's consultation with Indiana. The Commenters state that Georgia disagreed with Indiana's response to not require FFAs from its EGUs (including Gibston Station and AEP Rockport Generating Station), and Georgia's consultation record is incomplete because "there is no record of the Indiana disagreement in the Georgia SIP." If Georgia does disagree with Indiana, the Commenters argue that 51.308(f)(2)(ii)(C) would apply, which requires Georgia to "describe the actions taken to resolve the disagreement" and EPA "take this information into account." The Commenters assert that EPA cannot approve of Georgia's state-to-state consultation because Georgia has not adequately documented its disagreement and resolution of the disagreement with Indiana, which the Commenters state is in violation of the CAA and the RHR.

Response 25: 40 CFR 51.308(f)(2)(ii) provides that a "State must consult with those States that have emissions that are reasonably anticipated to contribute to visibility impairment in the mandatory Class I Federal area to develop coordinated emission management strategies containing the emission reductions necessary to make reasonable progress." If the state disagrees, the state must describe the actions taken to resolve the disagreement (40 CFR 51.308(f)(2)(ii)(C)).

Consultation may include efforts to reach agreement on the measures that each state will apply to its sources, or agreement on decision thresholds and other decision approaches, but it does not require such effort by any state and does not require that agreements be reached. If neither consulting state has sought an agreement about measures to be included in their SIP revision, neither state is required to include in its implementation plan the description mentioned in this requirement. However, if one state has formally asked another state to adopt a particular measure for a particular source, and the second state has not adopted that measure and also has not adopted an equivalent measure(s) as described in 40 CFR 51.308(f)(2)(ii)(A), then both states are subject to this requirement to describe the actions taken to resolve the disagreement. This provision does not specify that any particular actions towards resolution be taken. If the two states submit SIP revisions that disagree on the controls in each state that are needed for reasonable progress, the RHR provides for EPA to consider the technical information and explanations presented by both states when considering whether to approve each state's SIP.

2019 Guidance, at p. 53.

EPA's review of Georgia's interstate consultation process was hardly a box checking exercise, as EPA independently reviewed all of the consultation documentation provided by Georgia within its Haze Plan. Those materials are primarily contained in Appendix F of the Haze Plan, and EPA affirms that GA EPD properly complied with 40 CFR 51.308(f)(2)(ii) by consulting with Florida, South Carolina, Tennessee, Kentucky, Indiana, Pennsylvania, and Ohio and requesting FFAs for facilities located within those states with visibility impacts to Georgia Class I areas exceeding one percent for SO₂ or NO_x. Specifically, five facilities are located in Florida, one facility is located in Kentucky, two facilities are located in South Carolina, one facility is located in Tennessee, two facilities are located in Indiana, two facilities are located in Ohio, and one facility is located in Pennsylvania. Regarding Indiana specifically, Georgia documented communications between Georgia and Indiana in Appendix F-2b of the Haze Plan, and on pages 243–244 of the Haze Plan narrative, Georgia indicated that Indiana “is not requiring 4-factor analyses from its EGUs.” Georgia does not explicitly state its disagreement with Indiana, but based on the record, the states appear to disagree based on Georgia's request for FFAs at Plant Gibson and AEP Rockport along with Georgia's documentation within its Haze Plan that Indiana will not be preparing FFAs for these two facilities. As noted elsewhere in Georgia's Haze Plan, AEP Rockport's SO₂ impact on

visibility at Cohutta is 4.68 percent, and Plant Gibson's SO₂ impact on visibility at Cohutta is 2.31 percent. In accordance with 40 CFR 51.308(f)(2)(ii), Georgia has adequately documented its position and Indiana's position, including in a letter VISTAS sent to Indiana on behalf of Georgia dated June 22, 2020, requesting FFAs for these facilities, as well in follow-up emails. See Haze Plan, Appendix F-2b.

In regards to the Commenters' contention that EPA must require controls at facilities outside of Georgia in this action on Georgia's regional haze SIP, this action is not the appropriate forum to submit such comments. To the extent that Commenters have concerns about facilities outside of Georgia, such as those facilities in Pennsylvania, Ohio, and Indiana, any public comments related to out-of-state sources should be provided during the public comment periods regarding those states' haze plans. Georgia lacks authority to regulate these out-of-state sources, and therefore EPA cannot require other states to implement control measures through the Georgia regional haze SIP.

Comment 26: The Commenters assert that EPA must disapprove Georgia's SIP because the State failed to engage in meaningful FLM consultation. The Commenters state that while Georgia did summarize and respond to the FLMs' comments, it did not meaningfully consider or incorporate the suggestions into the SIP. The Commenters contend that “[c]ontrary to the CAA and RHR, Georgia treated the consultation as a box-checking exercise” and released the draft of the SIP revision for public comments only two days after it closed the formal consultation with FLMs. The Commenters argue that Georgia made only minor edits to the SIP based upon the FLMs' comments and did not fully respond to the many concerns raised. Some concerns included screening thresholds that led to very few Georgia sources for analysis, exclusion of NO_x from FFAs, lack of FFAs for multiple facilities (Plant Wansley, Plant Scherer, the Rome Linerboard Mill, Brunswick Cellulose, and IP-Savannah), concerns about the FFA for SO₂ at Plant Bowen, and concerns about the VISTA modeling approach. Therefore, the Commenters assert that EPA must reject Georgia's SIP revision on that basis that the State failed to meet the CAA's and RHR's requirement to “engage in meaningful FLM consultation.” Additionally, the Commenters argue that because EPA must disapprove of Georgia's source selection method, FFA, and RPGs, the Agency must also disapprove of Georgia's FLM consultation on the basis

that the FLM consultation was based upon a SIP revision that did not meet the statutory and regulatory requirements of the CAA and RHR.

Response 26: The FLMs play important roles in addressing visibility at Class I areas. 40 CFR 51.308(i)(3) requires states to include a description of how they address any comments provided by the FLMs. However, neither the CAA nor the RHR requires the state to agree with the FLM recommendations, nor do they specify the degree of consideration that must be given to those comments. Rather, 40 CFR 51.308(i)(3) requires the State to “include a description of how it addressed any comments provided by the Federal Land Managers.”

Georgia complied with this requirement by documenting how it addressed the FLMs' comments in 21 pages of single-spaced responses to the FLMs' comments contained within Appendix H-4a of its Haze Plan. The Commenters do not identify any specific FLM comments that Georgia did not respond to. EPA reviewed GA EPD's responses and finds that they comply with the RHR requirement to describe how the state addressed comments provided by the FLMs. EPA thus disagrees with the Commenters that GA EPD did not fully respond to the FLMs' comments.

The timing of this consultation was also compliant with the RHR. FLM-State consultation must take place at least 60 days prior to the state public comment period on any haze plan or plan revision pursuant to 40 CFR 51.308(i)(2). GA EPD complied this RHR requirement by initiating consultation with the FLMs on April 22, 2022, which was 62 days before the opening of the State's public comment period on June 24, 2022. In addition, GA EPD met with NPS upon request on June 14, 2022, to discuss NPS' feedback in more detail.⁷⁵

Comment 27: The Commenters assert that EPA must consider the environmental justice (EJ) impacts of Georgia's SIP revision. The Commenters state that EPA states it can ignore EJ implications of Georgia's SIP revision, and that the Agency contravenes directives from the current presidential administration, as well as EPA's commitments and action plans. The Commenters contend that EPA cannot argue to prioritize EJ while also disavowing any need to consider the disproportionate impacts of haze pollution sources in Georgia and its own actions on Georgia's SIP revision.

⁷⁵ FWS, FS, and EPA representatives were also in attendance at the June 14, 2022, Georgia-NPS consultation meeting.

The Commenters assert that executive orders (EOs), as well as EPA's own commitments and action plans direct the Agency to consider EJ implications. The Commenters state that EOs in place since 1994 require EPA to incorporate EJ as "part of its mission by identifying and addressing . . . disproportionately high and adverse human health or environmental effects of its program, policies, and activities," which they argue to be applicable to regional haze SIP actions on minority populations and low-income populations. Additionally, the Commenters argue the directive to incorporate EJ into all of the Agency's actions was reaffirmed by the Biden Administration in 2021 through back-to-back EOs directed to federal agencies, including EPA, and again in 2023 when the Administration issued the "Executive Order on Revitalizing Our Nation's Commitment to Environmental Justice for All."⁷⁶

The Commenters state that Administrator Regan recognized that EPA has a lead role in coordinating EJ efforts across the country and "urged all EPA offices to take 'affirmative steps to incorporate environmental justice consideration into their work . . . in regulatory development processes and to consider regulatory options to maximize benefits to these communities,'" and the Commenters argue that EPA's Equity Action Plan⁷⁷ issued in 2022 makes equity, EJ, and civil right a centerpiece of the agency's regulatory work, which includes actions on regional haze SIPs. Furthermore, the Commenters assert that the determination of which sources to selected for an FFA and the reasonable progress measure to require for a source should incorporate EJ and equity into technical analyses, citing EPA's 2019 Guidance, which specifies that "[s]tates may also consider any beneficial non-air quality environmental impacts," as well as the 2021 Clarification Memo issued by the Agency.

The Commenters contend that EPA ignores the previously mentioned EOs, plans, and commitments when concluding that it is not required to consider EJ impacts of pollutants that contribute to regional haze from Georgia's sources and actions on the SIP revision. The Commenters state that the

same pollutants that affect visibility at national parks and wilderness areas also cause significant public health impacts, particularly those who live closest to the facilities.

Drawing from EJScreen data,⁷⁸ the Commenters state that emissions from sources of concern raised by NPS and the Commenters in their comments to Georgia are likely impacting areas characterized by higher percentages of low income and people of color. Specifically, within a 10-mile radius of Plant Bowen, the Commenters state that 32 percent of the population are low-income and 25 percent as people of color, with the community surround the plant in the 73rd percentile for the PM EJ Index and 67th percentile for ozone EJ Index when compared to the rest of the country. The Commenters state that analysis conducted by a Clean Air Task Force, based on 2019 emissions, shows that Plant Bowen's emissions are responsible for "59 deaths, 7 hospital admissions, 13 asthma ER visits, 28 heart attacks, 34 cases of acute bronchitis, 637 asthma attacks, and 3020 lost work days each year." The Commenters also highlight the community surrounding IP-Savannah, which they state is 37 percent low-income and 59 percent people of color, as well as being in the 77th percentile for the PM EJ index when compared to the rest of the country. Additionally, the Commenters argue that the population surrounding the Rome Linerboard Mill, a facility that Georgia did not select or analyze in its SIP revision and EPA does not discuss in its proposal, is comprised of 44 percent low-income and 40 percent people of color, and in the 82nd percentile for PM EJ index and 71st percentile for ozone EJ index. The Commenters contend that the sources from the facilities identified above are likely adversely impacting those communities and assert that EPA can and must hold Georgia accountable to consider EJ impacts of haze pollution from in-state sources, as well as analyze the potential disparate impacts of its action on Georgia's SIP revision.

Response 27: EPA disagrees with this comment but acknowledges the EJScreen information provided by the Commenters. The regional haze statutory provisions do not explicitly address considerations of EJ and neither do the regional haze regulatory requirements of the second planning period in 40 CFR 51.308(f), (g), and (i). However, the lack of explicit direction does not preclude a State's SIP consideration of EJ in its SIP submittal.

⁷⁸ EJScreen, an EJ screening and mapping tool, is available at: <https://www.epa.gov/ejscreen>.

As explained in "EPA Legal Tools to Advance Environmental Justice,"⁷⁹ the CAA provides states with the discretion to consider EJ in developing rules and measures related to regional haze. While a state may consider EJ under the reasonable progress factors, neither the statute nor the regulation requires states to conduct an EJ analysis for EPA to approve a SIP submission.

In this instance, Georgia elected not to consider EJ under the reasonable progress factors. In Appendix H of the Haze Plan, in response to an EJ comment received from the NPCA and Sierra Club, GA EPD states that the purpose of the RHR is to improve visibility in the Class I areas, not to look at health impacts from criteria pollutants in areas outside Class I areas, which is addressed through the implementation of the National Ambient Air Quality Standards. In addition, GA EPD notes that it has not identified any EJ communities living in any Class I areas whose visibility would be disproportionately impacted by GA EPD's selection of reasonable progress controls.

As discussed in the NPRM and in this notice of final rulemaking, EPA has evaluated Georgia's SIP submission against the statutory and regulatory regional haze requirements and determined that it satisfies those minimum requirements. Furthermore, the CAA and applicable implementing regulations neither prohibit nor require such an evaluation of EJ with a regional haze SIP.

III. Incorporation by Reference

In this document, EPA is finalizing regulatory text that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, and as discussed in Sections I and II of this preamble, EPA is finalizing the incorporation by reference into Georgia's SIP GA EPD Permit No. 4911-015-0011-V-04-3 for Bowen Steam-Electric Generating Plant (State effective September 6, 2023), GA EPD Permit No. 2631-051-0007-V-04-1 for International Paper—Savannah (State effective October 20, 2023), and GA EPD Permit No. 2631-127-0003-V-07-3 for Brunswick Cellulose LLC (State effective October 25, 2023). EPA has made, and will continue to make, these materials generally available through www.regulations.gov and at the EPA Region 4 Office (please contact the person identified in the **FOR FURTHER**

⁷⁹ See "EPA Legal Tools to Advance Environmental Justice", May 2022, available at: <https://www.epa.gov/system/files/documents/2022-05/EJ%20Legal%20Tools%20May%202022%20FINAL.pdf> at 35–36.

⁷⁶ The "Executive Order on Revitalizing Our Nation's Commitment to Environmental Justice for All" is available at: <https://www.whitehouse.gov/briefing-room/presidential-actions/2023/04/21/executive-order-on-revitalizing-our-nations-commitment-to-environmental-justice-for-all/>.

⁷⁷ U.S. Env't Prot. Agency, E.O. 13985 Equity Action Plan at 4–11 (Apr. 2022), see <https://www.epa.gov/system/files/documents/2022-04/epa-equityactionplanapril2022508.pdf>.

INFORMATION CONTACT section of this preamble for more information). Therefore, these materials have been approved by EPA for inclusion in the SIP, have been incorporated by reference by EPA into that plan, are fully federally enforceable under sections 110 and 113 of the CAA as of the effective date of the final rulemaking of EPA's approval, and will be incorporated by reference in the next update to the SIP compilation.⁸⁰

IV. Final Action

EPA is approving Georgia's August 11, 2022, SIP submission as satisfying the regional haze requirements for the second planning period contained in 40 CFR 51.308(f). Thus, EPA is adopting into Georgia's SIP GA EPD Permit No. 4911-015-0011-V-04-3 for Bowen Steam-Electric Generating Plant, GA EPD Permit No. 2631-051-0007-V-04-1 for International Paper—Savannah, and GA EPD Permit No. 2631-127-0003-V-07-3 for Brunswick Cellulose LLC.

V. Statutory and Executive Order Reviews

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

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 14094 (88 FR 21879, April 11, 2023);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described

in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4);

- Does not have federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997) because it approves a state program;
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001); and
- Is not subject to requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA.

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

E.O. 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (59 FR 7629, February 16, 1994) directs Federal agencies to identify and address “disproportionately high and adverse human health or environmental effects” of their actions on communities with EJ concerns to the greatest extent practicable and permitted by law.

Executive Order 14096 (Revitalizing Our Nation's Commitment to Environmental Justice for All, 88 FR 25251, April 26, 2023) builds on and supplements E.O. 12898 and defines EJ as, among other things, the just treatment and meaningful involvement of all people, regardless of income, race, color, national origin, or Tribal affiliation, or disability in agency decision-making and other Federal activities that affect human health and the environment.

Georgia EPD did not evaluate EJ considerations as part of its SIP submittal; the CAA and applicable implementing regulations neither prohibit nor require such an evaluation. EPA did not perform an EJ analysis and did not consider EJ in this action. Due to the nature of the action being taken here, this action is expected to have a neutral to positive impact on the air

quality of the affected area.

Consideration of EJ is not required as part of this action, and there is no information in the record inconsistent with the stated goal of E.O. 12898/14096 of achieving EJ for communities with EJ concerns.

This action is subject to the Congressional Review Act, and EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a “major rule” as defined by 5 U.S.C. 804(2).

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by January 21, 2025. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (*See* section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Nitrogen dioxide, Particulate matter, Sulfur oxides.

Dated: November 14, 2024.

Cesar Zapata,

Acting Regional Administrator, Region 4.

For the reasons stated in the preamble, EPA amends 40 CFR part 52 as follows:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

- 1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart L—Georgia

- 2. In § 52.570(d), amend “Table 2 to Paragraph (d)” by adding entries for “Bowen Steam-Electric Generating Plant”, “International Paper-Savannah”, and “Brunswick Cellulose LLC” at the end of the table to read as follows:

§ 52.570 Identification of plan.

(d) * * *

⁸⁰ 62 FR 27968 (May 22, 1997).

TABLE 2 TO PARAGRAPH (d)—EPA-APPROVED GEORGIA SOURCE-SPECIFIC REQUIREMENTS

Name of source	Permit No.	State effective date	EPA approval date	Comments
Bowen Steam-Electric Generating Plant.	4911-015-0011-V-04-3	9/6/2023	11/21/2024, [Insert first page of Federal Register citation].	
International Paper—Savannah.	2631-051-0007-V-04-1	10/20/2023	11/21/2024, [Insert first page of Federal Register citation].	
Brunswick Cellulose LLC ..	2631-127-0003-V-07-3	10/24/2023	11/21/2024, [Insert first page of Federal Register citation].	In Condition 6.2.52, the phrase “shall use emissions factors” means “shall use an emissions factor of 157 S lb/Mgal.”

■ 3. In § 52.570(e), amend the table by adding an entry for “Regional Haze

Plan—Second Planning Period” at the end of the table to read as follows:

(e) * * *

EPA-APPROVED GEORGIA NON-REGULATORY PROVISIONS

Name of nonregulatory SIP provision	Applicable geographic or nonattainment area	State submittal date/effective date	EPA approval date	Explanation
Regional Haze Plan—Second Planning Period.	Georgia	8/11/22	11/21/2024, [Insert first page of Federal Register citation].	

[FR Doc. 2024-26977 Filed 11-20-24; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 272

[EPA-R06-RCRA-2021-0330; FRL-9522-01-R6]

Texas: Incorporation by Reference of State Hazardous Waste Management Program

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This rule codifies in the regulations the prior approval of Texas’ hazardous waste management program and incorporates by reference authorized provisions of the State’s statutes and regulations. The Environmental Protection Agency (EPA) uses the regulations entitled “Approved State Hazardous Waste Management Programs” to provide notice of the authorization status of State programs and to incorporate by reference those provisions of the State statutes and regulations that are authorized and that EPA will enforce under the Solid Waste Disposal Act, commonly referred to as the Resource Conservation and

Recovery Act (RCRA). The EPA previously provided notices and opportunity for comments on the Agency’s decisions to authorize the State of Texas program and the EPA is not now reopening the decisions, nor requesting comments, on the Texas authorizations as previously published in the **Federal Register** documents specified in Section I.C of this final rule document.

DATES: This regulation is effective on December 23, 2024. The Director of the Federal Register approves this incorporation by reference as of December 23, 2024, in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

ADDRESSES: The EPA has established a docket for this action under Docket ID No. EPA-R06-RCRA-2021-0330. All documents in the docket are listed on the <https://www.regulations.gov> website. Although listed in the index, some information is not publicly available, e.g., Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available electronically through <https://www.regulations.gov>.

You can view and copy the documents that form the basis for this

codification and associated publicly available materials from 8:30 a.m. to 4:00 p.m., Monday through Friday, at the following location: EPA, Region 6, 1201 Elm Street, Suite 500, Dallas, Texas 75270, phone number: (214) 665-8533. Interested persons wanting to examine these documents should make an appointment with the office.

FOR FURTHER INFORMATION CONTACT:

Alima Patterson, EPA Region 6 Regional Authorization/Codification Coordinator, RCRA Permits and Solid Waste Section (LCR-RP), Land, Chemicals and Redevelopment Division, EPA Region 6, 1201 Elm Street, Suite 500, Dallas, Texas 75270, phone number: (214) 665-8533, Email address: patterson.alima@epa.gov.

SUPPLEMENTARY INFORMATION:**I. Incorporation by Reference****A. What is codification?**

Codification is the process of placing a State’s statutes and regulations that comprise the State’s authorized hazardous waste management program into the Code of Federal Regulations (CFR). Section 3006(b) of RCRA, as amended, allows the EPA to authorize State hazardous waste management programs to operate in lieu of the Federal hazardous waste management regulatory program. The EPA codifies its authorization of State programs in 40

CFR part 272 and incorporates by reference State statutes and regulations that the EPA will enforce under sections 3007 and 3008 of RCRA and any other applicable statutory provisions.

The incorporation by reference of State authorized programs in the CFR should substantially enhance the public's ability to discern the current status of the authorized State program and State requirements that can be federally enforced. This effort provides clear notice to the public of the scope of the authorized program in each State.

B. Why wasn't there a proposed rule before this rule?

The EPA is publishing this rule to codify Texas' authorized hazardous waste management program without a prior proposal because we believe this action is not controversial. The reason being that, in accordance with section 3006(b) of RCRA, EPA has already evaluated the State's regulatory and statutory requirements and has determined that the State's program meets the statutory and regulatory requirements established by RCRA. The EPA previously provided notices and opportunity for comments on the Agency's decisions to authorize the Texas program. The EPA is not now reopening the decisions, nor requesting new comments, on the Texas authorizations as previously published in the **Federal Register** documents specified in Section I.C of this final rule document. The previous authorizations form the basis for the codification addressed in this final rule.

C. What is the history of the authorization and codification of Texas' hazardous waste management program?

The State of Texas initially received final authorization on December 26, 1984 (49 FR 48300), to implement its Base Hazardous Waste Management Program. This authorization was clarified in a notice published March 26, 1985 (50 FR 11858). Texas received authorization for revisions to its program, effective October 4, 1985 (51 FR 3952), February 17, 1987 (51 FR 45320), March 15, 1990 (55 FR 7318), July 23, 1990 (55 FR 21383), October 21, 1991 (56 FR 41626), December 4, 1992 (57 FR 45719), June 27, 1994 (59 FR 16987), June 27, 1994 (59 FR 17273), November 26, 1997 (62 FR 47947), December 3, 1997 (62 FR 49163), October 18, 1999 (64 FR 44836), November 15, 1999 (64 FR 49673), September 11, 2000 (65 FR 43246), June 14, 2005 (70 FR 34371), December 29, 2008, (73 FR 64252), and July 13, 2009 (74 FR 22469); March 7, 2011 (76 FR 12283), effective May 6, 2011; March 6,

2012 (77 FR 13200), effective May 7, 2012; November 30, 2012 (77 FR 71344), effective January 29, 2013; September 3, 2014 (79 FR 52220), effective November 3, 2014; October 21, 2015 (80 FR 63691), effective December 21, 2015; December 28, 2015 (80 FR 80672), effective February 26, 2016; April 10, 2020 (85 FR 20187), effective April 10, 2020; and March 5, 2021 (86 FR 12834), effective March 5, 2021.

The EPA incorporated by reference Texas' then authorized hazardous waste program effective December 3, 1997 (62 FR 49163), November 15, 1999 (64 FR 49673), December 29, 2008 (73 FR 64252), May 6, 2011 (76 FR 12283), January 29, 2013 (77 FR 71344), and February 26, 2016 (80 FR 80672), and April 10, 2020 (85 FR 20187).

In this document, EPA is revising subpart SS of 40 CFR part 272 to include the recent authorization revision actions effective March 5, 2021 (86 FR 12834).

D. What codification decisions have we made in this rule?

In this rule, the EPA is finalizing regulatory text that includes incorporation by reference of the authorized hazardous waste management program of the State of Texas. In accordance with requirements of 1 CFR 51.5, the EPA is finalizing the incorporation by reference of the Texas rules described in the amendments to 40 CFR part 272 set forth in section 272.2201. The EPA has made, and will continue to make, these documents available electronically through <https://www.regulations.gov> and in hard copy at the appropriate EPA office (see the **ADDRESSES** section of this preamble for more information).

The purpose of this document is to codify Texas' base hazardous waste management program and the State's revisions to that program. This document incorporates by reference Texas' hazardous waste statutes and regulations and clarifies which of these provisions are included in the authorized and federally enforceable program. By codifying Texas' authorized program and by amending the Code of Federal Regulations, the public will be more easily able to discern the status of federally approved requirements of the Texas hazardous waste management program.

The EPA is incorporating by reference the Texas authorized hazardous waste program in subpart SS of 40 CFR part 272. Section 272.2201(c)(1) incorporates by reference Texas' authorized hazardous waste statutes and regulations. Section 272.2201 also references material which is not being

incorporated by reference, but which EPA considered in determining the adequacy of Texas' program. Section 272.2201(c)(2) references sections of the Texas statutes which provide the legal basis for the State's implementation of the hazardous waste management program. In addition, §§ 272.2201(c)(5), (6), and (7) reference the Memorandum of Agreement, the Attorney General's Statements, and the Program Description, respectively. These documents are evaluated as part of the hazardous waste management program in accordance with subtitle C of RCRA but are not part of the material to be incorporated by reference.

State provisions that are "broader in scope" than the Federal program are not incorporated by reference in 40 CFR part 272. For reference and clarity, the EPA lists in 40 CFR 272.2201(c)(3) the Texas statutory and regulatory provisions that are "broader in scope" than the Federal program, and which are not part of the authorized program being incorporated by reference. While "broader in scope" provisions are not part of the authorized program and cannot be enforced by the EPA, the State may enforce such provisions under State law. At 40 CFR 272.2201(c)(4), EPA lists amendments to Texas regulations and Federal rules which are not part of the Texas authorized program.

E. What is the effect of Texas' codification on enforcement?

The EPA retains its authority under statutory provisions, including but not limited to, RCRA sections 3007, 3008, 3013, and 7003, and other applicable statutory and regulatory provisions to undertake inspections and enforcement actions and to issue orders in authorized States. With respect to these actions, the EPA will rely on Federal sanctions, Federal inspection authorities, and Federal procedures rather than any authorized State analogues to these provisions. Therefore, the EPA is not incorporating by reference such particular, approved Texas procedural and enforcement authorities. Section 272.2201(c)(2) of 40 CFR lists the statutory and regulatory provisions which provide the legal basis for the State's implementation of the hazardous waste management program, as well as those procedural and enforcement authorities that are part of the State's approved program, but these are not incorporated by reference.

F. What State provisions are not part of the codification?

The public needs to be aware that some provisions of Texas' hazardous

waste management program are not part of the federally authorized State program. These non-authorized provisions include:

(1) Provisions that are not part of the RCRA subtitle C program because they are “broader in scope” than RCRA subtitle C (see 40 CFR 271.1(i));

(2) Federal rules for which Texas is not authorized, but which have been incorporated into the State regulations because of the way the State adopted Federal regulations by reference;

(3) Unauthorized amendments to authorized State provisions;

(4) New unauthorized State requirements;

(5) Federal rules for which Texas is authorized but which were vacated by the U.S. Court of Appeals for the District of Columbia Circuit (D.C. Cir. No. 98–1379 and 98–1379; June 27, 2014); and

(6) Federal rules which Texas adopted but which were vacated by the U.S. Court of Appeals for the District of Columbia Circuit (D.C. Cir. No. 09–1038, rulings dated July 7, 2017 and March 6, 2018).

State provisions that are “broader in scope” than the Federal program are not part of the RCRA authorized program and the EPA will not enforce them. Therefore, they are not incorporated by reference in 40 CFR part 272. For reference and clarity, 40 CFR 272.2201(c)(3) lists the Texas regulatory provisions which are “broader in scope” than the Federal program and which are not part of the authorized program being incorporated by reference. “Broader in scope” provisions cannot be enforced by the EPA; the State, however, may enforce such provisions under State law.

Additionally, Texas’ hazardous waste regulations include amendments which have not been authorized by the EPA. Since the EPA cannot enforce a State’s requirements which have not been reviewed and authorized in accordance with RCRA section 3006 and 40 CFR part 271, it is important to be precise in delineating the scope of a State’s authorized hazardous waste program. Regulatory provisions that have not been authorized by the EPA include amendments to previously authorized State regulations as well as certain Federal rules.

Texas has adopted but is not authorized for the following Federal rules published in the **Federal Register** on December 31, 1985 (50 FR 53315); January 21, 1986 (51 FR 2702); September 22, 1986 (51 FR 33612); October 5, 1990 (55 FR 40834); February 1, 1991 (56 FR 3978); February 13, 1991 (56 FR 5910); April 2, 1991 (56 FR 13406); May 1, 1991 (56 FR 19951); May

13, 1991 (56 FR 21955); September 5, 1991 (56 FR 43874); September 19, 1994 (59 FR 47980); April 8, 1996 (61 FR 15660); April 12, 1996 (61 FR 16290); April 30, 1996 (61 FR 19117); June 28, 1996 (61 FR 33680); July 10, 1996 (61 FR 36419); August 26, 1996 (61 FR 43924); February 19, 1997 (62 FR 7502); June 8, 2000 (65 FR 36365); May 14, 2001 (66 FR 24270); July 3, 2001 (66 FR 35087); July 24, 2002 (67 FR 48393); October 7, 2002 (67 FR 62618); April 26, 2004 (69 FR 22601); June 16, 2005 (70 FR 35032); January 8, 2010 (75 FR 1236); December 17, 2010 (75 FR 78918); and June 26, 2014 (79 FR 36220). Therefore, these Federal amendments included in Texas’ adoption by reference at 30 Texas Administrative Code (TAC) sections 335.1(146)(A)(iv), 335.27; 335.112(a)(1) and (a)(4), 335.152(a)(1) and (a)(4), 335.431(c)(1) and (c)(3), and 335.504(1) are not part of the State’s authorized program and are not part of the incorporation by reference addressed by this document.

In those instances where Texas has made unauthorized amendments to previously authorized sections of State code, the EPA is identifying in 40 CFR 272.2201(c)(4)(i) any regulations which, while adopted by the State and incorporated by reference, include language not authorized by the EPA. Those unauthorized portions of the State regulations are not federally enforceable. Thus, notwithstanding the language in Texas hazardous waste regulations incorporated by reference at 40 CFR 272.2201(c)(1), the EPA will only enforce those portions of the State regulations that are actually authorized by the EPA. For the convenience of the regulated community, the actual State regulatory text authorized by the EPA for the citations listed at 272.2201(c)(4) (i.e., without the unauthorized amendments) is compiled as a separate document, *Addendum to the EPA Approved Texas Regulatory Requirements Applicable to the Hazardous Waste Management Program, dated March, 2021*. This document is available from EPA Region 6, 1201 Elm Street, Suite 500, Dallas, Texas 75270, phone number: (214) 665–8533.

State regulations that are not incorporated by reference in this rule at 40 CFR 272.2201(c)(1), or that are not listed in 40 CFR 272.2201(c)(2) (“legal basis for the State’s implementation of the hazardous waste management program”), 40 CFR 272.2201(c)(3) (“broader in scope”) or 40 CFR 272.2201(c)(4) (“unauthorized State amendments”), are considered new unauthorized State requirements. These

requirements are not federally enforceable. After review and analysis of the State’s regulations, the EPA has notified the State to seek authorization for the unauthorized rules that the State has adopted and are documented in this **Federal Register** document. The EPA expects the State to include these rules as part of their next Program Revision Application package.

Texas has adopted and was authorized for the following Federal rules which have since been vacated by the U.S. Court of Appeals for the District of Columbia Circuit (D.C. Cir. No. 98–1379 and 08–1144, respectively, June 27, 2014): (1) the Comparable Fuels Exclusion at 40 CFR 261.4(a)(16) and 261.38 published in the **Federal Register** on June 19, 1998 (63 FR 33782), as amended on June 15, 2010 (75 FR 33712); and (2) the Gasification Exclusion Rule published on January 2, 2008 (73 FR 57).

With respect to any requirement pursuant to the Hazardous and Solid Waste Amendments of 1984 (HSWA) for which the State has not yet been authorized, the EPA will continue to enforce the Federal HSWA standards until the State is authorized for these provisions.

G. What will be the effect of Federal HSWA requirements on the codification?

The EPA is not amending 40 CFR part 272 to include HSWA requirements and prohibitions that are implemented by EPA. Section 3006(g) of RCRA provides that any HSWA requirement or prohibition (including implementing regulations) takes effect in authorized and not authorized States at the same time. A HSWA requirement or prohibition supersedes any less stringent or inconsistent State provision which may have been previously authorized by the EPA (50 FR 28702, July 15, 1985). The EPA has the authority to implement HSWA requirements in all States, including authorized States, until the States become authorized for such requirement or prohibition. Authorized States are required to revise their programs to adopt the HSWA requirements and prohibitions, and then to seek authorization for those revisions pursuant to 40 CFR part 271.

Instead of amending the 40 CFR part 272 every time a new HSWA provision takes effect under the authority of RCRA section 3006(g), the EPA will wait until the State receives authorization for its analog to the new HSWA provision before amending the State’s 40 CFR part 272 incorporation by reference. Until then, persons wanting to know whether

a HSWA requirement or prohibition is in effect should refer to 40 CFR 271.1(j), as amended, which lists each such provision.

Some existing State requirements may be similar to the HSWA requirement implemented by the EPA. However, until the EPA authorizes those State requirements, the EPA can only enforce the HSWA requirements and not the State analogs. The EPA will not codify those State requirements until the State receives authorization for those requirements.

II. Environmental Justice Considerations

Executive Order 12898 (Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations, 59 FR 7629, Feb. 16, 1994) directs federal agencies to identify and address

“disproportionately high and adverse human health or environmental effects” of their actions on minority populations and low-income populations to the greatest extent practicable and permitted by law. The EPA defines environmental justice (EJ) as “the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.” The EPA further defines the term fair treatment to mean that “no group of people should bear a disproportionate burden of environmental harms and risks, including those resulting from the negative environmental consequences of industrial, governmental, and commercial operations or programs and policies.”¹

This rule codifies in the regulations the prior approval of Texas’ hazardous waste management program and incorporates by reference authorized provisions of the State’s statutes and regulations. EPA is not now reopening prior decisions. The incorporation by reference of State authorized programs in the CFR should enhance the public’s ability to discern the current status of the authorized State program and State requirements that can be federally enforced. This effort provides clear notice to the public of the scope of the authorized program in each State. Therefore, we conclude that this final rule does not have disproportionately high or adverse human health or environmental effects on communities with environmental justice concerns.

III. Statutory and Executive Order Reviews

The Office of Management and Budget (OMB) has exempted this action from the requirements of Executive Order 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011). This action incorporates by reference Texas’ authorized hazardous waste management regulations and imposes no additional requirements beyond those imposed by State law. Therefore, this action is not subject to review by OMB. This action is not an Executive Order 13771 (82 FR 9339, February 3, 2017) regulatory action because actions such as this codification of Texas’ revised hazardous waste program under RCRA are exempted under Executive Order 12866.

Accordingly, I certify that this action will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). Because this action incorporates by reference pre-existing requirements under State law and does not impose any additional enforceable duty beyond that required by State law, it does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1531–1538). For the same reason, this action also does not significantly or uniquely affect the communities of tribal governments, as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

This action 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, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999), because it merely incorporates by reference existing State hazardous waste management program requirements as part of the State RCRA hazardous waste management program without altering the relationship or the distribution of power and responsibilities established by RCRA.

This action also is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997), because it is not economically significant and it does not make decisions based on environmental health or safety risks. This action is not subject to Executive Order 13211, “Actions Concerning Regulations That Significantly Affect Energy Supply Distribution or Use” (66 FR 28344, May 22, 2001) because it is not a significant

regulatory action under Executive Order 12866.

Under RCRA section 3006(b), EPA grants a State’s application for authorization as long as the State meets the criteria required by RCRA. It would thus be inconsistent with applicable law for EPA, when it reviews a State authorization application, to require the use of any particular voluntary consensus standard in place of another standard that otherwise satisfies the requirements of RCRA. The requirements being codified are the result of Texas’ voluntary participation in the EPA’s State program authorization process under RCRA Subtitle C. Thus, the requirements of section 10(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. As required by section 3 of Executive Order 12988 (61 FR 4729, February 7, 1996), in issuing this rule, the EPA has taken the necessary steps to eliminate drafting errors and ambiguity, minimize potential litigation, and provide a clear legal standard for affected conduct. The EPA has complied with Executive Order 12630 (53 FR 8859, March 15, 1988) by examining the takings implications of the rule in accordance with the “Attorney General’s Supplemental Guidelines for the Evaluation of Risk and Avoidance of Unanticipated Takings” issued under the executive order. This rule does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). “Burden” is defined at 5 CFR 1320.3(b).

Executive Order 12898 (59 FR 7629, Feb. 16, 1994) establishes Federal executive policy on environmental justice. Because this rule codifies pre-existing State rules which are at least equivalent to, and no less stringent than existing Federal requirements, and imposes no additional requirements beyond those imposed by State law, and there are no anticipated significant adverse human health or environmental effects, the rule is not subject to Executive Order 12898.

The Congressional Review Act, 5 U.S.C. 801–808, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. The EPA will submit a report containing this document 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 publication in the **Federal Register**. A

¹ <https://www.epa.gov/environmentaljustice/learn-about-environmental-justice>.

major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a “major rule” as defined by 5 U.S.C. 804(2). This action will be effective November 21, 2024 because it is a final rule.

List of Subjects in 40 CFR Part 272

Environmental protection, Hazardous materials transportation, Hazardous waste, Incorporation by reference, Intergovernmental relations, Water pollution control, Water supply.

Authority: This notice is issued under the authority of Sections 2002(a), 3006 and 7004(b) of the Solid Waste Disposal Act as amended 42 U.S.C. 6912(a), 6926, 6974(b).

Dated: November 13, 2024.

Earthea Nance,

Regional Administrator, Region 6.

For the reasons set forth in the preamble, the EPA is amending 40 CFR part 272 as follows:

PART 272—APPROVED STATE HAZARDOUS WASTE MANAGEMENT PROGRAMS

■ 1. The authority citation for part 272 continues to read as follows:

Authority: Sections 2002(a), 3006, and 7004(b) of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended, 42 U.S.C. 6912(a), 6926, and 6974(b).

■ 2. Revise § 272.2201 to read as follows:

§ 272.2201 Texas State-Administered program: Final authorization.

(a) *History of the State of Texas authorization.* Pursuant to section 3006(b) of RCRA, 42 U.S.C. 6926(b), the EPA granted Texas final authorization for the following elements as submitted to EPA in Texas’ Base program application for final authorization which was approved by EPA effective on December 26, 1984. Subsequent program revision applications were approved effective on October 4, 1985, February 17, 1987, March 15, 1990, July 23, 1990, October 21, 1991, December 4, 1992, June 27, 1994, November 26, 1997, December 3, 1997, October 18, 1999, November 15, 1999, September 11, 2000, June 14, 2005, December 29, 2008, July 13, 2009, May 6, 2011, May 7, 2012, January 9, 2013, November 3, 2014, December 21, 2015, February 26, 2016, April 10, 2020, and March 5, 2021.

(b) *Enforcement authority.* The State of Texas has primary responsibility for enforcing its hazardous waste management program. However, EPA retains the authority to exercise its

inspection and enforcement authorities in accordance with sections 3007, 3008, 3013, 7003 of RCRA, 42 U.S.C. 6927, 6928, 6934, 6973, and any other applicable statutory and regulatory provisions, regardless of whether the State has taken its own actions, as well as in accordance with other statutory and regulatory provisions.

(c) *State statutes and regulations*—(1) *Incorporation by reference.* The Texas statutes and regulations cited in paragraph (c)(1)(i) of this section are incorporated by reference as part of the hazardous waste management program under Subtitle C of RCRA, 42 U.S.C. 6921 *et seq.* This incorporation by reference is approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. You may obtain copies of the Texas statutes and regulations that are incorporated by reference in this paragraph from Thomson Reuters, 610 Opperman Drive, Eagan, MN 55123; Phone: 1-888-728-7677; website: <https://legalsolutions.thomsonreuters.com>. You may inspect a copy at EPA Region 6, 1201 Elm Street, Suite 500, Dallas, Texas 75270, Phone number: (214) 665-8533, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fr.inspection@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

(i) “EPA-Approved Texas Statutory and Regulatory Requirements Applicable to the Hazardous Waste Management Program”, dated March 2021.

(ii) [Reserved]

(2) *Legal basis.* The following provisions provide the legal basis for the State’s implementation of the hazardous waste management program, but they are not being incorporated by reference and do not replace Federal authorities:

(i) Texas Health and Safety Code (THSC) Annotated, (Vernon, 2016); Chapter 361, The Texas Solid Waste Disposal Act (TSWDA), sections 361.002, 361.016, 361.017, 361.018, 361.0215(b)(2) and (b)(3), 361.023, 361.024, 361.029, 361.032, 361.033, 361.035, 361.036, 361.037(a), 361.061, 361.063, 361.0635, 361.064, 361.0641, 361.066(b) and (c), 361.0666, 361.068, 361.069, 361.078, 361.079, 361.0791, 361.080, 361.081, 361.082 (except 361.082(a) and (f)), 361.083, 361.084, 361.085, 361.0861(c), 361.0871(b), 361.088, 361.0885, 361.089, 361.095(b)-(f), 361.096, 361.097, 361.098, 361.099(a), 361.100, 361.101, 361.102 through 361.109, 361.113, 361.114, 361.116, 361.271 through 361.275, 361.301, 361.321(a) and (b), 361.321(c)

(except the phrase “Except as provided by Section 361.322(a)”), 361.321(d), 361.321(e) (except the phrase “Except as provided by Section 361.322(e)”), 361.451, 361.501 through 361.506, and 361.509(a) introductory paragraph, (a)(11), (b), (c) introductory paragraph, and (c)(2); Chapter 371, Texas Used Oil Collection, Management, and Recycling Act, sections 371.0025(b) and (c), 371.024(a), (c) and (d), 371.026(a) and (b), and 371.028.

(ii) Texas Water Code (TWC), as amended effective September 1, 2017: Chapter 5, sections 5.102 through 5.105, 5.112, 5.177, 5.351, 5.501 through 5.505, 5.509 through 5.512, 5.515, 5.551 through 5.556, and 5.557; Chapter 7, sections 7.031, 7.032, 7.051(a), 7.052(a), 7.052(c) and (d), 7.053 through 7.062, 7.064 through 7.069, 7.075, 7.101, 7.102, 7.104, 7.105, 7.107, 7.110, 7.162, 7.163, 7.176, 7.187(a), 7.189, 7.190, 7.252(1), 7.351, 7.3511, 7.353; Chapter 26, sections 26.001(13), 26.011, 26.020 through 26.022, 26.039, and 26.341 through 26.367; and Chapter 27, sections 27.003, 27.017(a), 27.018(a)-(d), and 27.019.

(iii) Texas Government Code as amended effective September 1, 2017, section 311.027.

(iv) Texas Rules of Civil Procedure, as amended effective September 1, 2017, Rule 60.

(v) Texas Administrative Code (TAC), Title 30, Environmental Quality, 2017, as amended, effective through December 31, 2016:

(A) Chapter 10; Chapter 39, sections 39.5(g) and (h), 39.11, 39.13 (except (10)), 39.103 (except (f) and (h)), 39.403(b)(1), 39.405(f)(1), 39.411 (except (b)(4)(B), (b)(10), (b)(11), and (b)(13)), 39.413 (except (10)), 39.420 (except (c) and (d)), 39.503 (except the reference to 39.405(h) in (d) introductory paragraph, and (g)), and 39.801 through 39.810;

(B) Chapter 50, sections 50.13, 50.19, 50.39, 50.113 (except (d)), 50.117(f), 50.119, 50.133, and 50.139;

(C) Chapter 55, sections 55.25(a) and (b), 55.27 (except (b)), 55.152(a)(4), 55.152(b), 55.154, 55.156 (except (d)-(g)), 55.201 (except as applicable to contested case hearings), and 55.211 (except as applicable to contested case hearings);

(D) Chapter 70, section 70.10;

(E) Chapter 281, sections 281.1 (except the clause “except as provided by . . . Prioritization Process”), 281.2 introductory paragraph and (4), 281.3(a) and (b), 281.5 (except the clause “Except as provided by . . . Discharge Permits”) and the phrases “subsurface area drip dispersal systems” and “radioactive material” in the introductory paragraph, 281.17(d)

(except the references to radioactive material licenses), 281.17(e) and (f), 281.18(a) (except for the sentence “For applications for radioactive . . . within thirty days.”), 281.19(a) (except the last sentence), 281.19(b) (except the phrase “Except as provided in subsection (c) of this section”), 281.20, 281.21(a) (except “and 32” and the phrase “and the Texas Radiation Control Act.”), 281.21(b), 281.21(c) (except the phrase “radioactive materials,” in 281.21(c)(2)), 281.21(d), 281.22(a) (except the phrase “For applications for radioactive . . . to deny the license.”), 281.22(b) (except the phrase “or an injection well,” in the first sentence and the phrase “For underground injection wells . . . the same facility or activity.”), 281.23(a), and 281.24;

(F) Chapter 305, sections, 305.29, 305.30, 305.64(d) and (f), 305.66(c), 305.66(e) (except for the last sentence), 305.66(f)–(l), 305.123 (except the phrases “and 32” and “and 401”), 305.125(1) and (3), 305.125(20), 305.127(1)(B)(i), 305.127(4)(A) and (C), 305.127(6), 305.401 (except the text “§ 55.21 of this title (relating to Requests for Contested Case Hearings, Public Comment)” at (b), and 305.401(c)); and

(G) Chapter 335, sections 335.2(b), 335.43(b), 335.206, 335.391 through 335.393.

(3) *Related legal provisions.* The following statutory and regulatory provisions are broader in scope than the Federal program, are not part of the authorized program, and are not incorporated by reference:

(i) Texas Health and Safety Code (THSC) Annotated, (Vernon, 2016): Chapter 361, The Texas Solid Waste Disposal Act (TSWDA), sections 361.131 through 361.140; Chapter 371, Texas Used Oil Collection, Management, and Recycling Act, sections 371.021, 371.022, 371.024(e), 371.0245, 371.0246, 371.025, and 371.026(c).

(ii) Texas Administrative Code (TAC), Title 30, Environmental Quality, 2017, as amended, effective through December 31, 2016: Chapter 305, sections 305.53, 305.64(b)(4), and 305.69(b)(1)(A) (as it relates to the Application Fee); Chapter 335, sections 335.1(146) “Solid waste” (a)(iv) introductory paragraph (IBR of 40 CFR 261.4(a)(24)), 335.18(a)(6), 335.19(d), 335.27 (IBR of 40 CFR 260.43(a)(4)), 335.321 through 335.332,

Appendices I and II, and 335.401 through 335.412.

(4) *Unauthorized state amendments and provisions.* (i) The following authorized provisions of the Texas regulations include amendments published in the Texas Register that are not approved by EPA. Such unauthorized amendments are not part of the State’s authorized program and are, therefore, not Federally enforceable. Thus, notwithstanding the language in the Texas hazardous waste regulations incorporated by reference at paragraph (c)(1)(i) of this section, EPA will enforce the State provisions that are actually authorized by EPA. The effective dates of the State’s authorized provisions are listed in the Table below. The actual State regulatory text authorized by EPA (*i.e.*, without the unauthorized amendments) is available as a separate document, *Addendum to the EPA-Approved Texas Regulatory and Statutory Requirements Applicable to the Hazardous Waste Management Program, dated March 2021*. Copies of the document can be obtained from EPA Region 6, 1201 Elm Street, Suite 500, Dallas, TX 75270.

TABLE 1 TO PARAGRAPH (c)(4)(i)

State provision (December 31, 2016)	Effective date of authorized provision	Unauthorized State amendments	
		Texas Register reference	Effective date
335.6(a)	7/29/92	18 TexReg 2799	5/12/93
		22 TexReg 12060	12/15/97
		23 TexReg 10878	10/19/98
335.6(c) introductory paragraph	7/29/92	17 TexReg 8010	11/27/92
		20 TexReg 2709	4/24/95
		20 TexReg 3722	5/30/95
		21 TexReg 1425	3/1/96
		21 TexReg 2400	3/6/96
		22 TexReg 12060	12/15/97
		23 TexReg 10878	10/19/98
		26 TexReg 9135	11/15/01
335.6(g)	7/29/92	18 TexReg 3814	6/28/93
		22 TexReg 12060	12/15/97
		23 TexReg 10878	10/19/98
335.24(b) introductory paragraph	3/1/96	21 TexReg 10983	11/20/96
		23 TexReg 10878	10/19/98
		38 TexReg 970	2/21/13
335.24(c) introductory paragraph	3/1/96	21 TexReg 10983	11/20/96
		23 TexReg 10878	10/19/98
		38 TexReg 970	2/21/13
335.45(b)	9/1/86	17 TexReg 5017	7/29/92
335.204(a)(1)	5/28/86	16 TexReg 6065	11/7/91
335.204(b)(1)	5/28/86	16 TexReg 6065	11/7/91
335.204(b)(6)	5/28/86	16 TexReg 6065	11/7/91
335.204(c)(1)	5/28/86	16 TexReg 6065	11/7/91
335.204(d)(1)	5/28/86	16 TexReg 6065	11/7/91
335.204(e)(6)	5/28/86	16 TexReg 6065	11/7/91

(ii) Texas has partially or fully adopted, but is not authorized to implement, the Federal rules that are listed in the following table. The EPA

will continue to implement the Federal HSWA requirements for which Texas is not authorized until the State receives specific authorization for those

requirements. The EPA will not enforce the non-HSWA Federal rules although they may be enforceable under State law. For those Federal rules that contain

both HSWA and non-HSWA requirements, the EPA will enforce only the HSWA portions of the rules.

TABLE 2 TO PARAGRAPH (c)(4)(ii)

Federal requirement	Federal Register reference	Publication date
Listing of Spent Solvents (HSWA) (Checklist 20 and Rule 20.1)	50 FR 53315	December 31, 1985.
	51 FR 2702	January 21, 1986.
Listing of Spent Pickle Liquor (Non-HSWA) (Checklist Rule 26.1)	51 FR 33612	September 22, 1986.
Toxicity Characteristic; Hydrocarbon Recovery Operations (HSWA) (Checklist 80 and Rules 80.1 and 80.2).	55 FR 40834	October 5, 1990.
	56 FR 3978	February 1, 1991.
	56 FR 13406	April 2, 1991.
Toxicity Characteristic; Chlorofluorocarbon Refrigerants (HSWA) (Checklist 84)	56 FR 5910	56 FR 5910.
Administrative Stay for K069 Listing (Non-HSWA) (Checklist 88)	56 FR 19951	May 1, 1991.
Revision to the Petroleum Refining Primary and Secondary Oil/Water/Solids Separation Sludge Listings (HSWA) (Checklist 89).	56 FR 21955	May 13, 1991.
Coke Oven Administrative Stay (HSWA) (Checklist 98)	56 FR 43874	September 5, 1991.
Hazardous Waste Management System; Testing and Monitoring Activities, Land Disposal Restrictions Correction (HSWA) (Checklist Rule 126.1).	59 FR 47980	September 19, 1994.
Land Disposal Restrictions Phase III—Decharacterized Wastewaters, Carbamate Wastes, and Spent Potliners (HSWA) (Checklist Rules 151.1, 151.2, 151.3, 151.4, 151.5, and 151.6).	61 FR 15660	April 8, 1996.
	61 FR 19117	April 30, 1996.
	61 FR 33680	June 28, 1996.
	61 FR 36419	July 10, 1996.
	61 FR 43924	August 26, 1996.
	62 FR 7502	February 19, 1997.
Organobromine Production Wastes; Petroleum Refining Wastes; Identification and Listing of Hazardous Waste; Land Disposal Restrictions (HSWA) (Checklist 187).	64 FR 36365	June 8, 2000.
Hazardous Air Pollutant Standards; Technical Corrections (Non-HSWA) (Checklist Rules 188.1 and 188.2).	66 FR 24270	May 14, 2001.
	66 FR 35087	July 3, 2001.
Zinc Fertilizers Made from Recycled Hazardous Secondary Materials (HSWA and Non-HSWA) (Checklist 200).	67 FR 48393	July 24, 2002.
Land Disposal Restrictions: National Treatment Variance to Designate New Treatment Subcategories for Radioactively Contaminated Cadmium, Mercury-Containing Batteries and Silver-Containing Batteries (HSWA) (Checklist 201).	67 FR 62618	October 7, 2002.
NESHAP: Surface Coating of Automobiles and Light-Duty Trucks (Non-HSWA) (Checklist 205).	69 FR 22601	April 26, 2004.
Non-wastewaters from Dyes and Pigments Correction (HSWA) (Checklist Rule 206.1)	70 FR 35032	June 16, 2005.
Removal of Saccharin and Its Salts from the Lists of Hazardous Constituents (Non-HSWA) (Checklist Rule 225).	75 FR 78918	December 17, 2010.
Hazardous Waste Technical Corrections and Clarifications Rule (Non-HSWA) (Checklist 228).	77 FR 22229	April 13, 2012.
Revisions to the Export Provisions of the Cathode Ray Tube (CRT) Rule (HSWA) (Checklist 232).	79 FR 36220	June 26, 2014.

(iii) The Federal rules listed in the table below are not delegable to States. Texas has adopted these provisions and left the authority to the EPA for implementation and enforcement.

TABLE 3 TO PARAGRAPH (c)(4)(iii)

Federal requirement	Federal Register reference	Publication date
Imports and Exports of Hazardous Waste: Implementation of OECD Council Decision (HSWA) (Checklist 152).	61 FR 16290	April 12, 1996.
OECD Requirements; Export Shipments of Spent Lead-Acid Batteries (Non-HSWA) (Checklist 222).	75 FR 1236	January 8, 2010.

(iv) Texas has chosen not to adopt, and is not authorized to implement, the following optional Federal rules:

TABLE 4 TO PARAGRAPH (c)(4)(iv)

Federal requirement	Federal Register reference	Publication date
Storage, Treatment, Transportation and Disposal of Mixed Waste (Non-HSWA) (Checklist 191).	66 FR 27218	May 16, 2001.

TABLE 4 TO PARAGRAPH (c)(4)(iv)—Continued

Federal requirement	Federal Register reference	Publication date
Inorganic Chemical Manufacturing Waste Identification and Listing (HSWA/Non-HSWA) (Checklist Rule 195.1).	67 FR 17119	April 9, 2002.
Revisions to the Definition of Solid Waste (Non-HSWA) (Checklist 219)	73 FR 64668	October 30, 2008.
Expansion of RCRA Comparable Fuel Exclusion (Non-HSWA) (Checklist 221)	73 FR 77954	December 19, 2008.
Withdrawal of the Emission Comparable Fuel Exclusion (Non-HSWA) (Checklist 224)	73 FR 33712	June 15, 2010.

(5) *Vacated Federal rules.* (i) Texas adopted and was authorized for the following Federal rules which have

since been vacated by the U.S. Court of Appeals for the District of Columbia

Circuit (D.C. Cir. No. 98–1379 and 08–1144, respectively; June 27, 2014):

TABLE 5 TO PARAGRAPH (c)(5)(i)

Federal requirement	Federal Register reference	Publication date
Hazardous Waste Combustors; Revised Standards (HSWA) (Checklist 168—40 CFR 261.4(a)(16) and 261.38 only).	63 FR 33782	June 19, 1998.
Exclusion of Oil-Bearing Secondary Materials Processed in a Gasification System to Produce Synthesis Gas (Checklist 216—Definition of “Gasification” at 40 CFR 260.10 and amendment to 40 CFR 261.4(a)(12)(i)).	73 FR 57	January 2, 2008.

(ii) Texas has adopted the following Federal provisions from the *Revisions to the Definition of Solid Waste Rule* (80 FR 1694); January 13, 2015, which have since been vacated by the United States Court of Appeals for the District of Columbia Circuit (*Am. Petroleum Inst. v. EPA*, 862 F.3d 50 (D.C. Cir. 2017) and *Am. Petroleum Inst. v. EPA*, No. 09–1038 (D.C. Cir. Mar. 6, 2018):

(A) one criterion in the determination of whether recycling is legitimate at 40 CFR 260.43(a)(4);

(B) one criterion related to the management of hazardous secondary materials at verified recycler facilities at 40 CFR 260.30(f);

(C) one criterion in the variance determination for exceptions to the classification of hazardous secondary materials as a solid waste (at 40 CFR 260.31(d)(6)); and

(D) the verified recycler exclusion, which allowed generators to send their hazardous secondary materials to certain reclaimers at 40 CFR 261.4(a)(24).

(6) *Memorandum of Agreement.* The Memorandum of Agreement between EPA Region 6 and the State of Texas was signed by the Executive Director of the Texas Commission on Environmental Quality (TCEQ) on December 20, 2011, and by the EPA Regional Administrator on February 17, 2012. The 2012 Memorandum of Agreement was re-certified by the Executive Director of the TCEQ on March 26, 2015, and the EPA Regional Administrator on September 30, 2015, and is referenced as part of the authorized hazardous waste

management program under Subtitle C of RCRA, 42 U.S.C. 6921 *et seq.*

(7) *Statement of legal authority.* “Attorney General’s Statement for Final Authorization”, signed by the Attorney General of Texas on May 22, 1984 and revisions, supplements, and addenda to that Statement dated November 21, 1986, July 21, 1988, December 4, 1989, April 11, 1990, July 31, 1991, February 25, 1992, November 30, 1992, March 8, 1993, January 7, 1994, August 9, 1996, October 16, 1996, as amended February 7, 1997, March 11, 1997, January 5, 1999, November 2, 1999, March 1, 2002, July 16, 2008, December 6, 2011, February 22, 2013, June 10, 2016, and July 9, 2020 are referenced as part of the authorized hazardous waste management program under Subtitle C of RCRA, 42 U.S.C. 6921 *et seq.*

(8) *Program Description.* The Program Description and any other materials submitted as part of the original application or as supplements thereto are referenced as part of the authorized hazardous waste management program under subtitle C of RCRA, 42 U.S.C. 6921 *et seq.*

■ 3. Appendix A to part 272 is amended by revising the listing for “Texas” to read as follows:

Appendix A to Part 272—State Requirements

* * * * *

Texas

The statutory provisions include: Texas Health and Safety Code (THSC) Annotated, (Vernon, 2016); Chapter 361, The Texas Solid Waste Disposal Act, sections 361.003 (except (3), (6), (11), (14), (14–a),

(15), (18–a), (19), (27), (33), (35), (37), and (39)), 361.019(a), 361.0235, 361.066(a), 361.082(a) and (f), 361.086, 361.087, 361.0871(a), 361.094, 361.095(a), 361.099(b), and 361.110; Chapter 371, The Texas Used Oil Collection, Management, and Recycling Act, sections 371.003, 371.024(b), 371.026(d), and 371.041.

Copies of the Texas statutes that are incorporated by reference are available from Thomson Reuters, 610 Opperman Drive, Eagan, MN 55123; Phone: 1–888–728–7677; website: <https://legalsolutions.thomsonreuters.com>.

The regulatory provisions include:

Texas Administrative Code (TAC), Title 30, Environmental Quality, 2017, as amended, effective through December 31, 2016. Please note that for some provisions, the authorized versions are found in the TAC, Title 30, Environmental Quality, as amended effective January 1, 1994, January 1, 1997, December 31, 1999, December 31, 2001, December 31, 2012,

December 31, 2014, or January 8, 2015. Texas made subsequent changes to these provisions, but these changes have not been authorized by EPA. Where the provisions are taken from regulations other than those effective December 31, 2016, notations are made below.

Chapter 3, Section 3.2(25) “Person”; Chapter 20, Section 20.15; Chapter 35, Section 35.402(e); Chapter 37, Sections 37.1 through 37.81, 37.100 through 37.161, 37.200 through 37.281, 37.301 through 37.381, 37.400 through 37.411, 37.501 through 37.551, 37.601 through 37.671, and 37.6001 through 37.6041; Chapter 281, Section 281.3(c);

Chapter 305, Subchapter A—General Provisions, Sections 305.1(a) (except the reference to Chapter 401, relative to Radioactive Materials); 305.2 introductory paragraph (except the references to THSC sections 401.003 and 401.004, relative to Radioactive Materials and the reference to

TWC 32.002); 305.2(1), (6), (11), (12), (14), (15), (19), (20), (24), (26), (27), (28), (31), and (40)–(42); 305.3;

Chapter 305, Subchapter C—Application for Permit or Post-Closure Order, Sections 305.41 (except the reference to Chapter 401, relative to Radioactive Materials and the reference to TWC Chapter 32); 305.42(a), (b), (d), and (f); 305.43(b); 305.44 (except (d)); 305.45 (except (a)(7)(I) and (J) and reference to “and for a Post-closure order” at 305.45(a)(8)(C)); 305.47; 305.50(a) introductory paragraph—(a)(3) (except the last two sentences in 305.50(a)(2)); 305.50(a)(4) (December 31, 2012); 305.50(a)(5)–(a)(8); 305.50(a)(13)–(a)(16); 305.50(b); 305.51;

Chapter 305, Subchapter D—Amendments, Renewals, Transfers, Corrections, Revocation, and Suspension of Permits, Sections 305.61; 305.62(a) (except the phrase in the first sentence “under § 305.70 of this title . . . Solid Waste Class I Modifications”) and the fifth sentence “If the permittee requests a modification of a municipal solid waste permit . . . § 305.70 of this title.”); 305.62(b); 305.62(c) introductory paragraph (except the phrase “other than . . . subsection (i) of this section”); 305.62(c)(1); 305.62(c)(2) introductory paragraph; 305.62(c)(2)(A) (except the phrase “except for Texas Pollutant Discharge Elimination System (TPDES) permits.”); 305.62(c)(2)(B) (except the phrase “except for TPDES permits”); 305.62(d) (except (d)(6)); 305.62(e)–(h); 305.63(a) (except the last sentence of (a)(3), and (a)(7)); 305.64(a); 305.64(b) (except (b)(4) and (b)(5)); 305.64(c) and (e); 305.64(g); 305.65; 305.66(a) (except (a)(7)–(a)(9)); 305.66(d); 305.67(a) and (b); 305.69(a); 305.69(b) (except the phrases “Additional Contents of Application for an Injection Well Permit” and “Waste Containing Radioactive Materials; and Application Fee” at (b)(1)(A)); 305.69(c); 305.69(d) (except (d)(7)); 305.69(e)–(h); 305.69(i)(3) and (i)(4); 305.69(j); 305.69(k) (except (k) A.8–A.10);

Chapter 305, Subchapter F—Permit Characteristics and Conditions, Sections 305.121 (except the phrases “radioactive material disposal” and “subsurface area drip dispersal systems”); 305.122 (except (e)); 305.124; 305.125 introductory paragraph; 305.125(2) and (4); 305.125(5) (except the second sentence); 305.125(6)–(8); 305.125(9) (except (9)(C)); 305.125(10) (except the phrases “and 32” and “and 401.603”); 305.125(11) (except the phrase “as otherwise required by Chapter 336 of this title” relative to Radioactive Substances in (11)(B)); 305.125(12)–(19), and (21); 305.127 introductory paragraph; 305.127(1)(B)(iii); 305.127(1)(E) and (F); 305.127(2); 305.127(3)(A) (except the last two sentences); 305.127(3)(B) and (C); 305.127(4)(B); 305.127(5)(C); 305.128;

Chapter 305, Subchapter G—Additional Conditions for Hazardous and Industrial Solid Waste Storage, Processing, or Disposal Permits, Sections 305.141 through 305.145; 305.150;

Chapter 305, Subchapter I—Hazardous Waste Incinerator Permits, Sections 305.171 through 305.176;

Chapter 305, Subchapter J—Permits for Land Treatment Demonstrations Using Field

Tests or Laboratory Analyses, Sections 305.181 through 305.184;

Chapter 305, Subchapter K—Research, Development, and Demonstration Permits, Sections 305.191 through 305.194;

Chapter 305, Subchapter L—Groundwater Compliance Plan, Section 305.401(c);

Chapter 305, Subchapter Q—Permits for Boilers and Industrial Furnaces Burning Hazardous Waste, Sections 305.571 through 305.573;

Chapter 305, Subchapter R—Resource Conservation and Recovery Act Standard Permits for Storage and Treatment Units, Sections 305.650 through 305.661;

Chapter 324, Subchapter A—Used Oil Recycling, Sections 324.1; 324.2 (except 324.2(2)); 324.3 (except 324.3(5)); 324.4; 324.6; 324.7; 324.11 through 324.16; 324.21; 324.22(d)(3);

Chapter 335, Subchapter A—Industrial Solid Waste and Municipal Hazardous Waste in General, Sections 335.1 introductory paragraph—(4), (6)–(12), (16)–(19), (21)–(23), (27), (28), (30)–(35), (38), (40), (42)–(51), (52) (except for the phrase “or is used for neutralizing the pH of non-hazardous industrial solid waste”), (54)–(59), (61)–(65), (67), (68), (70), (71), (73)–(82), (84)–(120) (except the phrase “solid waste or” at (94), (95), (96), (99), (100), and (105)), (122)–(124) (except the phrase “solid waste or” at (122)), (128)–(134) (except two instances of the phrase “solid waste or” at (129)), (136), (138)–(142), (144)–(146)(A)(iii), (146)(A)(iv) introductory paragraph (except the last sentence and the IBR of 40 CFR 261.4(a)(24)), (146)(B)–(G) (except the phrase “Except for materials described in subparagraph (H) of this paragraph.” at (D) and (G) introductory paragraphs), (146)(I)–(K), (147), (148), (150)–(160) (except the phrase “solid waste or” at (153), (156) and (158)), (161)–(165) (except the phrase “or industrial solid” at (161), (164), and (165)), (167)–(180) (except two instances of the phrase “solid waste or” at (170)), (181) (except the phrase “or industrial solid” at (181)(B)), (182)–(184), and (185) (except two instances of the phrase “solid waste or”); 335.2 (except (b), (d), (h), (k) and (n)); 335.4; 335.5 (except (d)); 335.6(a); 335.6(b) (January 1, 1997); 335.6(c); 335.6(d) (except the last sentence) (January 1, 1994); 335.6(e) (January 1, 1994); 335.6(f) and (g); 335.6(h) (except the third sentence); 335.6(i) and (j); 335.7; 335.8(a)(1) and (2); 335.9(a) (except (a)(2) and (3)); 335.9(a)(2) and (3) (January 1, 1997); 335.9(b) (January 1, 1994); 335.10(a) and (b); 335.11(a); 335.12(a); 335.13(a) (January 1, 1997); 335.13(c) and (d) (January 1, 1994); 335.13(e) and (f) (January 1, 1997); 335.13(g) (January 1, 1994); 335.13(k); 335.14; 335.15 introductory paragraph (January 1, 1994); 335.15(1); 335.15(3) (except two references to “Class 1 waste” at introductory paragraph); 335.17(a); 335.18(a) (except (a)(6)); 335.19 (except 335.19(d) and (e)); 335.20 through 335.23(1); 335.23(2) (January 1, 1994); 335.24(a)–(f); 335.24(m) and (n); 335.26; 335.27 (except the IBR of 40 CFR 260.43(a)(4)); 335.29 (except 335.29(3)); 335.29(3) (December 31, 2014); 335.30 through 335.32;

Chapter 335, Subchapter B—Hazardous Waste Management General Provisions, Sections 335.41(a)–(c); 335.41(d)

introductory paragraph and (d)(2)–(4); 335.41(d)(1) (December 31, 2001); 335.41(e)–(j); 335.43(a); 335.44; 335.45; 335.47 (except (b) and second sentence in (c)(3)); 335.47(b) (December 31, 1999);

Chapter 335, Subchapter C—Standards Applicable to Generators of Hazardous Waste, Sections 335.61 (except (f)); 335.62; 335.63; 335.65 through 335.68; 335.69 (except “and (n)” in (a) introductory paragraph, (i), and (n)); 335.70; 335.71; 335.73 through 335.75; 335.76 (except (h)); 335.77; 335.78(a); 335.78(b) (January 1, 1997); 335.78(c); 335.78(d) (except (d)(2)); 335.78(e) introductory paragraph (January 1, 1997); 335.78(e)(1) and (2); 335.78(f) (except 335.78(f)(2)); 335.78(f)(2) (January 1, 1997); 335.78(g) (except (g)(2)); 335.78(g)(2) (January 1, 1997); 335.78(h)–(j); 335.79;

Chapter 335, Subchapter D—Standards Applicable to Transporters of Hazardous Waste, Sections 335.91 (except (e)); 335.92; 335.93 (except (e)); 335.93(e) (December 31, 1999); 335.94;

Chapter 335, Subchapter E—Interim Standards for Owners and Operators of Hazardous Waste Treatment, Storage, or Disposal Facilities, Sections 335.111; 335.112 (except (a)(17)); 335.113; 335.115 through 335.128;

Chapter 335, Subchapter F—Permitting Standards for Owners and Operators of Hazardous Waste Treatment, Storage, or Disposal Facilities, Sections 335.151 through 335.153; 335.155 through 335.179;

Chapter 335, Subchapter G—Location Standards for Hazardous Waste Storage, Processing, or Disposal, Sections 335.201(a) (except (a)(3)); 335.201(c); 335.202 introductory paragraph; 335.202(2), (4), (9)–(11), (13), and (15)–(18); 335.203; 335.204(a) introductory paragraph—(a)(5); 335.204(b)(1)–(6); 335.204(c)(1)–(5); 335.204(d)(1)–(5); 335.204(e) introductory paragraph; 335.204(e)(1) introductory paragraph (except the phrase “Except as . . . (B) of this paragraph,” and the word “event” at the end of the paragraph); 335.204(e)(2)–(7); 335.204(f); 335.205(a) introductory paragraph—(a)(2) and (e);

Chapter 335, Subchapter H—Standards for the Management of Specific Wastes and Specific Types of Facilities, Sections 335.211 through 335.214; 335.221 through 335.225; 335.241 (except (b)(4)); 335.251; 335.261 (except (e)); 335.271; 335.272;

Chapter 335, Subchapter O—Land Disposal Restrictions, Section 335.431;

Chapter 335, Subchapter R—Waste Classification, Sections 335.504 (except (2)); 335.504(2) (January 8, 2015, 40 TexReg 77; August 22, 2014 proposed rule, 39 TexReg 6376);

Chapter 335, Subchapter U, Standards for Owners and Operators of Hazardous Waste Facilities Operating Under a Standard Permit, Sections 601 and 602;

Chapter 335, Subchapter V, Standards for Reclamation of Hazardous Secondary Materials, Sections 701 through 706.

Copies of the Texas regulations that are incorporated by reference are available from Thomson Reuters, 610 Opperman Drive, Eagan, MN 55123; Phone: 1–888–728–7677;

website: <https://legalsolutions.thomsonreuters.com>.

* * * * *

[FR Doc. 2024–26905 Filed 11–20–24; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 282

[EPA–R04–UST–2024–0279; FRL–12181–03–R4]

North Carolina: Final Approval of State Underground Storage Tank Program Revisions, Codification, and Incorporation by Reference; Correction

AGENCY: Environmental Protection Agency (EPA).

ACTION: Direct final rule; correction.

SUMMARY: The Environmental Protection Agency (EPA) is issuing a correction to a direct final rule that was published in the **Federal Register** on Tuesday, October 1, 2024, which will be effective on December 2, 2024. In the direct final rule, the EPA is approving revisions to the State of North Carolina's Underground Storage Tank Program under subtitle I of the Resource

Conservation and Recovery Act (RCRA). In addition, the direct final rule codifies the EPA's approval and incorporates by reference those provisions of the State statutes and regulations that the EPA has determined meet the requirements for approval. This document corrects inadvertent errors introduced in preparing the amendatory regulatory text for publication. These corrections do not include any substantive changes to the direct final rule.

DATES: The correction is effective December 2, 2024.

ADDRESSES: The EPA has established a docket for this action under Docket ID No. EPA–R04–UST–2024–0279. All documents in the docket are listed on the <https://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 electronically through <https://www.regulations.gov>.

FOR FURTHER INFORMATION CONTACT:

Upendra Giri, RCRA Programs and Cleanup Branch, Land, Chemicals, and Redevelopment Division, U.S. Environmental Protection Agency, Region 4, Atlanta Federal Center, 61 Forsyth Street SW, Atlanta, Georgia 30303–8960; Phone number: (404) 562–8185; email address: giri.upendra@epa.gov. Please contact Upendra Giri by phone or email for further information.

SUPPLEMENTARY INFORMATION: In FR Doc. 2024–22541 appearing at 89 FR 79756 in the **Federal Register** of Tuesday, October 1, 2024, the following corrections are made:

§ 282.83 [Corrected]

■ In § 282.83(d)(1), beginning in the first column of page 79761 and ending in the third column of page 79762, correct the paragraph level designation for each of the 5th level paragraphs from non-italicized Arabic numerals to italicized Arabic numerals.

Dated: November 15, 2024.

César A. Zapata,

*Acting Deputy Regional Administrator,
Region 4.*

[FR Doc. 2024–27123 Filed 11–20–24; 8:45 am]

BILLING CODE 6560–50–P

Proposed Rules

Federal Register

Vol. 89, No. 225

Thursday, November 21, 2024

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.

EQUAL EMPLOYMENT OPPORTUNITY COMMISSION

29 CFR Part 1602

RIN 3046-AB35

Recordkeeping and Reporting Requirements Under Title VII, the ADA, GINA, and the PWFA

AGENCY: Equal Employment Opportunity Commission.

ACTION: Notice of proposed rulemaking; hearing.

SUMMARY: The Equal Employment Opportunity Commission (EEOC or Commission) proposes to amend the language of its existing recordkeeping regulations under title VII of the Civil Rights Act of 1964 (title VII), the Americans with Disabilities Act (ADA), and the Genetic Information Nondiscrimination Act (GINA) to add references to the Pregnant Workers Fairness Act (PWFA). The PWFA requires covered employers to provide reasonable accommodations to a qualified applicant's or employee's known limitations related to, affected by, or arising out of pregnancy, childbirth, or related medical conditions, unless the accommodation will cause the employer an undue hardship. The PWFA adopts by reference the statutory recordkeeping provision of title VII, which authorizes the existing EEOC recordkeeping regulations.

DATES: Written comments must be received on or before January 21, 2025. Pursuant to 42 U.S.C. 2000e-8(c), a public hearing concerning these proposed changes will be held at a place and time to be announced. To request an opportunity to speak about your views at the hearing, please submit a written request in accordance with the instructions in the **SUPPLEMENTARY INFORMATION** section no later than December 23, 2024 to be assured of consideration.

ADDRESSES: You may submit comments, identified by RIN 3046-AB35, by any of

the following methods—please use only one method:

- **Federal eRulemaking Portal:** <https://www.regulations.gov>. Follow the instructions on the website for submitting comments.
- **Fax:** Comments totaling six or fewer pages may be sent by fax machine to (202) 663-4114. Receipt of fax transmittals will not be acknowledged, except that the sender may request confirmation of receipt by calling the Executive Secretariat staff at (202) 921-2815 (voice), (800) 669-6820 (TTY), or (844) 234-5122 (ASL Video Phone).
- **Mail:** Comments may be submitted by mail to Raymond Windmiller, Executive Officer, Executive Secretariat, U.S. Equal Employment Opportunity Commission, 131 M Street NE, Washington, DC 20507.
- **Hand Delivery/Courier:** Raymond Windmiller, Executive Officer, Executive Secretariat, U.S. Equal Employment Opportunity Commission, 131 M Street NE, Washington, DC 20507.

Instructions: The Commission invites comments from all interested parties. All comment submissions must include the Regulatory Information Number (RIN) for this rulemaking. The EEOC will post all comments received without change to <https://www.regulations.gov>, including any personal information you provide. However, the EEOC reserves the right to refrain from posting libelous or otherwise inappropriate comments, including those that contain obscene, indecent, or profane language; that contain threats or defamatory statements; that contain hate speech directed at race; color; sex; national origin; age; religion; disability; or genetic information; or that promote or endorse services or products.

Docket: To read the public comments received by the EEOC, go to <https://www.regulations.gov> and search for this item. There may be a few days' delay between submission of a comment and public posting on this docket. The received comments also will be available for review on a computer in the Commission's Headquarters library, 131 M Street NE, Suite 4NW08R, Washington, DC 20507, between the hours of 9 a.m. and 4:30 p.m. on days the Commission is open for business. You must make an appointment with library staff to review the comments in the Commission's library by contacting 202-921-3119.

FOR FURTHER INFORMATION CONTACT:

Raymond Peeler, Associate Legal Counsel, (202) 921-3240 (voice); (800) 669-6820 (TTY), Office of Legal Counsel, 131 M Street NE, Washington, DC 20507. Requests for this document in an alternative format should be made to the Office of Communications and Legislative Affairs at (202) 921-3191 (voice), (800) 669-6820 (TTY), or (844) 234-5122 (ASL).

SUPPLEMENTARY INFORMATION: The Pregnant Workers Fairness Act (PWFA)¹ became law on December 29, 2022, and took effect on June 27, 2023. The PWFA requires a covered employer to provide reasonable accommodations for a qualified employee's or applicant's known limitations related to pregnancy, childbirth, or related medical conditions, unless the employer can demonstrate that the accommodation would impose an undue hardship on the employer's operation of the business.² In the PWFA's enforcement section,³ Congress adopted by reference the statutory "powers, remedies, and procedures" of sections 705, 706, 707, 709, 710, and 711 of title VII.⁴ Specifically, section 709(c) of title VII provides that, with respect to "records relevant to the determinations of whether unlawful employment practices have been or are being committed":

"Every [covered entity] subject to this subchapter shall . . . (2) preserve such records for such periods . . . as the Commission shall prescribe by regulation or order, after public hearing, as reasonable, necessary, or appropriate for the enforcement of this subchapter or the regulations or orders thereunder."

Pursuant to this authority, the Commission has issued recordkeeping regulations at 29 CFR part 1602.

On February 14, 2024, the EEOC issued an interim final rule implementing changes to its administrative and procedural regulations to include references to the PWFA in a rule found at 89 FR 11167.⁵ The interim final rule, as corrected on May 28, 2024, did not revise four sections of 29 CFR part 1602 that

¹ 42 U.S.C. 2000gg *et seq.*

² 42 U.S.C. 2000gg-1.

³ 42 U.S.C. 2000gg-2.

⁴ 42 U.S.C. 2000e-4, 2000e-5, 2000e-6, 2000e-8, 2000e-9, and 2000e-10.

⁵ The EEOC has also issued regulations to implement the PWFA, pursuant to section 105 of the statute, 42 U.S.C. 2000gg-3(a) (see 89 FR 29096).

pertain to recordkeeping, because revisions to those recordkeeping provisions require approval under the Paperwork Reduction Act of 1995 (PRA),⁶ as well as the opportunity for a public hearing pursuant to 42 U.S.C. 2000e–8(c) (as incorporated into the PWFA by 42 U.S.C. 2000gg–2).⁷ Through the current rulemaking, the EEOC is proposing to add express references to the PWFA to these four recordkeeping provisions, in conformance with the PRA and the statutory requirement that the EEOC hold a public hearing as a condition of imposing recordkeeping obligations.

This rulemaking proposes to amend § 1602.14, covering private employers; § 1602.21(b), covering employers, labor organizations, and joint labor-management committees that control apprenticeship programs; § 1602.28(a), covering labor organizations; and § 1602.31, covering State and local governments. Under these existing recordkeeping requirements, these entities already must preserve records “made or kept”⁸ by that covered entity for one year (private employers and labor organizations) or two years (apprenticeship programs and public sector) and must continue to preserve any records relevant to charges filed under title VII, the ADA, or GINA until final disposition of those matters. The proposed rulemaking would expressly add the PWFA to this list of statutes and thus would impose the same record preservation requirements for records relating to PWFA charges as are currently imposed for records relating to title VII, ADA, and GINA charges.

This recordkeeping requirement does not require respondents to create any records, but only requires each covered entity to preserve records it already has made or kept in the normal course of its business operations. The EEOC proposal addresses record preservation only and does not impose any reporting requirements under the PWFA. However, the EEOC reserves the right in the future to issue reporting regulations as may be necessary to accomplish the purposes of the PWFA, pursuant to the proper statutory process.

A public hearing concerning the proposed revision to the Commission’s

existing recordkeeping requirements will be held at a place and time to be announced, as required by section 709(c) of title VII as adopted by reference in the PWFA. Persons wishing to speak about the proposal to revise the record preservation requirements should notify the Commission in writing of their desire to do so with a request to Raymond Windmiller, Executive Officer, Executive Secretariat, Equal Employment Opportunity Commission, 131 M Street NE, Washington, DC 20507. The request should include the requester’s contact information and a written summary of the remarks to be offered.

Regulatory Procedures

Executive Order 12866 (as Amended by Executive Order 14094)

The Commission has complied with the principles in section 1(b) of Executive Order 12866, as amended by Executive Order 14094, Regulatory Planning and Review. This rulemaking is not a “significant regulatory action” under section 3(f) of the Executive order and does not require an assessment of potential costs and benefits under section 6(a)(3) of the Executive order.

Paperwork Reduction Act

As part of its continuing effort to reduce paperwork and respondent burden, the Commission provides the general public with an opportunity to comment on proposed and continuing collections of information in accordance with the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3506(c)(2)(A)).

These proposed changes to the EEOC’s existing regulations contain information collection requirements⁹ subject to review and approval by the Office of Management and Budget (OMB) under the PRA. It is estimated that the public recordkeeping burden will not increase significantly as a result of the revisions because all covered entities affected by them are already required to preserve records that they make or keep for a period of one or two years, and that requirement would not be changed by the proposed revisions. The only new requirement imposed by the proposed revisions is that, if a charge is filed under the PWFA during that one- or two-year period, a covered entity must continue to preserve any of those records already made or kept that are relevant to the PWFA charge until final disposition of the charge, which

may necessitate preservation for longer than one or two years.

As required by the PRA, the EEOC is submitting to OMB a request for approval of these information collection requirements under section 3507(d) of the PRA. Organizations or individuals desiring to submit comments for consideration by OMB on these information collection requirements should access 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.

Overview of Information Collection

Collection Title: Recordkeeping under Title VII, the ADA, GINA, and the PWFA.

OMB Number: 3046–0040.

Description of Affected Public: Employers and labor organizations subject to title VII.

Number of Respondents: 887,869.

Number of Reports Submitted: 0.

Estimated Burden Hours: 178,485 annually; 443,935 one-time burden.

Burden Hour Cost: \$5,806,101 annually; \$14,441,189.29 one-time burden.

Federal Cost: None.

Number of Forms: None.

Abstract: The PWFA adopted the enforcement mechanisms and procedures of title VII, such that these requirements also apply to the PWFA. Section 104(a)(1) of the PWFA¹⁰ incorporates the powers, procedures, and remedies found in section 709 of title VII. Section 709(c) of title VII,¹¹ by incorporation into the PWFA, authorizes the Commission to establish regulations pursuant to which employers subject to the PWFA shall preserve records to assist the EEOC in assuring compliance with the PWFA’s nondiscrimination in employment requirements. The EEOC has issued recordkeeping regulations setting out recordkeeping requirements for private employers (29 CFR 1602.14); employers, labor organizations, and joint labor-management committees that control apprenticeship programs (29 CFR 1602.21(b)); labor organizations (29 CFR 1602.28(a)); State and local governments (29 CFR 1602.31); elementary and secondary school systems or districts (29 CFR 1602.40); and institutions of higher education (29 CFR 1602.49(a)). These regulations require all covered entities to preserve records they make or keep for a period of one or two years and to continue to preserve all records

⁶ 44 U.S.C. chapter 35.

⁷ See 89 FR 46021.

⁸ For specific language for different covered entities, see 29 CFR 1602.14 (“Any personnel or employment record made or kept by an employer . . . shall be preserved”); 29 CFR 1602.21(b) (“other records relating to apprenticeship made or kept . . . shall be kept”); 29 CFR 1602.28(a) (“shall preserve other membership or referral records . . . made or kept”); 29 CFR 1602.31 (“Any personnel or employment record made or kept by a political jurisdiction . . . shall be preserved”).

⁹ Section 3502(3) of the PRA defines “collection of information” to include recordkeeping requirements.

¹⁰ 42 U.S.C. 2000gg–2(a)(1).

¹¹ 42 U.S.C. 2000e–8(c).

relevant to a title VII, ADA, or GINA charge against them until final disposition of the charge. This proposed rule would extend these same recordkeeping requirements to records relevant to a PWFA charge. Any records that are subsequently disclosed to the EEOC during an investigation are protected from public disclosure by the confidentiality provisions of sections 706(b)¹² and 709(e)¹³ of title VII, which are adopted by reference into the ADA at section 107(a),¹⁴ GINA at section 207(a),¹⁵ and the PWFA at section 104(a).

Burden Statement: The estimated number of respondents currently subject to this recordkeeping requirement is 887,869 entities, which combines estimates from private employment,¹⁶ the public sector,¹⁷ colleges and universities,¹⁸ apprenticeship programs,¹⁹ and labor organizations.²⁰

Pursuant to the existing recordkeeping requirements under title VII, the ADA, and GINA in 29 CFR part 1602, a covered entity currently must preserve all personnel or employment records, records relating to

apprenticeship, or union membership or referral records made or kept by that entity for one year (private employers and labor organizations) or two years (apprenticeship programs and public sector). It also must continue to preserve any records relevant to charges filed under title VII, the ADA, or GINA until final disposition of the charges, which may be longer than one or two years. This recordkeeping requirement does not require respondents to make reports or create any records, but merely requires each covered entity to preserve records it already has made or kept in the normal course of business. Thus, for covered entities currently complying with these requirements, continued compliance does not impose an added time burden because their systems for preserving the records are already in place. For newly created entities, the EEOC previously has estimated an annual burden of 178,485 hours representing the time needed for appropriate personnel at the newly created entity to familiarize themselves with and to implement the recordkeeping requirements for title VII, the ADA, and GINA.

In addition to the above requirements, this proposed rulemaking would require covered entities also to continue to preserve records relevant to charges filed under the PWFA until final disposition of those charges. For existing entities (whose recordkeeping systems already preserve records relating to charges under title VII, the ADA, and GINA), the EEOC estimates a one-time burden associated with the time needed to update the recordkeeping systems to ensure compliance with the additional requirement to preserve PWFA charge records. Aside from this one-time burden, the EEOC estimates that the proposed revision imposes no annual burden on existing entities. For newly created entities that will be implementing new record preservation systems that cover title VII, ADA, GINA, and PWFA charge-related records, the time and associated cost of reviewing the regulatory standards and setting up the system will be virtually the same as it was before this proposed regulation added PWFA records. Accordingly, this proposal necessitates no change to the EEOC's previously approved annual burden estimate of 30 minutes for a newly created entity to set up an EEOC-compliant record preservation system.

Annual Burden on Newly Created Entities. Newly formed entities may incur a small burden when implementing their record preservation systems to ensure compliance with the EEOC's recordkeeping requirements.

The EEOC assumes some effort and time must be expended by newly created covered entities to familiarize themselves with the title VII, ADA, GINA, and PWFA recordkeeping requirements and explain those requirements to the appropriate staff. New entities will need to identify the appropriate records-focused personnel to understand the EEOC's straightforward recordkeeping requirements and ensure that the new entity follows them. To do so, they will need to recognize that they must preserve records that they will already make or keep in the ordinary course of their business for a period of one year (private employers and labor organizations) or two years (apprenticeship programs and public sector). For any of these already preserved records that are relevant to any charges of employment discrimination that may have been filed against the entity under title VII, the ADA, GINA, or the PWFA, the staff must arrange to continue to preserve them until final disposition of the charges, which may be longer than one or two years. The EEOC estimates that, on average, 30 minutes would be needed for this one-time familiarization process. Using projected business formation estimates from the U.S. Census Bureau for 2023 and the number of new apprenticeship programs established in 2021 provided by the Department of Labor, the EEOC estimates that there are 356,969 entities that would incur this start-up burden.²¹ Assuming a 30-minute burden per entity, the total annual hour burden is 178,485 hours (.5 hour × 356,969 new entities = 178,485 hours). The estimated associated burden hour cost to respondents is \$5,806,101, or around \$16.27 per new entity.²²

One-Time Burden on Existing Entities

To ensure compliance with the changes to the recordkeeping requirements, existing entities covered by those requirements may incur a one-time burden. The EEOC estimates that a respondent will need 30 minutes to ensure that its previously existing

¹² 42 U.S.C. 2000e-5(b).

¹³ 42 U.S.C. 2000e-8(e).

¹⁴ 42 U.S.C. 12117(a).

¹⁵ 42 U.S.C. 2000ff-6(a).

¹⁶ Source of original data: U.S. Census Bureau, 2021 Statistics of U.S. Businesses (SUSB) (Dec. 2023) (<https://www.census.gov/data/tables/2021/econ/susb/2021-susb-annual.html>). Local Downloadable CSV data. Select U.S. & states, 6-digit NAICS. The original number of employers was adjusted to include only those with 15 or more employees.

¹⁷ Source of original data: U.S. Census Bureau, 2022 Census of Governments, Survey of Public Employment & Payroll Datasets & Tables. Individual Government Data File (<https://www.census.gov/data/datasets/2022/econ/apes/2022.html>). Local Downloadable Data zip file "Individual Unit Files." The original number of government entities was adjusted to include only those with 15 or more employees.

¹⁸ Source: U.S. Department of Education, National Center for Education Statistics, IPEDS, Fall 2022, Institutional Characteristics component (provisional data). See Table 1, "Number and percentage distribution of Title IV institutions, by control of institution, level of institution, and region: United States and other U.S. jurisdictions, academic year 2022-23" (<https://nces.ed.gov/ipeds/search/viewtable?tableid=35945&returnUrl=%2Fsearch>).

¹⁹ Source: U.S. Department of Labor, Registered Apprenticeship National Results Fiscal Year 2021, Number of active apprenticeship programs in 2021 (<https://www.dol.gov/agencies/eta/apprenticeship/about/statistics/2021>). This is the most recent year for which the Department of Labor makes this data available.

²⁰ The EEOC has undertaken measures to enhance the agency's existing EEO-3 data frame (i.e., roster) of potentially eligible filers that was most recently used during the 2022 EEO-3 data collection. The number of labor organizations was estimated by comparing the EEOC's 2022 EEO-3 frame to a list of active unions from the U.S. Department of Labor's Office of Labor Management Standards (OLMS) Online Public Disclosure Room (OPDR) database (<https://olmsapps.dol.gov/olpdr/>).

²¹ Sources: U.S. Census Bureau, Business Formation Statistics (<https://www.census.gov/econ/bfs/index.html>); Total projected business formation statistics (series BF_PBF4Q) for 2023, across all industries, for the U.S., not seasonally adjusted; U.S. Department of Labor, New Apprenticeship programs for 2021 (<https://www.dol.gov/agencies/eta/apprenticeship/about/statistics/2021>).

²² Burden hour cost estimates are based on the median hourly wage rate of \$32.53 for Human Resources Specialists obtained from the Bureau of Labor Statistics, May 2024 (see U.S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook, <https://www.bls.gov/ooh/>).

system of continuing to preserve records pertinent to charges filed under title VII, the ADA, and GINA until final disposition of those charges is modified to likewise preserve records relating to charges filed under the PWFA (based upon the above estimate that a new entity would need 30 minutes to implement its recordkeeping system). For the 887,869 respondents, this 30-minute burden per entity results in a total one-time burden of 443,935 hours (.5 hour $\times$ 887,869 respondents = 443,935 hours). The estimated associated one-time burden hour cost to respondents is \$14,441,189.29, or around \$16.27 per entity.²³

Pursuant to the Paperwork Reduction Act of 1995, and OMB regulation 5 CFR 1320.8(d)(1), the Commission solicits public comment to enable it to:

1. Evaluate whether the proposed collection of information is necessary for the proper performance of the Commission's functions, including whether the information will have practical utility;
2. Evaluate the accuracy of the Commission's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;
3. Enhance the quality, utility, and clarity of the information to be collected; and
4. Minimize the burden of the collection of information on those who are to respond, including 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 Office of Information and Regulatory Affairs in OMB and the Commission review all comments posted at www.regulations.gov.

Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA), 5 U.S.C. 601–612, requires the Commission to evaluate the economic impact of this rulemaking on small entities. The RFA defines small entities to include small businesses, small organizations, including not-for-profit organizations, and small governmental jurisdictions. The Commission must determine whether the rule would impose a significant economic impact on a substantial number of such small entities. When an agency issues a rulemaking proposal, the RFA requires the agency to “prepare and make available for public comment an initial regulatory flexibility analysis” which will “describe the impact of the rule on

small entities.”²⁴ Section 605 of the RFA allows an agency to certify a rule, in lieu of preparing an analysis, if the rulemaking is not expected to have a significant economic impact on a substantial number of small entities. For the reasons outlined below, the Chair of the Commission hereby certifies that this rulemaking will not have a significant economic impact on a substantial number of small entities.

This proposed rulemaking applies to employers with fifteen or more employees, the majority of which are small entities.²⁵ Although this proposed rule would impact small entities, it will not have a “significant economic impact” on those entities. As discussed above, the proposed rulemaking may result in each small entity subject to the EEOC's recordkeeping requirements incurring a one-time cost of approximately \$16.27, either as a new entity implementing a recordkeeping system that complies with the requirement or an existing entity updating the recordkeeping system it already has in place. The Commission has determined that the impact of this minimal one-time cost of \$16.27 per affected small entity will not be “significant.” Accordingly, the Commission certifies under 5 U.S.C. 605(b) that this rulemaking will not have a significant economic impact on a substantial number of small entities because any burden it may impose on these entities is minimal. For this reason, a regulatory flexibility analysis is not required.

Unfunded Mandates Reform Act of 1995

This rulemaking will not result in the expenditure by State, local, or Tribal governments, in the aggregate, or by the private sector, of \$100 million or more in any one year, in 1995 dollars, updated annually for inflation. It will not significantly or uniquely affect small governments. Therefore, no actions were deemed necessary under the provisions of the Unfunded Mandates Reform Act of 1995, 2 U.S.C. 1501, 1532(a).

Congressional Review Act

This proposed rule is not a “rule” under the Congressional Review Act (Subtitle E of the Small Business Regulatory Enforcement Fairness Act of 1996) because the Congressional Review

Act only applies to final rules. Therefore, the reporting requirement of 5 U.S.C. 801 does not apply.

List of Subjects in 29 CFR Part 1602

Administrative practice and procedure, Equal employment opportunity.

Accordingly, the U.S. Equal Employment Opportunity Commission proposes to amend 29 CFR part 1602, as follows:

PART 1602—RECORDKEEPING AND REPORTING REQUIREMENTS UNDER TITLE VII, THE ADA, GINA, AND THE PWFA

- 1. The authority citation for part 1602 continues to read as follows:

Authority: 42 U.S.C. 2000e–8, 2000e–12; 44 U.S.C. 3501 *et seq.*; 42 U.S.C. 12117; 42 U.S.C. 2000ff–6; 42 U.S.C. 2000gg–2.

§§ 1602.14, 1602.21, 1602.28, and 1602.31 [Amended]

- 2. Remove the words “title VII, the ADA, or GINA” and add in their place the words “title VII, the ADA, GINA, or PWFA” in the following places:

- a. Section 1602.14;
- b. Section 1602.21(b);
- c. Section 1602.28(a); and
- d. Section 1602.31.

For the Commission.

Charlotte A. Burrows,

Chair.

[FR Doc. 2024–27286 Filed 11–20–24; 8:45 am]

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA–R01–OAR–2024–0051; FRL–12403–01–R1]

Air Plan Approval; Connecticut; Approval of State Implementation Plan Requirements for the 2008 Ozone Standard

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve State Implementation Plan (SIP) revisions submitted by the State of Connecticut. The SIP revisions are for the Connecticut portion of the New York-Northern New Jersey-Long Island, NY-NJ-CT Serious ozone nonattainment area for the 2008 ozone standard. The revisions pertain to requirements relating to reasonable further progress (RFP) plans, an Enhanced vehicle

²³ *Id.*

²⁴ 5 U.S.C. 603(a).

²⁵ Sources: U.S. Census Bureau, 2021 Statistics of U.S. Businesses (SUSB) (Dec. 2023) (<https://www.census.gov/data/tables/2021/econ/susb/2021-susb-annual.html>). Local Downloadable CSV data. Select U.S. & states, 6-digit NAICS; U.S. Small Bus. Admin., Table of Size Standards (Mar. 17, 2023) (<https://www.sba.gov/document/support-table-size-standards>).

emissions inspection and maintenance (I/M) program, transportation conformity, and a clean fuels for motor vehicles program. EPA is also starting the adequacy process for the motor vehicle emissions budgets included in the RFP SIP revision. This action is being taken under the Clean Air Act.

DATES: Written comments must be received on or before December 23, 2024.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA–R01–OAR–2024–0051 at <https://www.regulations.gov>, or via email to: mcconnell.robert@epa.gov. For comments submitted at *Regulations.gov*, follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from *Regulations.gov*. For either manner of submission, 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>. Publicly available docket materials are available at <https://www.regulations.gov> or at the U.S. Environmental Protection Agency, EPA Region 1 Regional Office, Air and Radiation Division, 5 Post Office Square—Suite 100, Boston, MA. EPA requests that if at all possible, you contact the contact listed in the **FOR FURTHER INFORMATION CONTACT** section to schedule your inspection. The Regional Office's official hours of business are Monday through Friday, 8:30 a.m. to 4:30 p.m., excluding legal holidays and facility closures due to COVID–19.

FOR FURTHER INFORMATION CONTACT: Bob McConnell, Environmental Engineer, Air Quality Branch, (Mail Code 5–MD), U.S. Environmental Protection Agency, Region 1, 5 Post Office Square, Suite 100, Boston, Massachusetts, 02109–

3912; (617) 918–1046; mcconnell.robert@epa.gov.

SUPPLEMENTARY INFORMATION:

Throughout this document whenever “we,” “us,” or “our” is used, we mean EPA.

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I. Background

On March 12, 2008, the EPA revised both the primary and secondary National Ambient Air Quality Standards (NAAQS) for ozone to a level of 0.075 parts per million (ppm) (annual fourth-highest daily maximum 8-hour average concentration, averaged over three years) to provide increased protection of public health and the environment (73 FR 16436, March 27, 2008). The 2008 ozone NAAQS retains the same general form and averaging time as the 0.08 ppm NAAQS set in 1997, but is set at a more protective level. Under the EPA's regulations at 40 CFR part 50, the 2008 8-hour ozone NAAQS is attained when the 3-year average of the annual fourth highest daily maximum 8-hour average ambient air quality ozone concentrations is less than or equal to 0.075 ppm. *See* 40 CFR 50.15.

Effective July 20, 2012, the EPA designated as nonattainment any area that was violating the 2008 8-hour ozone NAAQS based on the three most recent years (2008–2010) of air monitoring data (77 FR 30088, May 21, 2012). With that rulemaking, three counties within Connecticut, Fairfield, Middlesex, and New Haven Counties, were included within a nonattainment area described as the New York–N. New Jersey–Long Island NY–NJ–CT area and were designated as a Marginal ozone nonattainment area. For brevity, in the remainder of this notice we refer to this area as the NY–NJ–CT area. Areas that were designated as Marginal nonattainment were required to attain the 2008 8-hour ozone NAAQS no later than July 20, 2015, based on 2012–2014 monitoring data. On May 14, 2016 (81 FR 26697), the EPA published its determination that the NY–NJ–CT area, as well as other nonattainment areas in the country, had failed to attain the 2008 8-hour ozone NAAQS by the Marginal area attainment deadline, and so these areas were reclassified to

Moderate ozone nonattainment areas. *See* 40 CFR 81.306. Moderate areas were required to attain the 2008 8-hour ozone NAAQS by no later than six years after the effective date of designations, or July 20, 2018. *See* 40 CFR 51.903. Subsequently, on August 23, 2019 (84 FR 44238), the EPA published its determination that the NY–NJ–CT area, as well as other nonattainment areas in the country, had failed to attain the 2008 8-hour ozone NAAQS by the Moderate area attainment deadline, and so these areas were reclassified as Serious ozone nonattainment areas. Serious areas were required to attain the 2008 8-hour ozone NAAQS by no later than nine years after the effective date of designations, or July 20, 2021. Furthermore, on October 7, 2022 (87 FR 60926), the EPA published its determination that the NY–NJ–CT area, as well as other nonattainment areas in the country, had failed to attain the 2008 8-hour ozone NAAQS by the Serious area attainment deadline, and so these areas were reclassified as Severe ozone nonattainment areas. Severe areas are required to attain the 2008 8-hour ozone NAAQS by no later than 15 years after the effective date of designations, or July 20, 2027. *See* 40 CFR 51.903. However, Connecticut's SIP submittal, and EPA's proposed approval, relates to obligations under the CAA as a result of the area's prior reclassification to Serious. Additional SIP obligations are anticipated from the State as a result of the area's most recent reclassification to Severe.

II. Description of State's Submittals

Clean Air Act (CAA) section 182, subpart 2, outlines SIP requirements applicable to ozone nonattainment areas in each classification category. Requirements for each type of classification area were established under the provisions of the EPA's ozone implementation rule for the 2008 8-hour ozone NAAQS (40 CFR part 51, subpart AA). Examples of these requirements include submission of a reasonable further progress plan, and controls on stationary sources that represent reasonably available control technology (RACT).

On June 23, 2022, Connecticut submitted SIP revisions required due to the State's classification as a Serious nonattainment area for the 2008 ozone standard that included an RFP plan with motor vehicle emissions budgets (“budgets”), the I/M program certification, and a certification that the State's previously adopted clean fuels program continues to meet CAA requirements. EPA is proposing approval of these items for the reasons

articulated below. Connecticut's June 23, 2022, submittal also contained other SIP revisions, but today we are proposing action on only the items mentioned above.

On November 17, 2022, Connecticut submitted a supplement to the June 23, 2022 SIP submittal; the November 17, 2022 supplement consists of a modeling analysis comparing the Connecticut I/M program to the Federal Enhanced I/M performance standard.

On December 12, 2023, Connecticut submitted a clarification letter as a supplement to the June 23, 2022 RFP SIP submittal. The December 12, 2023 supplement clarified that motor vehicle emissions budgets were being submitted only for the Connecticut portion of the NY-NJ-CT nonattainment area. The December 12, 2023 supplement also included a revised version of the RFP plan to replace section 9 of the June 23, 2022 SIP submittal.

The RFP plan contained within Connecticut's submittal documents showed that a nine percent (9%) reduction in ozone precursor emissions occurred over the three-year time period from 2018 to 2020 relative to emissions in 2011. Table 9–2 of the State's submittal illustrates the oxides of nitrogen (NO_x) and volatile organic compounds (VOCs) emission target levels that needed to be met by 2020 for the State to meet its RFP emission reduction obligation, and table 9–4 provides a comparison of 2020 emission levels to these targets and confirms that the State did meet these targets, and furthermore, was considerably below them. Regarding transportation conformity, Connecticut's RFP SIP submittal establishes motor vehicle emissions budgets for 2020 for the Connecticut portion of the NY-NJ-CT nonattainment area that are more restrictive than the previous budgets that EPA approved for 2017 on October 1, 2018 (see 83 FR 49297), and also notes that the State provides a two percent (2%) contingency buffer to account for uncertainties inherent to the creation of these budgets. The Connecticut Department of Energy and Environmental Protection notes that it works with the State's Department of Transportation to ensure that emissions from transportation projects do not exceed the motor vehicle emissions budgets it establishes.

Regarding vehicle emissions I/M program, Connecticut's submittal notes

that it implements a statewide program that meets EPA's Enhanced I/M performance specifications pursuant to State authority codified within the Regulations of Connecticut State Agencies (RCSA) at section 22a–174–27 and the Connecticut General Statutes at 14–164c. The aforementioned November 17, 2022 supplement includes additional technical support regarding Connecticut conducting performance standard modeling to support its June 23, 2022 I/M certification submittal. Regarding a clean fuels program, Connecticut's submittal documents that its previously adopted and SIP approved program continues to meet CAA requirements. These SIP revisions and associated supporting documents are available in the docket for this action, at <https://www.regulations.gov>, docket number EPA–R01–OAR–2024–0051. Section III discusses our evaluation of these SIP submittals from Connecticut.

III. Evaluation of State's Submittals

A. Reasonable Further Progress Plans

Section 182(b)(1) of the CAA and the EPA's 2008 Ozone Implementation Rule require that States submit an RFP demonstration for each 8-hour ozone nonattainment area designated moderate and above, for review and approval into its SIP, that describes how the area will achieve actual emissions reductions of VOC and NO_x from a baseline emissions inventory. The 2008 Ozone Implementation Rule sets 2011 as the base year against which RFP emission reductions are measured, and EPA approved Connecticut's 2011 base year emissions inventory into the Connecticut SIP on October 1, 2018 (see 83 FR 49297). Additionally, EPA approved Connecticut's initial RFP plan for the 2008 NAAQS, which demonstrated a 15% reduction in ozone precursor emissions that occurred between 2012–2017, within the same October 1, 2018 action mentioned above.

In addition to demonstrating the 15% emission reduction described above, ozone nonattainment areas classified as Serious or higher must also demonstrate that additional reductions in ozone precursor emissions occur that average three percent (3%) per year beginning in the seventh year after designation and lasting until the area's attainment date, which for Serious areas occurs nine

years after designation. After taking into consideration the 15% emission reduction that was previously documented to occur between 2011 and 2018, Connecticut's submittal demonstrates that RFP was achieved for the second RFP increment by showing that ozone precursor emissions declined by a total of 24 percent (15% between 2011 and 2017, plus 9% between 2018 and 2020) between 2011 and 2020. Connecticut set its ozone precursor target levels to reflect a 16% reduction in NO_x emissions, and an 8% reduction in VOC emissions would occur by 2020. As noted below, Connecticut's RFP plan illustrates that Connecticut achieved a greater reduction in ozone precursor emissions than this amount over the nine-year period from 2011 to 2020.

One aspect of the RFP plan includes estimating emissions for the year 2020. Connecticut relied primarily on the emissions projection work it had developed and submitted to the Mid-Atlantic Regional Air Management Association (MARAMA), which is a regional organization that assists the mid-Atlantic and Northeast States with the development of emissions modeling files for use in ozone modeling. The projection of emissions from electrical generating units (EGUs) was accomplished using a forecasting tool developed by the Eastern Regional Technical Advisory Group (ERTAC) which is made up of technical staff from the Northeast and mid-Atlantic States, including Connecticut, with expertise in the emissions, controls, and projection of emissions from electrical generating units. Connecticut accounted for emissions held within its emissions offsets bank that are available for use as emissions offsets within the RFP analysis.

Table 1 below contains a summary of the 2011 RFP baseline inventory, 2020 target levels incorporating the eight percent (8%) VOC and 16% NO_x emission reductions, and 2020 projected, controlled emissions for the Connecticut portion of the NY-NJ-CT nonattainment area. Connecticut's RFP analysis shows that projected, controlled VOC and NO_x emissions in 2020 will be well below the emission target levels, thereby demonstrating that RFP has been met. Note that we are only proposing action on the Connecticut portion of the RFP plan for the NY-NJ-CT area.

TABLE 1—SUMMARY OF RFP CALCULATIONS FOR CT'S PORTION OF THE NY-NJ-CT NONATTAINMENT AREA

Description	VOC emissions (tons/summer day)	NO _x emissions (tons/summer day)
<i>RFP 2011 Baseline inventory</i>	115.6	115.1
<i>2020 target level of emissions</i>	106.4	96.7
<i>2020 projected, controlled emissions</i>	83.9	60.4

RFP plans must include budgets, which identify the allowable on-road mobile emissions an area can produce and continue to demonstrate RFP. The State's RFP plan includes budgets for the Connecticut portion of the NY-NJ-CT nonattainment area for 2020. The budgets are discussed in detail in section III.B of this notice.

B. RFP Motor Vehicle Emissions Budgets/Transportation Conformity

Transportation conformity is required by section 176(c) of the CAA. Conformity to a SIP means conformity to an implementation plan's purpose of eliminating or reducing the severity and number of violations of the NAAQS and achieving expeditious attainment of the NAAQS, and that transportation activities will not produce new air quality violations, worsen existing

violations, or delay timely attainment of the NAAQS or any required interim emission reductions or other milestones in any area. (CAA 176(c)(1)(A) and (B)). The EPA's conformity rule at 40 CFR part 93, subpart A requires that transportation plans, transportation improvement programs, and projects conform to SIPs and establishes the criteria and procedures for determining whether or not they conform. To effectuate its purpose, the conformity rule requires a demonstration that emissions from the metropolitan planning organization's (MPO) Regional Transportation Plan (RTP) and the Transportation Improvement Program (TIP) are consistent with the budgets contained in the control strategy SIP revision or maintenance plan (40 CFR 93.101, 93.118, and 93.124). The term

"Motor vehicle emissions budget" is defined in 40 CFR 93.101 as "that portion of the total allowable emissions defined in the submitted or approved control strategy . . . [SIP] or maintenance plan for a certain date for the purpose of meeting reasonable further progress milestones or demonstrating attainment or maintenance of the NAAQS, for any pollutant or its precursors, allocated to highway and transit vehicle use and emissions."

The RFP plan submitted by Connecticut is a control strategy SIP, and it contains 2020 budgets for VOCs and NO_x for the Connecticut portion of the NY-NJ-CT nonattainment area. Table 2 contains these VOC and NO_x budgets, based on MOVES2014b, in units of tons per summer day:

TABLE 2—MOTOR VEHICLE EMISSIONS BUDGETS IN THE CONNECTICUT RFP PLAN

Area name	2020 Transportation conformity budgets (tons/day)	
	VOC	NO _x
NY-NJ-CT area (CT portion) Without Contingency Buffer	17.3	22.8
NY-NJ-CT area (CT portion) With Contingency Buffer	17.6	23.3

In this action, we are proposing approval of the 2020 budgets for VOC and NO_x for the Connecticut portion of the NY-NJ-CT nonattainment area shown in table 2 above. As part of this action, EPA is also initiating the adequacy process for these 2020 budgets providing opportunity for the public to review and comment. The criteria we use to determine whether a SIP's budgets are adequate for conformity purposes are outlined in 40 CFR 93.118(e)(4). We further described our process for determining the adequacy of submitted SIP budgets in 40 CFR 93.118(f). The public can comment on the adequacy of budgets, along with EPA's proposed approval of the budgets, during the comment period defined in the **DATES** section above.

C. Inspection and Maintenance (I/M) Program

The goal of I/M programs is to identify and repair high-emitting

vehicles to improve air quality in areas that are not attaining the NAAQS.¹

Section 182(c)(3) of the CAA requires States with ozone nonattainment areas classified as Serious or above to implement an Enhanced I/M program to reduce VOC and NO_x emissions from in-use motor vehicles registered in urbanized portions of the nonattainment area. The Federal rules addressing I/M program requirements are provided at 40 CFR part 51, subpart S. Under these requirements, Serious ozone nonattainment areas in urbanized areas with 1980 Census-defined urbanized populations of 200,000 or more are required to adopt Enhanced I/M programs (40 CFR 51.350(a)(2)).

Similarly, pursuant to CAA section 182(b)(4), States with ozone

nonattainment areas classified as Moderate are required to implement a Basic I/M program in certain applicable areas. To address this Basic I/M requirement for the Connecticut portion of the NY-NJ-CT 2008 ozone NAAQS Moderate nonattainment area, Connecticut submitted a SIP revision on August 8, 2017. Due to more stringent nonattainment classifications under previous NAAQS and Connecticut's inclusion as part of the Ozone Transport Region (OTR), Connecticut already had been implementing an Enhanced I/M program.² On March 29, 2019, at 84 FR 11884, EPA approved Connecticut's

¹ For more information, see *Overview of Vehicle Inspection and Maintenance (I/M) Programs* (EPA-420-F-21-067, October 2021) at <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockkey=P1013CC0.pdf>.

² Connecticut was required to implement an Enhanced I/M program as a result of having state-wide designations of serious and severe for the 1979 1-hour ozone NAAQS. Furthermore, because Connecticut is in the OTR, CAA section 184(b)(1) requires implementation of an Enhanced I/M program in some portions of the State. Connecticut's state-wide Enhanced I/M program was initially approved into the Connecticut SIP on December 5, 2008 (73 FR 74019).

certification that the State's vehicle emissions I/M program implemented via the regulation and statute mentioned above satisfied the CAA's requirement for Moderate ozone nonattainment areas and for States located within the Ozone Transport Region (OTR).

Connecticut's I/M certification submittal of June 23, 2022, being proposed for approval here, notes that although the OTR requirements of the CAA include a requirement that Enhanced I/M programs be implemented within metropolitan statistical areas with populations exceeding 100,000, the State implements Enhanced I/M statewide and thus the I/M program is SIP-strengthening and more stringent than required. Connecticut's Enhanced I/M program tests gasoline-fueled and diesel-fueled motor vehicles up to 10,000 pounds gross vehicle weight rating (GVWR), requires on-board

diagnostic testing on Model Year (MY) 1996 and newer vehicles, and requires more comprehensive tailpipe testing on MY 1995 and older vehicles. The Enhanced I/M program also implements an emissions control device inspection through visual inspection for the presence of catalytic converter(s) and other major emissions control equipment. More details of the State's Enhanced I/M program may be found in section 6 of Connecticut's June 23, 2022, submittal. The State's submittal also attests that Connecticut's I/M program complies with all applicable CAA and I/M rule requirements for Enhanced I/M programs.

On November 17, 2022, Connecticut submitted supplemental documentation containing an I/M performance standard modeling analysis using EPA's latest mobile source emissions model at the time of the analysis (MOVES3). To demonstrate that the Connecticut

Enhanced I/M program meets the Enhanced program performance standard described in 40 CFR 51.351, the Connecticut program must be modeled to show that, it achieves the same or lower emission rates of VOC and NO_x as the Federal model Enhanced program to within 0.02 grams per mile for the area's total vehicle miles travelled on a July weekday in the appropriate analysis year. Connecticut's supplemental demonstration shows that the State's I/M program meets the applicable Enhanced I/M performance standard requirements for the 2008 ozone NAAQS for the analysis years of 2020, 2023, and 2025.

Table 3 contains the results of the performance standard modeling, which illustrates that the Connecticut I/M program achieves the same or lower emission rates as the Federal model Enhanced program to within 0.02 grams per mile.

TABLE 3—I/M PERFORMANCE STANDARD EVALUATION EMISSION RATES

	CT's portion of the NY-NJ-CT nonattainment area	
	Current Connecticut I/M program	Enhanced performance standard
I/M Performance Standard Evaluation Emission Rates (grams/mile)		
2020 Summer		
VOC	0.364	0.369
CO	3.772	4.333
NO _x	0.267	0.265
2023 Summer		
VOC	0.230	0.227
CO	3.143	3.615
NO _x	0.279	0.278
2025 Summer		
VOC	0.211	0.207
CO	2.783	3.203
NO _x	0.238	0.236

Based on our review, we find that State's modeling analysis showed that the State I/M program was modeled appropriately; modeling inputs accurately reflected the vehicles subject to I/M testing and emission reductions from the State program were greater than or equal to the I/M benchmark program for the Enhanced performance standard. This modeling was consistent with the most current guidance at the time of, and we concur with the State's determination that the Connecticut I/M program meets the performance standard and requirements for Enhanced I/M. We therefore propose approval of the I/M SIP certification.

D. Clean Fuels Program

CAA section 182(c)(4) requires States with ozone nonattainment areas classified as Serious or above with 1980 populations greater than 250,000 to submit a SIP revision to either "include such measures as may be necessary to ensure the effectiveness of the applicable provisions of the clean-fuel vehicle program prescribed under part C of subchapter II of this chapter" or to provide "a substitute for all or a portion of the clean-fuel vehicle program prescribed under part C of subchapter II of this chapter." In light of this requirement, Connecticut adopted the Low Emission Vehicle and Zero Emission Vehicle programs as set out in

RCSA section 22a-174-36c (see 89 FR 57361, July 15, 2024). Connecticut submitted these programs and EPA has approved them into the Connecticut SIP,³ thereby fulfilling requirements for Serious ozone nonattainment areas based on the State's past classification as Severe for the one-hour ozone standard. Pursuant to guidance issued by EPA in June of 2022 entitled, "Guidance for Fulfilling the Clean Fuel Fleets Requirement of the Clean Air Act" (see EPA-420-B-22-027, June 2022), EPA's current Clean Fuels Fleets

³ Connecticut's Low Emission Vehicles and Zero Emission Vehicles Programs was most recently approved into the Connecticut SIP on July 15, 2024 (see 89 FR 57361).

regulations in 40 CFR part 88 provide a compliance option where vehicles and engines certified to current standards under 40 CFR parts 86 and 1036 are deemed to also meet the Clean Fuels Fleets standards as ultra low-emission vehicles. Connecticut's adoption of the Low Emission Vehicle and Zero Emission Vehicle programs as set out in RCSEA section 22a–174–36c, constitutes as vehicles meeting more stringent emission standards than those found under vehicles certified to meeting 40 CFR parts 86 and 1036 emission standards. Therefore, the purchase of any new light-duty or heavy-duty vehicle in Connecticut would provide emission reductions equivalent to or greater than a new vehicle that would have been certified to the CAA's ultra-low clean-fuel vehicle emission standards.

IV. Proposed Action

EPA is proposing to approve Connecticut's RFP plan for the 2018 to 2020 timeframe, motor vehicle emissions budgets for 2020, certification of its Enhanced I/M program, and clean fuels program certification. EPA is also starting the adequacy process for the 2020 budgets. EPA is soliciting public comments on the issues discussed in this notice and on other relevant matters. These comments will be considered before taking final action. Interested parties may participate in the Federal rulemaking procedure by submitting written comments to this proposed rule by following the instructions listed in the **ADDRESSES** section of this **Federal Register**.

V. Statutory and Executive Order Reviews

Under the Clean Air Act, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. *See* 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve State choices, provided that they meet the criteria of the Clean Air Act. Accordingly, this proposed action merely approves State law as meeting Federal requirements and does not impose additional requirements beyond those imposed by State law. For that reason, this 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);
- 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); and
- Is not subject to requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the Clean Air Act.

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

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

The Connecticut DEEP did not evaluate environmental justice

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

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Nitrogen dioxide, Ozone, Volatile organic compounds.

Dated: November 14, 2024.

David Cash,

Regional Administrator, EPA Region 1.

[FR Doc. 2024–27050 Filed 11–20–24; 8:45 am]

BILLING CODE 6560–50–P

DEPARTMENT OF TRANSPORTATION

Federal Motor Carrier Safety Administration

49 CFR Parts 386 and 387

[Docket No. FMCSA–2024–0280]

RIN 2126–AC76

Broker and Freight Forwarder Financial Responsibility; Extension of Compliance Date

AGENCY: Federal Motor Carrier Safety Administration (FMCSA), Department of Transportation (DOT).

ACTION: Notice of proposed rulemaking (NPRM); reopening of comment period.

SUMMARY: FMCSA is reopening the comment period for its November 4, 2024, NPRM, proposing to amend its November 16, 2023, final rule, “Broker and Freight Forwarder Financial Responsibility,” by extending the compliance date for certain provisions from January 16, 2025, to January 16, 2026. FMCSA's forthcoming online registration system will be used to accept filings and track notifications, and this functionality will not be available in its legacy systems. As the new system is not expected to be available before January 16, 2025, FMCSA proposes to extend the compliance date to January 16, 2026, to provide regulated entities time to begin using and familiarizing themselves with the new system before compliance is

required. The comment period is being reopened due to a request from the Small Business in Transportation Coalition.

DATES: The comment period for the NPRM published November 4, 2024, at 89 FR 87532 is reopened. Comments must be received on or before November 29, 2024. Comments should be limited to the proposed change in the compliance date.

ADDRESSES: You may submit comments identified by Docket Number FMCSA–2024–0280 using any of the following methods:

- *Federal eRulemaking Portal:* Go to <https://www.regulations.gov>. Follow the online instructions for submitting comments.

- *Mail:* Dockets Operations, U.S. Department of Transportation, 1200 New Jersey Avenue SE, West Building, Ground Floor, Washington, DC 20590–0001.

- *Hand Delivery or Courier:* Dockets Operations, U.S. Department of Transportation, 1200 New Jersey Avenue SE, West Building, Ground Floor, Washington, DC 20590–0001, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. To be sure someone is there to help you, please call (202) 366–9317 or (202) 366–9826 before visiting Dockets Operations.

- *Fax:* (202) 493–2251.

FOR FURTHER INFORMATION CONTACT: Ana Alvarez, Financial Analyst, Office of Registration, Financial Responsibility Filings Division, FMCSA, 1200 New Jersey Avenue SE, West Building, 6th Floor, Washington, DC 20590; (202) 366–0401; ana.alvarez@dot.gov. If you have questions on viewing or submitting material to the docket, call Dockets Operations at (202) 366–9826.

SUPPLEMENTARY INFORMATION:

I. Public Participation and Request for Comments

A. Submitting Comments

If you submit a comment, please include the docket number for this NPRM (FMCSA–2024–0280), indicate the specific section of this document to which your comment applies, and provide a reason for each suggestion or recommendation. You may submit your comments and material online or by fax, mail, or hand delivery, but please use only one of these means. FMCSA recommends that you include your name and a mailing address, an email address, or a phone number in the body of your document so FMCSA can contact you if there are questions regarding your submission.

To submit your comment online, go to <https://www.regulations.gov/docket/FMCSA-2024-0280-0001>, click “Comment,” and type your comment into the text box on the following screen.

If you submit your comments by mail or hand delivery, submit them in an unbound format, no larger than 8½ by 11 inches, suitable for copying and electronic filing.

FMCSA will consider all comments and material received during the comment period.

Confidential Business Information (CBI)

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to the NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to the NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission that constitutes CBI as “PROPIN” to indicate it contains proprietary information. FMCSA will treat such marked submissions as confidential under the Freedom of Information Act, and they will not be placed in the public docket of the NPRM.

Submissions containing CBI should be sent to Mr. Brian Dahlin, Chief, Regulatory Evaluation Division, Office of Policy, FMCSA, 1200 New Jersey Avenue SE, Washington, DC 20590–0001 or via email at brian.g.dahlin@dot.gov. At this time, you need not send a duplicate hardcopy of your electronic CBI submissions to FMCSA headquarters. Any comments FMCSA receives not specifically designated as CBI will be placed in the public docket for this rulemaking.

B. Viewing Comments and Documents

To view any documents mentioned as being available in the docket, go to <https://www.regulations.gov/docket/FMCSA-2024-0280/document> and choose the document to review. To view comments, go to <https://www.regulations.gov/docket/FMCSA-2024-0280>, then click “Browse Comments.” If you do not have access to the internet, you may view the docket online by visiting Dockets Operations on the ground floor of the DOT West Building, 1200 New Jersey Avenue SE, Washington, DC 20590–0001, between 9

a.m. and 5 p.m., Monday through Friday, except Federal holidays. To be sure someone is there to help you, please call (202) 366–9317 or (202) 366–9826 before visiting Dockets Operations.

C. Privacy

In accordance with 5 U.S.C. 553(c), DOT solicits comments from the public to better inform its regulatory process. DOT posts these comments, including any personal information the commenter provides, to www.regulations.gov as described in the system of records notice (DOT/ALL 14—Federal Docket Management System (FDMS)), which can be reviewed at <https://www.transportation.gov/individuals/privacy/privacy-act-system-records-notice>. The comments are posted without edit and are searchable by the name of the submitter.

II. Background

The November 4, 2024, NPRM (89 FR 87532) requested public comment on FMCSA’s proposal to amend its November 16, 2023, final rule, “Broker and Freight Forwarder Financial Responsibility,” by extending the compliance date for certain provisions from January 16, 2025, to January 16, 2026. The extension to the compliance date is being proposed because FMCSA has determined that only its forthcoming online registration system will be used to accept filings and track notifications, and this functionality will not be added to its legacy systems. As the new system is not expected to be widely available before January 16, 2025, FMCSA proposes to extend the compliance date to January 16, 2026, to provide regulated entities time to begin using and familiarizing themselves with the system before compliance is required.

The comment period for the NPRM expires on November 19, 2024. The Small Business in Transportation Coalition requested an extension of the comment period on November 12, 2024. FMCSA believes it is in the interest of the public to allow for public comment on this proposal, and accordingly reopens the comment period for all comments on the NPRM until November 29, 2024.

Issued under the authority of delegation in 49 CFR 1.87.

Larry W. Minor,

Associate Administrator for Policy.

[FR Doc. 2024–27134 Filed 11–20–24; 8:45 am]

BILLING CODE 4910–EX–P

Notices

Federal Register
Vol. 89, No. 225
Thursday, November 21, 2024

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

DEPARTMENT OF AGRICULTURE

Submission for OMB Review;
Comment Request

The Department of Agriculture has submitted the following information collection requirement(s) to OMB for review and clearance under the Paperwork Reduction Act of 1995, Public Law 104–13. Comments are requested regarding; whether the collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility; the accuracy of the agency’s estimate of burden including the validity of the methodology and assumptions used; ways to enhance the quality, utility and clarity 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 appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

Comments regarding this information collection received by December 23, 2024 will be considered. 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.

An agency may not conduct or sponsor a collection of information unless the collection of information displays a currently valid OMB control number and the agency informs potential persons who are to respond to the collection of information that such persons are not required to respond to the collection of information unless it

displays a currently valid OMB control number.

Foreign Agricultural Service

Title: USDA Trade Missions and Trade Shows.

OMB Control Number: 0551–0050.

Summary of Collection: Under 7 U.S.C. 1761 Foreign Market Development; 7 U.S.C. 5693 Export Promotion—Foreign Agricultural; 7 U.S.C. 1765b Function of the US Agricultural Trade; and Section 12602 of the Agricultural Act of 2014 (Pub. L. 113–79) (The Act), as amended by the Agricultural Improvement Act of 2018 (Pub. L. 115–334), authorizes the USDA Secretary to collect information regarding customer and consumer feedback by gathering more useful information to further program objectives for USDA Trade Mission and Shows Events. The agency will use five instruments to collect this feedback: (1) Trade Mission Application; (2) Trade Missions (Post-Event) Survey; (3) USDA-Endorsed Trade Shows (Post-Event) Survey; (4) Virtual Trade Event Application; (5) Virtual Trade Events (Post-Event) Survey.

Need and Use of the Information: USDA will be used the information gathered to implement effective trade promotion events and ensure that program objectives are met. The three voluntary post-event digital surveys for participants to report their satisfaction with the event and actual on-site and projected sales data as a direct result of their participation in the program. This information will be used to measure the benefits of these activities for participants, participant satisfaction with the activities, and how activities can be improved. All revised surveys are expected to positively contribute to FAS’ strategic goals related to promoting U.S. agricultural exports.

Description of Respondents: Affected Public: Business or other-for-profit; State, Local or Tribal Government; Respondent Types: private companies, agricultural cooperatives, and export trade associations; State Regional Trade Groups.

Number of Respondents: 2,300.

Frequency of Responses: Record keeping, Reporting: Annually.

Total Burden Hours: 444.

Rachelle Ragland-Greene,
Departmental Information Collection
Clearance Officer.
[FR Doc. 2024–27335 Filed 11–20–24; 8:45 am]
BILLING CODE 3410–10–P

DEPARTMENT OF AGRICULTURE

Rural Business-Cooperative Service

[Docket #: RBS–24–BUSINESS–0010]

Amended Notice of Solicitation of
Applications for the Rural Economic
Development Loan and Grant
Programs for Fiscal Year 2025

AGENCY: Rural Business-Cooperative Service, USDA.
ACTION: Notice; lowering maximum loan amount.

SUMMARY: The Rural Business-Cooperative Service (RBCS or Agency), a Rural Development (RD) agency of the United States Department of Agriculture (USDA), invited applications for loans and grants under the Rural Economic Development Loan and Grant Programs (REDLG or Programs) for fiscal year (FY) 2025, subject to the availability of funding on August 23, 2024. The Rural Business-Cooperative Service (RBCS or Agency) now announces that the maximum loan amount awarded for applications competing in the Second, Third, and Fourth Quarter funding cycles of fiscal year (FY) 2025 will be lowered to \$1 million.

DATES: The following are the deadlines for FY 2025 complete loan applications to be received in the USDA Rural Development State Office no later than 4:30 p.m. (local time): Second Quarter, December 31, 2024; Third Quarter, March 31, 2025; and Fourth Quarter, June 30, 2025.

ADDRESSES: Applications must be submitted in paper or electronically to the RD State Office for the state where the project is located. A list of the RD State Office contacts can be found at: www.rd.usda.gov/about-rd/state-offices. This notice will also be announced at www.grants.gov.

FOR FURTHER INFORMATION CONTACT: Cindy Mason at cindy.mason@usda.gov, Program Management Division, Business Programs, Rural Business-Cooperative Service, U.S. Department of

Agriculture, 1400 Independence Avenue SW, Stop 3226, Room 5160-South, Washington, DC 20250–3226, or call (202) 720–1400. For further information on this program, please contact the Rural Development State office in the state which the applicant's headquarters is located. A list of Rural Development State Office contacts is provided at the following link: <https://www.rd.usda.gov/contact-us/state-offices>. The Rural Development office for the state in which the applicant is located. A list of Rural Development State Office contacts is provided at the following link: <https://www.rd.usda.gov/contact-us/state-offices>.

SUPPLEMENTARY INFORMATION: RBCS published a Notice of Solicitation of Applications for the Rural Economic Development Loan and Grant Programs for FY 2025 on August 23, 2024, (89 FR 68133) Section B states that: “The Agency anticipates the following maximum amounts per award: Loans—\$2,000,000; Grants—\$300,000.”

Based on the total amount of loan applications submitted in FY 2024 far exceeding the available allocated funds and the number of submitted but unfunded applications that will be competing for funding in the First Quarter of FY 2025, the Agency has determined that lowering the maximum loan amount to \$1 million for the Second, Third, and Fourth Quarter application periods would allow for additional project opportunities and a broader geographic distribution of Program funding.

The following are the deadlines for FY 2025 complete loan applications to be received in the USDA Rural Development State Office no later than 4:30 p.m. (local time): Second Quarter, December 31, 2024; Third Quarter, March 31, 2025; and Fourth Quarter, June 30, 2025. Completed loan applications that exceed \$1 million but are not funded in the FY 2025 First Quarter competition will be allowed to compete for Second Quarter funding with the submission of a revised scope of work plan and budget for a loan amount not to exceed \$1 million.

Kathryn E. Dirksen Londrigan,

Administrator, Rural Business-Cooperative Service, USDA Rural Development.

[FR Doc. 2024–27264 Filed 11–20–24; 8:45 am]

BILLING CODE 3410–XY–P

DEPARTMENT OF COMMERCE

Economic Development Administration

Agency Information Collection Activities; Submission to the Office of Management and Budget (OMB) for Review and Approval; Comment Request; Comprehensive Economic Development Strategies (CEDs)

AGENCY: Economic Development Administration, Department of Commerce.

ACTION: Notice of information collection, request for comment.

SUMMARY: The Department of Commerce, in accordance with the Paperwork Reduction Act of 1995 (PRA), invites the general public and other Federal agencies to comment on proposed, and continuing information collections, which helps us assess the impact of our information collection requirements and minimize the public's reporting burden. The purpose of this notice is to allow for 60 days of public comment preceding submission of the collection to OMB.

DATES: To ensure consideration, comments regarding this proposed information collection must be received on or before January 21, 2025.

ADDRESSES: Interested persons are invited to submit written comments by mail to Jeff Roberson, Chief Counsel, U.S. Department of Commerce, via email at jroberson@eda.gov or via phone at (202) 482–1315. You may also submit comments to PRAComments@doc.gov. Please reference OMB Control Number 0610–0093 in the subject line of your comments. Do not submit Confidential Business Information or otherwise sensitive or protected information.

FOR FURTHER INFORMATION CONTACT: Requests for additional information or specific questions related to collection activities should be directed to Interested persons are invited to submit written comments by mail to Jeff Roberson, Chief Counsel, U.S. Department of Commerce, via email at jroberson@eda.gov or via phone at (202) 482–1315.

SUPPLEMENTARY INFORMATION:

I. Abstract

The Economic Development Administration (EDA) leads the Federal economic development agenda by promoting innovation and competitiveness, preparing American regions for growth and success in the worldwide economy. Guided by the basic principle that sustainable economic development should be locally-driven, EDA works directly with

communities and regions to help them build the capacity for economic development based on local business conditions and needs. The Public Works and Economic Development Act of 1965 (PWEDA) (42 U.S.C. 3121 *et seq.*) is EDA's organic authority and is the primary legal authority under which EDA awards financial assistance. Under PWEDA, EDA provides financial assistance to both rural and urban distressed communities by fostering entrepreneurship, innovation, and productivity through investments in infrastructure development, capacity building, and business development to attract private capital investments and new and better jobs to regions experiencing economic distress. Further information on EDA programs and financial assistance opportunities can be found at www.eda.gov.

To effectively administer and monitor its economic development assistance programs, EDA collects certain information from applications for, and recipients of, EDA investment assistance. The purpose of this notice is to seek comments from the public and other Federal agencies on a request for an extension of an information collection related to a Comprehensive Economic Development Strategy (CEDs). A CEDs emerges from a continuing planning process developed and driven by a public sector planning organization by engaging a broad-based and diverse set of stakeholders to address the economic problems and potential of a region. The CEDs should include information about how and to what extent stakeholder input and support was solicited. Information on how the planning organization collaborated with its diverse set of stakeholders (including the public sector, private interests, non-profits, educational institutions, and community organizations) in the development of the CEDs should be included. In accordance with 13 CFR 303.7(b), a CEDs must contain a summary background, a SWOT (Strengths, Weaknesses, Opportunities, and Threats) Analysis, Strategic Direction/Action Plan, and an Evaluation Framework. In addition, the CEDs must incorporate the concept of economic resilience (*i.e.*, the ability to avoid, withstand, and recover from economic shifts, natural disasters, etc.). A CEDs is required for an eligible applicant to qualify for an EDA investment assistance under EDA's Public Works program, Economic Adjustment Assistance program, and certain planning programs, and is a prerequisite for a region's designation

by EDA as an Economic Development District (see 13 CFR part 303, 13 CFR 305.2, and 13 CFR 307.2). EDA collects information under this information collection to ensure compliance with EDA’s CEDS requirements.

This information collection is scheduled to expire on January 31, 2025. EDA is not proposing any changes to the current information collection request.

II. Method of Collection

CEDS are collected primarily through electronic submissions but may also be collected through paper submission.

III. Data

OMB Control Number: 0610–0093.
Form Number(s): None.
Type of Review: Regular submission; Extension of a currently approved collection.
Affected Public: (1) Cities or other political subdivisions of a State, including a special purpose unit of State or local government engaged in economic or infrastructure development activities; (2) States; (3) institutions of higher education; (4) public or private non-profit organizations or associations; (5) District Organizations; and (6) Indian Tribes.
Estimated Number of Respondents: 527.

Estimated Time per Response: 480 hours for the initial CEDS for a District organization or other planning organization funded by EDA; 160 hours for the CEDS revision required at least every 5 years from an EDA-funded District or other planning organization; 40 hours per CEDS update and performance report; and 40 hours per applicant for EDA Public Works or Economic Adjustment Assistance with a project deemed by EDA to merit further consideration that is not located in an EDA-funded District.

Estimated Total Annual Burden Hours: 31,640.

Type of response	Number of responses	Hours per response	Estimated time (hours)
Initial CEDS	3	480 hours/initial CEDS	1,440
Revised CEDS	77	160 hours/revised CEDS	12,320
CEDS Updates/Performance Reports	385	40 hours/report	15,400
CEDS by applicants not in EDA-funded District	62	40 hours	2,480
Total	527	.....	31,640

Estimated Total Annual Cost to Public: \$2,170,504 (cost assumes application of U.S. Bureau of Labor Statistics September 2024 hourly employer costs for employee compensation for professional and related occupations of \$68.60).

Respondent’s Obligation: Mandatory.

Legal Authority: The Public Works and Economic Development Act of 1965 (42 U.S.C. 3121 *et seq.*).

IV. Request for Comments

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

Comments that you submit in response to this notice are a matter of public record. We will include or summarize each comment in our request to OMB to approve this ICR. Before including your address, phone number, email address, or other personal identifying information in your

comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you may ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Sheleen Dumas,
Departmental PRA Clearance Officer, Office of the Under Secretary for Economic Affairs, Commerce Department.
[FR Doc. 2024–27332 Filed 11–20–24; 8:45 am]
BILLING CODE 3510–34–P

DEPARTMENT OF COMMERCE

Economic Development Administration

Agency Information Collection Activities; Submission to the Office of Management and Budget (OMB) for Review and Approval; Comment Request; Property Management Requirements

AGENCY: Economic Development Administration, Department of Commerce.

ACTION: Notice of information collection, request for comment.

SUMMARY: The Department of Commerce, in accordance with the Paperwork Reduction Act of 1995 (PRA), invites the general public and other Federal agencies to comment on proposed, and continuing information

collections, which helps us assess the impact of our information collection requirements and minimize the public’s reporting burden. The purpose of this notice is to allow for 60 days of public comment preceding submission of the collection to OMB.

DATES: To ensure consideration, comments regarding this proposed information collection must be received on or before January 21, 2025.

ADDRESSES: Interested persons are invited to submit written comments by mail to Jeff Roberson, Chief Counsel, U.S. Department of Commerce, via email at jroberson@eda.gov or via phone at (202) 482–1315. You may also submit comments to PRAComments@doc.gov. Please reference OMB Control Number 0610–0103 in the subject line of your comments. Do not submit Confidential Business Information or otherwise sensitive or protected information.

FOR FURTHER INFORMATION CONTACT: Requests for additional information or specific questions related to collection activities should be directed to Jeff Roberson, Chief Counsel, U.S. Department of Commerce, via email at jroberson@eda.gov or via phone at (202) 482–1315.

SUPPLEMENTARY INFORMATION:

I. Abstract

The Economic Development Administration (EDA) leads the Federal economic development agenda by promoting innovation and competitiveness, preparing American

regions for growth and success in the worldwide economy. Guided by the basic principle that sustainable economic development should be locally driven, EDA works directly with communities and regions to help them build the capacity for economic development based on local business conditions and needs. The Public Works and Economic Development Act of 1965 (PWEDA) (42 U.S.C. 3121 *et seq.*) is EDA's organic authority and is the primary legal authority under which EDA awards financial assistance. Under PWEDA, EDA provides financial assistance to both rural and urban distressed communities by fostering entrepreneurship, innovation, and productivity through investments in infrastructure development, capacity building, and business development to attract private capital investments and new and better jobs to regions experiencing economic distress. Further information on EDA programs and financial assistance opportunities can be found at www.eda.gov.

To effectively administer and monitor its economic development assistance programs, EDA collects certain information from applications for, and recipients of, EDA investment assistance. First, this collection of information allows EDA to determine whether an incidental use of property acquired or improved with EDA investment assistance is appropriate.

Pursuant to 13 CFR part 314.3(g), an incidental use of property: (1) does not interfere with the scope of the project or the economic purpose for which the investment was made; (2) provided that the recipient is in compliance with applicable law and the terms and conditions of the investment assistance; and (3) the incidental use of the property will not violate the terms and conditions of the investment assistance or otherwise adversely affect the economic useful life of the property. A recipient must request in writing EDA's approval to undertake an incidental use of property acquired or improved with EDA's investment assistance pursuant to.

Second, this collection of information allows EDA to determine whether to release its real property or tangible personal property interests. If a recipient wishes for EDA to release its real property or tangible personal property interests before the expiration of the property's estimated useful life, the recipient must submit a written request to EDA. Pursuant to 13 CFR 314.10(c), the recipient must disclose to EDA the intended future use of the property for which the release is requested.

This information collection is scheduled to expire on January 31, 2024. EDA is not proposing any changes to the current information collection request.

II. Method of Collection

Property management requests are collected primarily through electronic submissions but may also be collected through paper submission.

III. Data

OMB Control Number: 0610–0103.

Form Number(s): None.

Type of Review: Regular submission; Extension of a currently approved collection.

Affected Public: Current recipients of EDA awards, including: (1) cities or other political subdivisions of a state, including a special purpose unit of state or local government engaged in economic or infrastructure development activities; (2) states; (3) institutions of higher education; (4) public or private non-profit organizations or associations; (5) District Organizations; and (6) Indian Tribes.

Estimated Number of Respondents: 150 (54 incidental use requests and 96 requests to release EDA's property interest each year).

Estimated Time per Response: Each request takes an estimated 45 minutes initially, with an estimated two hours to provide additional documentation or respond to follow-up questions, if necessary.

Estimated Total Annual Burden Hours: 412.50.

Type of request	Number of requests (estimated)	Hours per request (estimated)	Total estimated burden hours
Incidental use request	54	2.75	148.5
Release request	96	2.75	264
Total			412.5

Estimated Total Annual Cost to Public: \$28,298 (cost assumes application of U.S. Bureau of Labor Statistics September 2024 hourly employer costs for employee compensation for professional and related occupations of \$68.60).

Respondent's Obligation: Mandatory.

Legal Authority: The Public Works and Economic Development Act of 1965 (42 U.S.C. 3121 *et seq.*).

IV. Request for Comments

We are soliciting public comments to permit the Department/Bureau to: (a) Evaluate whether the proposed information collection is necessary for the proper functions of the Department, including whether the information will have practical utility; (b) Evaluate the accuracy of our estimate of the time and cost burden for this proposed collection,

including the validity of the methodology and assumptions used; (c) Evaluate ways to enhance the quality, utility, and clarity of the information to be collected; and (d) Minimize the reporting burden on those who are to respond, including the use of automated collection techniques or other forms of information technology.

Comments that you submit in response to this notice are a matter of public record. We will include or summarize each comment in our request to OMB to approve this ICR. Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you may ask us in your comment

to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Sheleen Dumas,

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

[FR Doc. 2024–27331 Filed 11–20–24; 8:45 am]

BILLING CODE 3510–34–P

DEPARTMENT OF COMMERCE**Foreign-Trade Zones Board****[B-41-2024]****Foreign-Trade Zone (FTZ) 52; Authorization of Production Activity; Photonics Industries International Inc.; (Laser Systems); Ronkonkoma, New York**

On July 18, 2024, Photonics Industries International Inc. submitted a notification of proposed production activity to the FTZ Board for its facility within FTZ 52, in Ronkonkoma, New York.

The notification was processed in accordance with the regulations of the FTZ Board (15 CFR part 400), including notice in the **Federal Register** inviting public comment (89 FR 60601, July 26, 2024). On November 15, 2024, the applicant was notified of the FTZ Board's decision that no further review of the activity is warranted at this time. The production activity described in the notification was authorized, subject to the FTZ Act and the FTZ Board's regulations, including section 400.14.

Dated: November 15, 2024.

Elizabeth Whiteman,
Executive Secretary.

[FR Doc. 2024-27169 Filed 11-20-24; 8:45 am]

BILLING CODE 3510-DS-P

DEPARTMENT OF COMMERCE**Foreign-Trade Zones Board****[B-57-2024]****Foreign-Trade Zone (FTZ) 144, Notification of Proposed Production Activity; Corteva Agriscience, LLC; (Crop Protection Products); Valdosta, Georgia**

Corteva Agriscience, LLC submitted a notification of proposed production activity to the FTZ Board (the Board) for its facilities in Valdosta, Georgia within Subzone 144A. The notification conforming to the requirements of the Board's regulations (15 CFR 400.22) was received on November 14, 2024.

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

ftz. The proposed finished product(s) and material(s)/component(s) would be added to the production authority that the Board previously approved for the operation, as reflected on the Board's website.

The proposed finished products include: formulated insecticides (GF-3028™ (Methoxyfenozide) (Spinetoram); Salibro® Reklamel® (Fluazaindolizine); Vydate® (Oxamyl)); formulated insecticide seed treatments (Dermacor® (Chlorantraniliprole); Lumiposa® (Chlorantraniliprole); Lumivia® (Chlorantraniliprole)); and formulated fungicides (ACANTO® PLUS SC (Picoxystrobin); Aproach Prima® (Picoxystrobin) (Cyproconazole (ISO)); Aproach® (Chlorantraniliprole); FONTELIS® (DPX-LEM17 20SC) (Penthiopyrad); Indar 2F® (Fenbuconazole (ISO)); Lumisena® (Oxathiapiprolin (ISO)); Plenaris® Sunflower (Oxathiapiprolin (ISO)); Tanos® (Famoxadone) (Cymoxanil); Verpico® (Adavelt® Florylpicoxamid); ZORVEC ENCANTIA® 330SE (Famoxadone) (Oxathiapiprolin)) (duty rates are 5% or 6.5%).

The proposed foreign-status materials/components include: Chlorantraniliprole Technical Insecticide; Cyproconazole Technical Insecticide; Famoxadone Technical Fungicide; Fenbuconazole (RH-7592) Technical Fungicide; Florylpicoxamid Technical Fungicide; Marasprese N-22 Binder/Dispersing Agent; Methomyl Technical Insecticide; Methoxyfenozide Technical Insecticide; Oxamyl Technical Insecticide; Penthiopyrad Technical Fungicide; Picoxystrobin Technical Fungicide; Prothioconazole Technical Fungicide; Pyraclostrobin Technical Fungicide; Fluazaindolizine Technical Fungicide; 2,4,6-tris(1-phenylethyl)phenoxy Surfactant; and, Oxathiapiprolin Technical Fungicide (duty rates range from duty free to 6.5%). The request indicates that certain materials/components are subject to duties under section 301 of the Trade Act of 1974 (section 301), depending on the country of origin. The applicable section 301 decisions require subject merchandise to be admitted to FTZs in privileged foreign status (19 CFR 146.41).

Public comment is invited from interested parties. Submissions shall be addressed to the Board's Executive Secretary and sent to: ftz@trade.gov. The closing period for their receipt is December 31, 2024.

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

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

Dated: November 18, 2024.

Elizabeth Whiteman,
Executive Secretary.

[FR Doc. 2024-27322 Filed 11-20-24; 8:45 am]

BILLING CODE 3510-DS-P

DEPARTMENT OF COMMERCE**Bureau of Industry and Security****Regulations and Procedures Technical Advisory Committee; Notice of Partially Closed Meeting**

The Regulations and Procedures Technical Advisory Committee (RPTAC) will meet on December 10, 2024, 9 a.m.–4 p.m., Eastern Daylight Time, in the Herbert C. Hoover Building, Room 3884, 1401 Constitution Avenue NW, Washington, DC (enter through Main Entrance on 14th Street between Constitution and Pennsylvania Avenues). The Committee advises and assists the Secretary of Commerce (Secretary) and other Federal officials and agencies with respect to actions designed to carry out the policy set forth in section 1752(1)(A) of the Export Control Reform Act. The purpose of the meeting is to have Committee members and U.S. Government representatives mutually review updated technical data and policy-driving information that has been gathered.

Agenda**Public Session**

1. Opening remarks by the Chairman
2. Opening remarks by the Bureau of Industry and Security
3. Presentations of Papers by the Public
4. Regulations Update
5. Automated Export System Update
6. Working Group Reports

Closed Session

7. Discussion of matters determined to be exempt from the open meeting and public participation requirements found in sections 1009(a)(1) and 1009(a)(3) of the Federal Advisory Committee Act (FACA) (5 U.S.C. 1001–1014). The exemption is authorized by section 1009(d) of the FACA, which permits the closure of advisory committee meetings, or portions thereof, if the head of the agency to which the advisory committee reports determines such meetings may be closed to the public in accordance with subsection (c) of the Government in the Sunshine Act (5 U.S.C. 552b(c)). In this case, the applicable provisions of 5 U.S.C. 552b(c) are subsection 552b(c)(4), which permits closure to protect trade secrets and commercial or

financial information that is privileged or confidential, and subsection 552b(c)(9)(B), which permits closure to protect information that would be likely to significantly frustrate implementation of a proposed agency action were it to be disclosed prematurely. The closed session of the meeting will involve committee discussions and guidance regarding U.S. Government strategies and policies.

The open session will be accessible via teleconference. To join the conference, submit inquiries to TAC@bis.doc.gov.

A limited number of seats will be available for members of the public to attend the open session in person. Reservations are not accepted.

Special Accommodations: Individuals requiring special accommodations to access the public meeting should contact TAC@bis.doc.gov no later than Tuesday, December 3, 2024, so that appropriate arrangements can be made.

To the extent that time permits, members of the public may present oral statements to the Committee. The public may submit written statements at any time before or after the meeting. However, to facilitate distribution of materials to the Committee members, the Committee suggests that members of the public forward their materials prior to the meeting to Ms. Springer via email. Material submitted by the public will be made public and therefore should not contain confidential information. Meeting materials from the public session will be accessible via the Technical Advisory Committee (TAC) site at <https://tac.bis.doc.gov>, within 30 days after the meeting.

The Deputy Assistant Secretary for Administration, performing the non-exclusive functions and duties of the Chief Financial Officer and Assistant Secretary for Administration, with the concurrence of the delegate of the General Counsel, formally determined on September 23, 2024, pursuant to 5 U.S.C. 1009(d)), that the portion of the meeting dealing with pre-decisional changes to the Commerce Control List and the U.S. export control policies shall be exempt from the provisions relating to public meetings found in 5 U.S.C. 1009(a)(1) and 1009(a)(3). The remaining portions of the meeting will be open to the public.

Meeting cancellation: If the meeting is cancelled, a cancellation notice will be posted on the TAC website at <https://tac.bis.doc.gov>.

For more information, contact TAC@bis.doc.gov.

Kevin Coyne,

Committee Liaison Officer.

[FR Doc. 2024–27368 Filed 11–20–24; 8:45 am]

BILLING CODE 3510–JT–P

DEPARTMENT OF COMMERCE

International Trade Administration

[A–533–502]

Welded Carbon Steel Standard Pipes and Tubes From India: Notice of Court Decision Not in Harmony With the Results of Antidumping Administrative Review; Notice of Amended Final Results

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

SUMMARY: On November 7, 2024, the U.S. Court of International Trade (CIT) issued its final judgment in *Garg Tube Export LLP and Garg Tube Limited v. United States*, Court No. 21–00169, sustaining the U.S. Department of Commerce’s (Commerce) first and second remand results pertaining to the administrative review of the antidumping duty (AD) order on welded carbon steel standard pipes and tubes (pipe and tube) from India covering the period May 1, 2018, through April 30, 2019. Commerce is notifying the public that the CIT’s final judgment is not in harmony with Commerce’s final results of the administrative review and that Commerce is amending the final results with respect to the dumping margin assigned to Garg Tube Limited and Garg Tube Export LLP (collectively, Garg Tube).

DATES: Applicable November 17, 2024.

FOR FURTHER INFORMATION CONTACT: Dmitry Vladimirov, AD/CVD Operations, Office I, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 1401 Constitution Avenue NW, Washington, DC 20230; telephone: (202) 482–0665.

SUPPLEMENTARY INFORMATION:

Background

On March 19, 2021, Commerce published its *Final Results* in the 2018–2019 AD administrative review of pipe and tube from India.¹ Commerce

calculated a weighted-average dumping margin of 13.90 percent for Garg Tube.²

Garg Tube appealed Commerce’s *Final Results*. On February 3, 2023, the CIT granted Commerce’s request for a voluntary remand to recalculate Garg Tube’s weighted-average dumping margin established in the *Final Results* without making a cost-based particular market situation (PMS) adjustment.³ In its final results of the first remand redetermination, issued in March 2023, Commerce reversed a PMS adjustment made to the cost of production (COP) in the *Final Results* and recalculated Garg Tube’s weighted-average dumping margin accordingly.⁴

On April 8, 2024, the CIT remanded the *Final Results* to Commerce, holding that it was not reasonably discernable from Commerce’s analysis which statutory provision under section 776 of the Tariff Act of 1930, as amended (the Act), it was relying upon in applying partial adverse facts available (AFA) with respect to COP for pipe and tube sourced from an unaffiliated supplier.⁵ The CIT further held that to the extent that Commerce relied on section 776(a) of the Act, Commerce must further support its determination by addressing the *Mueller*⁶ factors, and to the extent Commerce relied on section 776(b) of the Act, Commerce must explain why Garg Tube did not act to the best of its ability and do all that it could to cooperate.⁷

In its final results of the second remand redetermination, issued in July 2024, Commerce clarified its methodology and, under respectful protest, modified the margin calculations for Garg Tube by relying on facts available, with no adverse inference, to fill the gap in the record on the unaffiliated supplier’s missing COP information caused by its non-cooperation.⁸ The CIT sustained

² *Id.* at 14873.

³ See *Garg Tube Export LLP and Garg Tube Limited v. United States*, Court No. 21–00169 (CIT February 3, 2023); see also Commerce’s February 2, 2023, consent motion for a voluntary remand (the CIT granted the motion without modification).

⁴ See *Final Results of Redetermination Pursuant to Court Remand, Garg Tube Export LLP and Garg Tube Limited v. United States*, Court No. 21–00169, (CIT February 3, 2023), dated March 16, 2023.

⁵ See *Garg Tube Export LLP and Garg Tube Limited v. United States*, 698 F. Supp. 3d 1230 (CIT 2024) (*Garg Tube*).

⁶ See *Mueller Comercial de Mexico, S. de R.L. de C.V. v. United States*, 753 F.3d 1227 (Fed. Cir. 2014) (*Mueller*).

⁷ See *Garg Tube*.

⁸ See *Final Results of Redetermination Pursuant to Court Remand, Garg Tube Export LLP and Garg Tube Limited v. United States*, 698 F. Supp. 3d 1230 (CIT 2024), dated July 8, 2024.

¹ See *Welded Carbon Steel Standard Pipes and Tubes from India: Final Results of Antidumping Duty Administrative Review; 2018–2019*, 86 FR 14872 (March 19, 2021) (*Final Results*), and accompanying Issues and Decision Memorandum.

Commerce’s final results of the first and second redeterminations.⁹

Timken Notice

In its decision in *Timken*,¹⁰ as clarified by *Diamond Sawblades*,¹¹ the U.S. Court of Appeals for the Federal Circuit held that, pursuant to sections 516A(c) and (e) of the Act, Commerce must publish a notice of court decision that is not “in harmony” with a Commerce determination and must suspend liquidation of entries pending a “conclusive” court decision. The CIT’s November 7, 2024, judgment constitutes a final decision of the CIT that is not in harmony with Commerce’s *Final Results*. Thus, this notice is published in fulfillment of the publication requirements of *Timken*.

Amended Final Results

Because there is now a final court judgment, Commerce is amending its *Final Results* with respect to Garg Tube as follows:

Producer or exporter	Weighted-average dumping margin (percent)
Garg Tube Export LLP and Garg Tube Limited	4.25

Cash Deposit Requirements

Because Garg Tube does not have a superseding cash deposit rate, *i.e.*, there have not been final results published in a subsequent administrative review, we will issue revised cash deposit instructions to U.S. Customs and Border Protection (CBP).

Liquidation of Suspended Entries

At this time, Commerce remains enjoined by CIT order from liquidating entries that were produced and/or exported by Garg Tube, and were entered, or withdrawn from warehouse, for consumption during the period May 1, 2018, through April 30, 2019. These entries will remain enjoined pursuant to the terms of the injunction during the pendency of any appeals process.

In the event the CIT’s ruling is not appealed, or, if appealed, upheld by a final and conclusive court decision, Commerce intends to instruct CBP to assess antidumping duties on

unliquidated entries of subject merchandise produced and/or exported by Garg Tube in accordance with 19 CFR 351.212(b). We will instruct CBP to assess antidumping duties on all appropriate entries covered by this review when the importer-specific *ad valorem* assessment rate is not zero or *de minimis*. Where an import-specific *ad valorem* assessment rate is zero or *de minimis*,¹² we will instruct CBP to liquidate the appropriate entries without regard to antidumping duties.

Notification to Interested Parties

This notice is issued and published in accordance with sections 516A(c) and (e) and 777(i)(1) of the Act.

Dated: November 15, 2024.
Abdelali Elouaradia,
Deputy Assistant Secretary for Enforcement and Compliance.
[FR Doc. 2024–27319 Filed 11–20–24; 8:45 am]
BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE

International Trade Administration

[A–821–838, C–821–839]

Ferrosilicon From the Russian Federation: Antidumping and Countervailing Duty Orders

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

SUMMARY: Based on affirmative final determinations by the U.S. Department of Commerce (Commerce) and the U.S. International Trade Commission (ITC), Commerce is issuing antidumping duty (AD) and countervailing duty (CVD) orders on ferrosilicon from the Russian Federation (Russia).

DATES: Applicable November 21, 2024.

FOR FURTHER INFORMATION CONTACT: Jacob Saude, 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) 482–0981.

SUPPLEMENTARY INFORMATION:

Background

In accordance with sections 705(d), 735(d), and 777(i) of the Tariff Act of 1930, as amended (the Act), on September 18, 2024, Commerce published its affirmative final determination of sales at less than fair value and its final affirmative determination that countervailable

subsidies are being provided to producers and exporters of ferrosilicon from Russia.¹ As part of these determinations, Commerce made affirmative critical circumstances findings for the Russia-wide entity in the AD investigation and for Russian Ferro Alloys Inc./RFA International LP and all other producers and/or exporters in the CVD investigation.

On November 4, 2024, the ITC notified Commerce of its affirmative final determination that an industry in the United States is materially injured within the meaning of sections 705(b)(1)(A)(i) and 735(b)(1)(A)(i) of the Act, by reason of imports of ferrosilicon that are subsidized by the government of Russia and sold in the United States at less than fair value.² On November 8, 2024, in accordance with section 735(d) of the Act, the ITC published in the **Federal Register** its affirmative final injury determination in these investigations in which it found that an industry in the United States is materially injured by reason of imports of ferrosilicon from Russia.³ In addition, the ITC found that critical circumstances do not exist with regard to imports from Russia.⁴

Scope of the Orders

The product covered by these orders is ferrosilicon from Russia. For a complete description of the scope of the orders, *see* the appendix to this notice.

Antidumping Duty Order

On November 4, 2024, in accordance with section 735(d) of the Act, the ITC notified Commerce of its final determination that an industry in the United States is materially injured within the meaning of section 735(b)(1)(A)(i) of the Act by reason of imports of ferrosilicon that are sold in the United States at less than fair value. Therefore, in accordance with sections 735(c)(2) and 736 of the Act, Commerce is issuing this AD order. Because the ITC determined that imports of ferrosilicon from Russia are materially injuring a U.S. industry, unliquidated entries of such merchandise from Russia, entered or withdrawn from

⁹ See *Garg Tube Export LLP and Garg Tube Limited v. United States*, Court No. 21–00169, Slip Op. 24–124 and Judgment Order (CIT November 7, 2024).

¹⁰ See *Timken Co. v. United States*, 893 F.2d 337 (Fed. Cir. 1990) (*Timken*).

¹¹ See *Diamond Sawblades Manufacturers Coalition v. United States*, 626 F.3d 1374 (Fed. Cir. 2010) (*Diamond Sawblades*).

¹² See 19 CFR 351.106(c)(2).

¹ See *Ferrosilicon from the Russian Federation: Final Affirmative Determination of Sales at Less Than Fair Value and Final Affirmative Determination of Critical Circumstances*, 89 FR 76450 (September 18, 2024); *see also* *Ferrosilicon from the Russian Federation: Final Affirmative Countervailing Duty Determination and Final Affirmative Determination of Critical Circumstances*, 89 FR 76454 (September 18, 2024).

² See ITC Letter, “Notification of ITC Final Determination,” dated November 4, 2024.

³ See *Ferrosilicon from Russia*, 89 FR 88814 (November 8, 2024) (*ITC Final Determination*).

⁴ *Id.*

warehouse for consumption, are subject to the assessment of antidumping duties.

Therefore, in accordance with section 736(a)(1) of the Act, Commerce will direct U.S. Customs and Border Protection (CBP) to assess, upon further instruction by Commerce, antidumping duties equal to the amount by which the normal value of the merchandise exceeds the export price (or constructed export price) of the merchandise, for all relevant entries of ferrosilicon from Russia. Antidumping duties will be assessed on unliquidated entries of ferrosilicon from Russia entered, or withdrawn from warehouse, for consumption on or after June 28, 2024, the date of publication of the *AD Preliminary Determination* but will not include entries occurring after the expiration of the provisional measures period and before publication of the ITC's final injury determination, as further described below.⁵

Critical Circumstances

With respect to the ITC's negative critical circumstances determination on imports of ferrosilicon from Russia, we will instruct CBP to lift the suspension of liquidation and to refund all cash deposits for estimated antidumping duties with respect to entries of the subject merchandise entered, or withdrawn from warehouse, for consumption on or after March 30, 2024 (*i.e.*, 90 days prior to the date of the publication of the *AD Preliminary Determination*), but before June 28, 2024, the date of publication of the *AD Preliminary Determination*.

Suspension of Liquidation and Cash Deposits—AD

Commerce intends to instruct CBP to reinstitute the suspension of liquidation of ferrosilicon from Russia, effective on the date of publication of the *ITC Final Determination* in the **Federal Register**, and to assess, upon further instruction by Commerce, antidumping duties on each entry of subject merchandise based on the estimated weighted-average dumping margins indicated in the table below. These instructions suspending liquidation will remain in effect until further notice. Commerce also intends to instruct CBP to require cash deposits equal to the estimated weighted-average dumping margins indicated in the table below. Accordingly, effective on the date of publication in the **Federal Register** of the notice of the ITC's final affirmative injury determination, CBP

will require, at the same time as importers would normally deposit estimated customs duties on this subject merchandise, a cash deposit equal to the rates listed in the table below.

Estimated Weighted-Average AD Margins

The estimated weighted-average dumping margins are as follows:

Exporter or producer	Weighted-average dumping margin (percent)
Russia-Wide Entity	283.27

Provisional Measures—AD

Section 733(d) of the Act states that suspension of liquidation pursuant to an affirmative preliminary determination may not remain in effect for more than four months, except where exporters representing a significant proportion of exports of the subject merchandise request that Commerce extend the four-month period to no more than six months. Commerce published the *AD Preliminary Determination* on June 28, 2024.

The provisional measures period, beginning on the date of publication of the *AD Preliminary Determination*, ended on October 25, 2024. Therefore, in accordance with section 733(d) of the Act, Commerce intends to instruct CBP to terminate the suspension of liquidation and to liquidate, without regard to antidumping duties, unliquidated entries of ferrosilicon from Russia entered, or withdrawn from warehouse, for consumption on or after October 26, 2024, the first day provisional measures were no longer in effect, until and through the day preceding the date of publication of the *ITC Final Determination*. Suspension of liquidation and the collection of cash deposits will resume on the date of publication of the *ITC Final Determination* in the **Federal Register**.

Countervailing Duty Order

As stated above, based on the above-referenced affirmative final determination by the ITC that an industry in the United States is materially injured within the meaning of section 705(b)(1)(A)(i) of the Act by reason of subsidized imports of ferrosilicon from Russia, in accordance with section 705(c)(2) of the Act, Commerce is issuing this CVD order. Because the ITC determined that imports of ferrosilicon from Russia are materially injuring a U.S. industry, unliquidated entries of subject merchandise entered, or withdrawn

from warehouse, for consumption, are subject to the assessment of countervailing duties.

Therefore, in accordance with section 706(a) of the Act, Commerce will direct CBP to assess, upon further instruction by Commerce, countervailing duties on all relevant entries of ferrosilicon from Russia, which are entered, or withdrawn from warehouse, for consumption on or after June 28, 2024, the date of publication of the *CVD Preliminary Determination*, but will not include entries occurring after the expiration of the provisional measures period and before the publication of the ITC's final injury determination under section 705(b) of the Act, as further described in the "Provisional Measures—CVD" section of this notice.⁶

Critical Circumstances

With respect to the ITC's negative critical circumstances determination on imports of ferrosilicon from Russia, we will instruct CBP to lift the suspension of liquidation and to refund all cash deposits for estimated antidumping duties with respect to entries of the subject merchandise entered, or withdrawn from warehouse, for consumption on or after March 30, 2024 (*i.e.*, 90 days prior to the date of the publication of the *CVD Preliminary Determination*), but before June 28, 2024, the date of publication of the *CVD Preliminary Determination*.

Suspension of Liquidation and Cash Deposits—CVD

In accordance with section 706 of the Act, Commerce intends to instruct CBP to reinstitute the suspension of liquidation of ferrosilicon from Russia, effective on the date of publication of the ITC's final affirmative injury determination in the **Federal Register**, and to assess, upon further instruction by Commerce, countervailing duties on each entry of subject merchandise in an amount based on the net countervailable subsidy rates below. These instructions suspending liquidation will remain in effect until further notice.

Commerce also intends, pursuant to section 706(a)(1) of the Act, to instruct CBP to require cash deposits equal to the amounts as indicated below. Accordingly, effective on the date of publication of the ITC's final affirmative injury determination in the **Federal Register**, CBP will require, at the same time as importers would normally deposit estimated customs duties on the subject merchandise, a cash deposit for

⁵ See *Ferrosilicon from the Russian Federation: Preliminary Affirmative Determination of Sales at Less Than Fair Value*, 89 FR 53953 (June 28, 2024) (*AD Preliminary Determination*).

⁶ See *Ferrosilicon from the Russian Federation: Preliminary Affirmative Countervailing Duty Determination*, 89 FR 53949 (June 28, 2024) (*CVD Preliminary Determination*).

each entry of subject merchandise equal to the subsidy rates listed below.⁷ The all-others rate applies to all producers or exporters not specifically listed below, as appropriate.

Estimated CVD Subsidy Rates

The estimated CVD subsidy rates as published in Commerce's *CVD Final Determination* are as follows:

Company	Subsidy rate (percent)
Russian Ferro Alloys Inc./ RFA International LP	748.58
All Others	748.58

Provisional Measures—CVD

Section 703(d) of the Act states that the suspension of liquidation pursuant to an affirmative preliminary determination may not remain in effect for more than four months. Commerce published the *CVD Preliminary Determination* on June 28, 2024.⁸ As such, the four-month period beginning on the date of publication of the *CVD Preliminary Determination* ended on October 25, 2024.

In accordance with section 703(d) of the Act, Commerce intends to instruct CBP to terminate the suspension of liquidation and to liquidate, without regard to CVDs, unliquidated entries of ferrosilicon from Russia entered, or withdrawn from warehouse, for consumption, on or after October 26, 2024, the first day provisional measures were no longer in effect, until and through the day preceding the date of publication of the *ITC Final Determination*. Suspension of liquidation and the collection of cash deposits will resume on the date of publication of the *ITC Final Determination* in the **Federal Register**.

Establishment of the Annual Inquiry Service List

On September 20, 2021, Commerce published the *Final Rule* in the **Federal Register**.⁹ On September 27, 2021, Commerce also published the *Procedural Guidance* in the **Federal Register**.¹⁰ The *Final Rule* and *Procedural Guidance* provide that Commerce will maintain an annual inquiry service list for each order or suspended investigation, and any interested party submitting a scope

ruling application or request for circumvention inquiry shall serve a copy of the application or request on the persons on the annual inquiry service list for that order, as well as any companion order covering the same merchandise from the same country of origin.

In accordance with the *Procedural Guidance*, for orders published in the **Federal Register** after November 4, 2021, Commerce will create an annual inquiry service list segment in Commerce's online e-filing and document management system, Antidumping and Countervailing Duty Electronic Service System (ACCESS), available at <https://access.trade.gov>, within five business days of publication of the order. Each annual inquiry service list will be saved in ACCESS, under each case number, and under a specific segment type called "AISL-Annual Inquiry Service List."¹¹

Interested parties who wish to be added to the annual inquiry service list for an order must submit an entry of appearance to the annual inquiry service list segment for the order in ACCESS within 30 days after the date of publication of the order. For ease of administration, Commerce requests that law firms with more than one attorney representing interested parties in an order designate a lead attorney to be included on the annual inquiry service list. Commerce will finalize the annual inquiry service list within five business days thereafter. As mentioned in the *Procedural Guidance*, the new annual inquiry service list will be in place until the following year, when the *Opportunity Notice* for the anniversary month of the order is published. Commerce may update an annual inquiry service list at any time as needed based on interested parties' amendments to their entries of appearance to remove or otherwise modify their list of members and representatives, or to update contact information. Any changes or announcements pertaining to these procedures will be posted to the ACCESS website.

¹¹ This segment will be combined with the ACCESS Segment Specific Information (SSI) field which will display the month in which the notice of the order or suspended investigation was published in the **Federal Register**, also known as the anniversary month. For example, for an order under case number A-000-000 that was published in the **Federal Register** in January, the relevant segment and SSI combination will appear in ACCESS as "AISL-January Anniversary." Note that there will be only one annual inquiry service list segment per case number, and the anniversary month will be pre-populated in ACCESS.

Special Instructions for Petitioners and Foreign Governments

In the *Final Rule*, Commerce stated that, "after an initial request and placement on the annual inquiry service list, both petitioners and foreign governments will automatically be placed on the annual inquiry service list in the years that follow."¹²

Accordingly, as stated above, the petitioners and Government of Russia should submit their initial entries of appearance after publication of this notice in order to appear in the first annual inquiry service list for those orders for which they qualify as an interested party. Pursuant to 19 CFR 351.225(n)(3), the petitioners and the Government of Russia will not need to resubmit their entries of appearance each year to continue to be included on the annual inquiry service list. However, the petitioners and the Government of Russia are responsible for making amendments to their entries of appearance during the annual update to the annual inquiry service list in accordance with the procedures described above.

Notification to Interested Parties

This notice constitutes the AD and CVD orders with respect to ferrosilicon from Russia, pursuant to sections 736(a) and 706(a) of the Act. Interested parties can find a list of AD and CVD orders currently in effect at <https://enforcement.trade.gov/stats/iastats1.html>.

These orders are published in accordance with sections 736(a) and 706(a) of the Act, and 19 CFR 351.211(b).

Dated: November 15, 2024.

Abdelali Elouaradia,

Deputy Assistant Secretary for Enforcement and Compliance.

Appendix

Scope of the Orders

The scope of the order covers all forms and sizes of ferrosilicon, regardless of grade, including ferrosilicon briquettes. Ferrosilicon is a ferroalloy containing by weight four percent or more iron, more than eight percent but not more than 96 percent silicon, three percent or less phosphorus, 30 percent or less manganese, less than three percent magnesium, and 10 percent or less of any other element. The merchandise covered also includes product described as slag, if the product meets these specifications.

Subject merchandise includes material matching the above description that has been finished, packaged, or otherwise processed in a third country, including by performing any grinding or any other finishing, packaging, or processing that would not otherwise remove

¹² See *Final Rule*, 86 FR at 52335.

⁷ See section 706(a)(3) of the Act.

⁸ See *CVD Preliminary Determination*.

⁹ See *Regulations to Improve Administration and Enforcement of Antidumping and Countervailing Duty Laws*, 86 FR 52300 (September 20, 2021) (*Final Rule*).

¹⁰ See *Scope Ruling Application; Annual Inquiry Service List; and Informational Sessions*, 86 FR 53205 (September 27, 2021) (*Procedural Guidance*).

the merchandise from the scope of the investigation if performed in the country of manufacture of the ferrosilicon.

Ferrosilicon is currently classifiable under subheadings 7202.21.1000, 7202.21.5000, 7202.21.7500, 7202.21.9000, 7202.29.0010, and 7202.29.0050 of the Harmonized Tariff Schedule of the United States (HTSUS). While the HTSUS numbers are provided for convenience and customs purposes, the written description of the scope remains dispositive.

[FR Doc. 2024–27283 Filed 11–20–24; 8:45 am]

BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE

International Trade Administration

[A–201–849, A–570–093, C–570–094]

Refillable Stainless-Steel Kegs From Mexico and the People's Republic of China: Final Results of Sunset Reviews and Revocation of Orders

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

SUMMARY: On September 3, 2024, the U.S. Department of Commerce (Commerce) initiated the first sunset review of the antidumping duty (AD) order on refillable stainless-steel kegs (kegs) from Mexico and the AD and countervailing duty (CVD) orders on kegs from the People's Republic of China (China). Because no domestic interested party responded to the sunset review notice of initiation by the applicable deadline, consistent with section 751(c)(3)(A) of the Tariff Act of 1930, as amended (the Act), Commerce is revoking the AD orders on kegs from China and Mexico and the CVD order on kegs from China.

DATES: Applicable November 21, 2024.

FOR FURTHER INFORMATION CONTACT: Carter Sherwin, AD/CVD Operations, Office II, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 1401 Constitution Avenue NW, Washington, DC 20230; telephone: (202) 482–4260.

SUPPLEMENTARY INFORMATION:

Background

On October 10, 2019, Commerce issued the AD order on kegs from Mexico.¹ On December 16, 2019, Commerce issued the AD and CVD orders on kegs from China.² On

September 3, 2024, Commerce initiated the current sunset reviews of the *China Orders* and *Mexico Order* (collectively, *Orders*), pursuant to section 751(c) of the Act).³

On September 24, 2024, Commerce staff spoke with counsel to the American Keg Company LLC (the petitioner) who informed Commerce that the petitioner does not intend to participate in these sunset reviews.⁴ As a result, in accordance with 19 CFR 351.218(d)(1)(iii)(B)(1), Commerce determined that no domestic interested party intends to participate in these sunset reviews. On September 25, 2024, we notified the U.S. International Trade Commission of these facts and that we intended to revoke the *Orders* within 90 days of the initiation, consistent with 19 CFR 351.218(d)(1)(iii)(B)(2).⁵

Scope of the Orders

The merchandise covered by the *Orders* are kegs, vessels, or containers with bodies that are approximately cylindrical in shape, made from stainless steel (*i.e.*, steel containing at least 10.5 percent chromium by weight and less than 1.2 percent carbon by weight, with or without other elements), and that are compatible with a “D Sankey” extractor (refillable stainless steel kegs) with a nominal liquid volume capacity of 10 liters or more, regardless of the type of finish, gauge, thickness, or grade of stainless steel, and whether or not covered by or encased in other materials. Refillable stainless-steel kegs may be imported assembled or unassembled, with or without all components (including spears, couplers or taps, necks, collars, and valves), and be filled or unfilled.

“Unassembled” or “unfinished” refillable stainless-steel kegs include drawn stainless-steel cylinders that have been welded to form the body of the keg and attached to an upper (top) chime and/or lower (bottom) chime. Unassembled refillable stainless-steel kegs may or may not be welded to a neck, may or may not have a valve assembly attached, and may be otherwise complete except for testing, certification, and/or marking.

Subject merchandise also includes refillable stainless steel kegs that have

been further processed in a third country, including but not limited to, attachment of necks, collars, spears or valves, heat treatment, pickling, passivation, painting, testing, certification or any other processing that would not otherwise remove the merchandise from the scope of the *Orders* if performed in the country of manufacture of the in-scope refillable stainless steel keg.

Specifically excluded are the following:

(1) vessels or containers that are not approximately cylindrical in nature (*e.g.*, box, “hopper” or “cone” shaped vessels);

(2) stainless steel kegs, vessels, or containers that have either a “ball lock” valve system or a “pin lock” valve system (commonly known as “Cornelius,” “corny” or “ball lock” kegs);

(3) necks, spears, couplers or taps, collars, and valves that are not imported with the subject merchandise; and

(4) stainless steel kegs that are filled with beer, wine, or other liquid and that are designated by the Commissioner of Customs as Instruments of International Traffic within the meaning of section 332(a) of the Tariff Act of 1930, as amended.

The merchandise covered by the *Orders* are currently classified in the Harmonized Tariff Schedule of the United States (HTSUS) under subheadings 7310.10.0010, 7310.10.0050, 7310.29.0025, and 7310.29.0050. These HTSUS subheadings are provided for convenience and customs purposes; the written description of the scope of this investigation is dispositive.

Revocation

Pursuant to section 751(c)(3)(A) of the Act and 19 CFR 351.218(d)(1)(iii)(B)(3), if no domestic interested party responds to a notice of initiation, Commerce shall, within 90 days after the initiation of review, revoke the order. Because the petitioner informed Commerce that it did not intend to participate in these sunset reviews, we are revoking the *Orders*.⁶

Effective Date of Revocation

Pursuant to section 751(c)(3)(A) of the Act and 19 CFR 351.222(i)(2)(i), Commerce intends to instruct U.S. Customs and Border Protection to terminate the suspension of liquidation of the merchandise subject to these *Orders* entered, or withdrawn from the warehouse, on or after October 10, 2024, the fifth anniversary of the date of the

¹ See *Refillable Stainless Steel Kegs From Mexico: Antidumping Duty Order*, 84 FR 54591 (October 10, 2019) (*Mexico Order*).

² See *Refillable Stainless-Steel Kegs from the Federal Republic of Germany and the People's Republic of China: Antidumping Duty Order*, 84 FR 68405 (December 16, 2019) (*AD China Order*); see

also *Refillable Stainless-Steel Kegs from the People's Republic of China: Countervailing Duty Order*, 84 FR 68400 (December 16, 2019) (*CVD China Order*) (collectively, *China Orders*).

³ See *Initiation of Five-Year (Sunset) Reviews*, 89 FR 71252 (September 3, 2024).

⁴ See Memorandum, “Petitioner Does Not Intend to Participate in the Reviews,” dated September 25, 2024. (Petitioner Participation Memorandum).

⁵ See Commerce's Letter, “Sunset Reviews Initiated on September 3, 2024,” dated September 25, 2024.

⁶ See Petitioner Participation Memorandum.

publication of the *Mexico Order*, and December 16, 2024, the fifth anniversary of the date of publication of the *China Orders*, respectively.⁷

Entries of subject merchandise prior to the effective date of revocation will continue to be subject to suspension of liquidation and AD and CVD deposit requirements. Commerce may conduct administrative reviews of subject merchandise entered prior to the effective date of revocation in response to appropriately filed requests for review.

Notifications to Interested Parties

We are issuing and publishing this notice in accordance with sections 751(c) and 777(i)(1) of the Act, and 19 CFR 351.218(d)(1)(iii)(B)(3) and 351.222(i)(1)(i).

Dated: November 14, 2024.

Abdelali Elouaradia,

Deputy Assistant Secretary for Enforcement and Compliance.

[FR Doc. 2024–27170 Filed 11–20–24; 8:45 am]

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DEPARTMENT OF COMMERCE

International Trade Administration

[C–570–181, C–533–933]

Hexamethylenetetramine From the People's Republic of China and India: Postponement of Preliminary Determinations in the Countervailing Duty Investigations

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

DATES: Applicable November 21, 2024.

FOR FURTHER INFORMATION CONTACT:

Megan Goins (People's Republic of China (China)) and Thomas Schauer (India), AD/CVD Operations, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 1401 Constitution Avenue NW, Washington, DC 20230; telephone: (202) 482–0884 and (202) 482–0410, respectively.

SUPPLEMENTARY INFORMATION:

Background

On October 21, 2024, the U.S. Department of Commerce (Commerce) initiated countervailing duty (CVD) investigations of U.S. imports of hexamethylenetetramine from China and India.¹ Currently, the preliminary

determinations in these investigations are due no later than December 26, 2024.

Postponement of Preliminary Determinations

Section 703(b)(1) of the Tariff Act of 1930, as amended (the Act), requires Commerce to issue the preliminary determination in a CVD investigation within 65 days after the date on which Commerce initiated the investigation. However, section 703(c)(1) of the Act permits Commerce to postpone the preliminary determination in a CVD investigation until no later than 130 days after the date on which Commerce initiated the investigation if: (A) the petitioner makes a timely request for an extension of the period within which the determination must be made; or (B) Commerce concludes that the parties concerned are cooperating, that the investigation is extraordinarily complicated, and that additional time is necessary to make the 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 November 14 and 15, 2024, Bakelite LLC, the petitioner in these investigations, timely requested that Commerce postpone the preliminary determinations in the investigations.² The petitioner requested postponement of the preliminary determinations in the investigations so that Commerce can fully analyze the forthcoming questionnaire responses of the mandatory respondents and issue supplemental questionnaires, as necessary.³

In accordance with 19 CFR 351.205(e), the petitioner submitted its request for postponement of the preliminary determinations in the investigations 25 days or more before the scheduled date of the preliminary determinations and stated the reasons for its requests. Commerce finds no compelling reason to deny the requests. Therefore, in accordance with section 703(c)(1)(A) of the Act, Commerce is

Countervailing Duty Investigations, 89 FR 87560 (November 4, 2024).

² See Petitioner's Letters, "Countervailing Duty Investigation of Hexamethylenetetramine from India: Request to Postpone Preliminary Determination," dated November 14, 2024; and "Countervailing Duty Investigation of Hexamethylenetetramine from China: Request to Postpone Preliminary Determination," dated November 15, 2024.

³ *Id.*

postponing the deadline for the preliminary determinations in the investigations to no later than 130 days after the date on which it initiated the investigations, *i.e.*, February 28, 2025.

Pursuant to section 705(a)(1) of the Act and 19 CFR 351.210(b)(1), the deadline for the final determinations in the investigations will continue to be 75 days after the date of the preliminary determinations.

Notification to Interested Parties

This notice is issued and published pursuant to section 703(c)(2) of the Act and 19 CFR 351.205(f)(1).

Dated: November 15, 2024.

Abdelali Elouaradia,

Deputy Assistant Secretary for Enforcement and Compliance.

[FR Doc. 2024–27282 Filed 11–20–24; 8:45 am]

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DEPARTMENT OF COMMERCE

National Institute of Standards and Technology

Board of Overseers of the Malcolm Baldrige National Quality Award

AGENCY: National Institute of Standards and Technology, Department of Commerce.

ACTION: Notice of open meeting.

SUMMARY: The Board of Overseers of the Malcolm Baldrige National Quality Award (Board) will meet in open session on Thursday, December 5, 2024. The purpose of this meeting is to review and discuss the work of the Baldrige Performance Excellence Program to implement improvements to the Malcolm Baldrige National Quality Award (Award), and to provide recommendations to the Director of the National Institute of Standards and Technology (NIST) as the Board deems necessary. Details on the agenda are noted in the **SUPPLEMENTARY INFORMATION** section of this notice.

DATES: The meeting will be held on Thursday, December 5, 2024, from 10:00 a.m. Eastern time until 4:00 p.m. Eastern time. The meeting will be open to the public.

ADDRESSES: The meeting will be held virtually via webinar. Please note admittance instructions under the **SUPPLEMENTARY INFORMATION** section of this notice.

FOR FURTHER INFORMATION CONTACT:

Robert Fangmeyer, Director, Baldrige Performance Excellence Program, National Institute of Standards and Technology, 100 Bureau Drive, Mail Stop 1020, Gaithersburg, Maryland

⁷ See *Mexico Order*, 84 FR 54591; *AD China Order*, 84 FR 68405; and *CVD China Order*, 84 FR 68400.

¹ See *Hexamethylenetetramine from the People's Republic of China and India: Initiation of*

20899–1020, telephone number (301) 975–2361, or by email at robert.fangmeyer@nist.gov.

SUPPLEMENTARY INFORMATION:

Authority: 15 U.S.C. 3711a(d)(2)(B) and the Federal Advisory Committee Act, as amended, 5 U.S.C. 1001 *et seq.*

Pursuant to the Federal Advisory Committee Act, as amended (FACA), 5 U.S.C. 1001 *et seq.*, notice is hereby given that the Board will meet in open session on Thursday, December 5, 2024, from 10:00 a.m. Eastern time until 4:00 p.m. Eastern time. The Board is currently composed of twelve members selected for their preeminence in the field of organizational performance excellence and appointed by the Secretary of Commerce. The Board consists of a balanced representation from U.S. service, manufacturing, nonprofit, education, and healthcare industries. The Board includes members familiar with the quality, performance improvement operations, and competitiveness issues of manufacturing companies, service companies, small businesses, nonprofits, healthcare providers, and educational institutions. The purpose of this meeting is to review and discuss the work of the Baldrige Performance Excellence Program (Program) to implement improvements to the Malcolm Baldrige National Quality Award (Award), and to provide recommendations to the Director of the National Institute of Standards and Technology (NIST) as the Board deems necessary. The agenda will include: Report on Program Accomplishments for 2024, Update on Baldrige Reimagined Implementation, Baldrige Foundation Update, Alliance for Performance Excellence Update, Communities of Excellence Update, and Recommendations for the NIST Director. The agenda may change to accommodate Board business. The final agenda will be posted on the NIST Baldrige Performance Excellence website at <http://www.nist.gov/baldrige/community/overseers.cfm>. The meeting will be open to the public.

Individuals and representatives of organizations who would like to offer comments and suggestions related to the Board's affairs are invited to request a place on the agenda. On December 5, 2024, approximately one-half hour will be reserved in the afternoon for public comments and speaking times will be assigned on a first-come, first-served basis. The amount of time per speaker will be determined by the number of requests received but is likely to be about 3 minutes each. The exact time for public comments will be included in the final agenda that will be posted on

the Baldrige Program website at <http://www.nist.gov/baldrige/community/overseers.cfm>. Questions from the public will not be considered during this period. Requests must be submitted by email to Robyn Decker at Robyn.Decker@nist.gov and must be received by noon Eastern Time, December 2, 2024, to be considered. Speakers who wish to expand upon their oral statements, those who had wished to speak, but could not be accommodated on the agenda, and those who were unable to attend are invited to submit written statements to the Baldrige Performance Excellence Program, NIST, 100 Bureau Drive, Mail Stop 1020, Gaithersburg, Maryland 20899–1020, via fax at 301–975–4967 or electronically by email to Robyn.Decker@nist.gov.

All participants will be attending virtually via webinar and need to pre-register to be admitted. Please contact Mrs. Robyn Decker by email at Robyn.Decker@nist.gov; Mailing Address: NIST c/o Robyn Decker, 100 Bureau Drive, MS 1020, Gaithersburg, MD 20899; or 301–975–2361, please provide her with your name, email, and phone number; and she will provide you with instructions for admittance. All requests must be received by noon Eastern Time, December 2, 2024.

Alicia Chambers,

NIST Executive Secretariat.

[FR Doc. 2024–27336 Filed 11–20–24; 8:45 am]

BILLING CODE 3510–13–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[RTID 0648–XE456]

Endangered and Threatened Species; Initiation of 5-Year Review for the Sawback Angelshark (*Squatina aculeata*)

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice; request for information.

SUMMARY: NMFS announces its intent to conduct a 5-year review of the endangered sawback angelshark (*Squatina aculeata*). NMFS is required by the Endangered Species Act (ESA) to conduct 5-year reviews to ensure that listing classifications of species are accurate. The 5-year review must be based on the best scientific and commercial data available at the time of the review. We request submission of

any such information on the sawback angelshark, particularly information on its status, threats, and conservation efforts, that has become available since the status review of three species of angelsharks (sawback angelshark, *Squatina aculeata*; smoothback angelshark, *Squatina oculata*; and common angelshark, *Squatina squatina*) was issued in June 2016 and the species was listed in August 2016.

DATES: To allow us adequate time to conduct this review, we must receive your information no later than January 21, 2025. However, we will continue to accept new information about any listed species at any time.

ADDRESSES: Submit your information, identified by docket number NOAA–NMFS–2024–0133, by the following method:

- **Electronic Submissions:** Submit all electronic comments via the Federal eRulemaking Portal. Go to <https://www.regulations.gov> and enter NOAA–NMFS–2024–0133 in the Search box. Click on the “Comment” icon, complete the required fields, and enter or attach your comments.

Instructions: NMFS may not consider comments or other information if sent by any other method, to any other address or individual, or received after the comment period ends. All comments and information received are a part of the public record and NMFS will post the comments for public viewing on <https://www.regulations.gov> without change. All personal identifying information (*e.g.*, name, address, *etc.*) submitted voluntarily by the sender will be publicly accessible. Do not submit confidential business information, or otherwise sensitive or protected information. NMFS will accept anonymous comments (enter “N/A” in the required fields if you wish to remain anonymous).

FOR FURTHER INFORMATION CONTACT: Howard Goldstein, Office of Protected Resources, (301) 648–1012, howard.goldstein@noaa.gov.

SUPPLEMENTARY INFORMATION: This notice announces our active review of the sawback angelshark, which is currently listed as endangered (81 FR 50394; August 1, 2016). Section 4(c)(2) of the ESA requires that the Secretary, through NMFS, conduct a review of listed species at least once every 5 years. The species was last reviewed in June 2016 and listed as endangered in August 2016 (81 FR 50394; August 1, 2016). The regulations in 50 CFR 424.21 require that we publish a notice in the **Federal Register** announcing species currently under active review. Based on such reviews, we determine whether a listed

species should be removed from the list (*i.e.*, delisted), or be changed in status from endangered to threatened or from threatened to endangered (16 U.S.C. 1533(c)(2)(B)). As described by the regulations in 50 CFR 424.11(e), the Secretary will delist a species if the Secretary determines, based on consideration of the factors and standards set forth in 50 CFR 424.11(c), that the best scientific and commercial data available substantiate that that: (1) the species is extinct; (2) the species has recovered to the point at which it no longer meets the definition of an endangered species or a threatened species; or (3) new information that has become available since the original listing decision shows that the listed entity does not meet the definition of an endangered species or a threatened species; or (4) new information that has become available since the original listing decision shows the listed entity does not meet the definition of a species. Any change in Federal status would require a separate rulemaking process.

Background information on the sawback angelshark is available on the NMFS website at: <https://www.fisheries.noaa.gov/species/sawback-angelshark>.

Public Solicitation of New Relevant Information

To ensure that the 5-year review is complete and based on the best scientific and commercial data available, we are soliciting new information from the public, governmental agencies, Tribes, the scientific community, industry, environmental entities, and any other interested parties concerning the status of the sawback angelshark. Categories of requested information include: (1) species biology including, but not limited to, population trends, distribution, abundance, demographics, and genetics; (2) habitat conditions including, but not limited to, amount, distribution, suitability, and important features for conservation; (3) degree, nature, and trends of threats to the species and its habitats; (4) conservation measures that have been implemented that benefit the species, including monitoring data demonstrating effectiveness of such measures; and (5) other new information or data, including, but not limited to, taxonomic or nomenclatural changes and improved analytical methods for evaluating extinction risk.

If you wish to provide information for the review, you may submit your information and materials electronically (see **ADDRESSES** section). We request that all information be accompanied by

supporting documentation such as maps, bibliographic references, or reprints of pertinent publications.

Authority: 16 U.S.C. 1531 *et seq.*

Dated: November 15, 2024.

Lisa Manning,

Acting Chief, Endangered Species Conservation Division, Office of Protected Resources, National Marine Fisheries Service.

[FR Doc. 2024–27231 Filed 11–20–24; 8:45 am]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE

National Telecommunications and Information Administration

Open RAN Certification Principles Listening Session

AGENCY: National Telecommunications and Information Administration, U.S. Department of Commerce.

ACTION: Notice of open meeting.

SUMMARY: The National Telecommunications and Information Administration (NTIA), on behalf of the Global Coalition on Telecommunications (GCOT), will convene a virtual industry listening session on Open RAN Certification Principles. The listening session is designed to collect stakeholder input to help inform the development of GCOT Open RAN Certification Principles.

DATES: The listening session will be held at the following time:

- December 3, 2024, from 9 a.m. EST to 11 a.m. EST.

ADDRESSES: The session will be held virtually, with online slide share and dial-in information to be posted at <https://www.ntia.gov/>.

FOR FURTHER INFORMATION CONTACT:

Please direct questions regarding this Notice to kdimsdale@ntia.gov, indicating “GCOT Certification Principles Listening Session” in the subject line, or if by mail, addressed to National Telecommunications and Information Administration, U.S. Department of Commerce, 1401 Constitution Avenue NW, Washington, DC 20230; telephone: 202–482–1866. Please direct media inquiries to NTIA’s Office of Public Affairs, press@ntia.gov or (202) 482–7002.

SUPPLEMENTARY INFORMATION:

Background

In October 2023, the Department for Science, Innovation and Technology (United Kingdom); the Department of Infrastructure, Transport, Regional Development, Communications and the Arts (Australia); the Department of Innovation, Science and Economic

Development (Canada); the Ministry of Internal Affairs and Communications (Japan); and NTIA (USA) announced their commitment to establish the Global Coalition on

Telecommunications (GCOT). GCOT is the most comprehensive grouping of likeminded partners on a range of telecommunications-related topics, including telecommunications supplier diversity. GCOT will complement the work of other domestic and international groupings.

*GCOT aims to:*¹

- Increase cooperation and coordination between the GCOT partners on telecommunications, including by improving information sharing with a view to ensuring complementary national approaches;
- Build broader international consensus on key areas of telecommunications policy in support of our shared objectives;
- Enable dialogue between policymakers, industry, and academia; and
- Promote innovation and growth opportunities for industry

In order to enact these goals, GCOT intends to explore engagements that will enhance information sharing, support joint research and development, ensure alignment of funding priorities, support vision setting and standards development, and enhance coordination on international outreach and collaboration. GCOT’s immediate areas of focus are on telecommunications supply chain diversification and 6G and future telecommunications.

GCOT Certification Principles: On behalf of all GCOT partners, NTIA, in collaboration with the U.S. Department of State’s Bureau of Cyberspace and Digital Policy (CDP), Innovation, Science, and Economic Development Canada (ISED), and the United Kingdom’s Department for Science, Innovation, and Technology (DSIT) is in the process of developing certification principles on Open RAN. These principles are intended to serve as a voluntary framework of recommendations for the telecommunications industry to develop a robust certification program to advance the maturity of the Open RAN market and ensure that certified Open RAN products are open, interoperable, and resilient. The discussions held at this session will be analyzed to help

¹ Global Coalition on Telecommunications Joint Statement of Intent between UK, Australia, Canada, Japan, and US: <https://www.gov.uk/government/publications/global-coalition-on-telecommunications-joint-statement-of-intent-between-uk-australia-canada-japan-and-us>.

inform development of GCOT Certification Principles.

The discussion will focus on the key areas of the GCOT Certification Principles paper which include certification governance and integrity, cost-effective implementation, and facilitating adoption, as described below:

Certification Governance and Integrity

- Suggests roles and responsibilities for all Open RAN ecosystem stakeholders;
- Identifies different sources (from bodies like 3GPP and the O-RAN Alliance);
- Addresses the various types of testing including conformance, interoperability, performance, and security;
- Enumerates the development, governance, and oversight expected from a certification regime; and
- Provides a general overview of transparency, accreditation, and continuous improvement.

Cost-Effective Implementation

- Discusses accessibility for all small and medium-sized enterprises to meet certification standards;
- Highlights the importance of integrating automation and leveraging existing resources; and
- Proposes a possible certification structure and scope and a path for recertification.

Facilitating Adoption

- Outlines the necessary support for MNOs and other Open RAN ecosystem stakeholders for the success of any

certification in procurement processes; and

- Describes how industry and government can generally support the process.

Authority: NTIA's role in development of the GCOT certification principles is under authority of the *National Telecommunications and Information Administration Organization Act* (47 U.S.C. 902 *et seq.*).²

Time and Date: NTIA will convene one public listening session on December 3, 2024, from 9 a.m. to 11:00 a.m. Eastern Standard Time. The exact time of the meeting is subject to change. Please refer to NTIA's website, <https://www.ntia.gov>, for the most current information.

Place: The meeting will be held virtually, with online slide share and dial-in information to be posted at <https://www.ntia.gov>. Please refer to NTIA's website, <https://www.ntia.gov>, for the most current information.

Other Information: The meeting is open to the public and the press on a first-come, first-served basis and will be held in English. The virtual meeting is accessible to people with disabilities. Individuals requiring accommodations such as real-time captioning, sign language interpretation or other ancillary aids should notify NTIA at kdimsdale@ntia.gov at least seven (7) business days prior to the meeting. Access details for the meeting are subject to change. Please refer to NTIA's website, <https://www.ntia.gov>, for the most current information.

² Specific authority can be found in 47 U.S.C. 902(b)(2)(G)(i).

Dated: November 14, 2024.

Stephanie Weiner,

Chief Counsel, National Telecommunications and Information Administration.

[FR Doc. 2024-27146 Filed 11-20-24; 8:45 am]

BILLING CODE 3510-60-P

DEPARTMENT OF DEFENSE

Office of the Secretary

[Transmittal No. 23-84]

Arms Sales Notification

AGENCY: Defense Security Cooperation Agency, Department of Defense (DoD).

ACTION: Arms sales notice.

SUMMARY: The DoD is publishing the unclassified text of an arms sales notification.

FOR FURTHER INFORMATION CONTACT:

Pamela Young at (703) 953-6092, pamela.a.young14.civ@mail.mil, or dsca.ncr.rsrcmgmt.list.cns-mbx@mail.mil.

SUPPLEMENTARY INFORMATION: This 36(b)(1) arms sales notification is published to fulfill the requirements of section 155 of Public Law 104-164 dated July 21, 1996. The following is a copy of a letter to the Speaker of the House of Representatives with attached Transmittal 23-84 and Policy Justification.

Dated: November 18, 2024.

Stephanie J. Bost,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

BILLING CODE 6001-FR-P



DEFENSE SECURITY COOPERATION AGENCY
 2800 Defense Pentagon
 Washington, DC 20301-2800

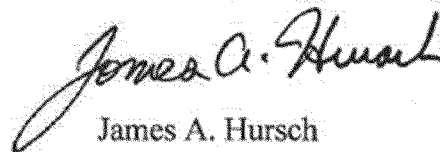
December 1, 2023

The Honorable Mike Johnson
 Speaker of the House
 U.S. House of Representatives
 H-209, The Capitol
 Washington, DC 20515

Dear Mr. Speaker:

Pursuant to the reporting requirements of Section 36(b)(1) of the Arms Export Control Act, as amended, we are forwarding herewith Transmittal No. 23-84, concerning the Navy's proposed Letter(s) of Offer and Acceptance to the Government of Australia for defense articles and services estimated to cost \$2.0 billion. We will issue a news release to notify the public of this proposed sale upon delivery of this letter to your office.

Sincerely,


 James A. Hursch
 Director

Enclosures:

1. Transmittal
2. Policy Justification

BILLING CODE 6001-FR-C

Transmittal No. 23-84

Notice of Proposed Issuance of Letter of Offer Pursuant to Section 36(b)(1) of the Arms Export Control Act, as amended

(i) *Prospective Purchaser:* Government of Australia

(ii) *Total Estimated Value:*

Major Defense Equipment *	\$0
Other	\$2.0 billion
TOTAL	\$2.0 billion

(iii) *Description and Quantity or Quantities of Articles or Services under Consideration for Purchase:* The Government of Australia has requested to buy articles and services in support of the Trilateral AUKUS Pillar I program.

Major Defense Equipment (MDE):

None

Non-MDE:

Included are training devices, personnel training, planning, and Non-Recurring Engineering (NRE) services; support equipment;

special tools; training software and courseware; design; supply chain and industrial base support; facilities and construction support; publications and technical documentation; personnel training and training equipment; (United States (U.S.) Government and contractor engineering, technical, and logistics support services; test and trials support; studies and surveys; other related elements of engineering and repair services for associated equipment and program

support; and other related elements of logistic and program support. U.S. training of private Australian industry personnel will occur only after explicitly authorized by the U.S. Department of State under U.S. law.

(iv) *Military Department: Navy* (AT–P–BTQ)

(v) *Prior Related Cases, if any: AT–P–FBG*

(vi) *Sales Commission, Fee, etc., Paid, Offered, or Agreed to be Paid: None known*

(vii) *Sensitivity of Technology Contained in the Defense Article or Defense Services Proposed to be Sold: None*

(viii) *Date Report Delivered to Congress: December 1, 2023*

* As defined in Section 47(6) of the Arms Export Control Act.

POLICY JUSTIFICATION

Australia—AUKUS Training and Training Devices

The Government of Australia has requested to buy articles and services in support of the Trilateral AUKUS Pillar I program. Included are training devices, personnel training, planning, and Non-Recurring Engineering (NRE) services; support equipment; special tools; training software/and courseware; design; supply chain and industrial base support; facilities and construction support; publications and technical documentation; personnel training and training equipment; U.S. Government and contractor engineering, technical, and logistics support services; test and trials support; studies and surveys; other related elements of engineering, and repair services for associated equipment and program support; and other related elements of logistic and

program support. U.S. training of private Australian industry personnel will occur only after explicitly authorized by the U.S. Department of State under U.S. law. The estimated total program cost is \$2.0 billion.

This proposed sale will support the foreign policy and national security objectives of the U.S. Australia is one of our most important allies in the Western Pacific. The strategic location of this political and economic power contributes significantly to ensuring peace and economic stability in the region. It is vital to the U.S. national interest to assist our ally in developing and maintaining a strong and ready self-defense capability.

The proposed sale will improve Australia's capability to meet current and future threats by providing an effective combatant deterrent capability to protect maritime interests and infrastructure in support of its strategic mission. The acquisition will lay the groundwork for the Australia/United Kingdom/U.S. (AUKUS) trilateral agreement. Australia will have no difficulty absorbing this equipment and services into its armed forces.

The proposed sale of this equipment and support will not alter the basic military balance in the region.

The principal contractors will be Huntington Ingalls Industries, Newport News, VA; General Dynamics Electric Boat, Groton, CT; and Systems Planning Analysis, Alexandria, VA. There are no known offset agreements in connection with this potential sale.

Implementation of this proposed sale requires the assignment of approximately seventy (70) additional U.S. Government and contractor representatives to Australia for a duration of approximately three (3)

years to support in-person training, equipment familiarization, and on-site engineering and maintenance of simulation and training devices.

There will be no adverse impact on U.S. defense readiness as a result of this proposed sale.

[FR Doc. 2024–27297 Filed 11–20–24; 8:45 am]

BILLING CODE 6001–FR–P

DEPARTMENT OF DEFENSE

Office of the Secretary

[Transmittal No. 23–81]

Arms Sales Notification

AGENCY: Defense Security Cooperation Agency, Department of Defense (DoD).

ACTION: Arms sales notice.

SUMMARY: The DoD is publishing the unclassified text of an arms sales notification.

FOR FURTHER INFORMATION CONTACT:

Pamela Young at (703) 953–6092, pamela.a.young14.civ@mail.mil, or dsca.ncr.rsrcmgmt.list.cns-mbx@mail.mil.

SUPPLEMENTARY INFORMATION: This 36(b)(1) arms sales notification is published to fulfill the requirements of section 155 of Public Law 104–164 dated July 21, 1996. The following is a copy of a letter to the Speaker of the House of Representatives with attached Transmittal 23–81, Policy Justification, and Sensitivity of Technology.

Dated: November 18, 2024.

Stephanie J. Bost,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

BILLING CODE 6001–FR–P



DEFENSE SECURITY COOPERATION AGENCY
 2800 Defense Pentagon
 Washington, DC 20301-2800

December 1, 2023

The Honorable Mike Johnson
 Speaker of the House
 U.S. House of Representatives
 H-209, The Capitol
 Washington, DC 20515

Dear Mr. Speaker:

Pursuant to the reporting requirements of Section 36(b)(1) of the Arms Export Control Act, as amended, we are forwarding herewith Transmittal No. 23-81, concerning the Air Force's proposed Letter(s) of Offer and Acceptance to the Government of the Republic of Korea for defense articles and services estimated to cost \$271 million. We will issue a news release to notify the public of this proposed sale upon delivery of this letter to your office.

Sincerely,

James A. Hursch
 Director

Enclosures:

1. Transmittal
2. Policy Justification
3. Sensitivity of Technology

BILLING CODE 6001-FR-C

Transmittal No. 23-81

Notice of Proposed Issuance of Letter of Offer Pursuant to Section 36(b)(1) of the Arms Export Control Act, as amended

(i) *Prospective Purchaser:* Government of the Republic of Korea

(ii) *Total Estimated Value:*

Major Defense Equipment * ..	\$209 million
Other	\$ 62 million
Total	\$271 million

(iii) *Description and Quantity or Quantities of Articles or Services under Consideration for Purchase:*

Major Defense Equipment (MDE):

Thirty-nine (39) AIM-120C-8
 Advanced Medium Range Air-to-Air Missiles (AMRAAM)

Two (2) AIM-120C-8 AMRAAM
 Guidance Sections

Eighty-eight (88) KMU-556 Tail Kits
 for the GBU-31v1 Joint Direct-Attack Munition (JDAM)

Eighty-six (86) Mk-84 General

Purpose (GP) 2000-lb Bombs for the GBU-31v1 JDAM

Seventy (70) KMU-557 Tail Kits for the GBU-31v3 JDAM

Seventy (70) BLU-109C/B 2000-lb Bombs for the GBU-31v3 JDAM

Seventy-eight (78) KMU-572 Tail Kits for the GBU-54 Laser JDAM (LJDAM)

Two hundred sixty-nine (269) MAU-169 Computer Control Groups/ Guidance Sections for the GBU-12 Paveway II

Two hundred sixty-nine (269) MXU–650 Air Foil Groups for the GBU–12 Paveway II
 Three hundred forty-two (342) Mk–82 500-lb GP Bombs for the GBU–12 Paveway II or GBU–54 LJDAM
 Twelve (12) Mk–82 Inert Bombs
 Thirty-five (35) GBU–39 Small Diameter Bomb-Increment 1 (SDB–I) All-Up-Rounds (AUR) with Containers
 One hundred eighteen (118) GBU–53 Small Diameter Bomb-Increment 2 (SDB–II) AURs

Non-MDE:

Also included are AIM–120 control section spares and containers; DSU–38 Laser Illuminated Target Detectors; SDB–I Tactical Training Rounds and carriage systems; SDB–II Practical Explosive Ordnance Disposal Trainers (PEST) and Weapon Load Crew Trainer (WLCT) units; FMU–139 fuzes; Common Munitions Built-in-Test (BIT)/Reprogramming Equipment (CMBRE); ADU–891 adapter group computer test sets; Mk–84 practice bombs and other training bombs/components; munitions support and support equipment including propellant and explosive charges; classified software delivery and support; spare parts, consumables, and accessories, and repair and return support; major modifications, maintenance, and maintenance support; transportation and airlift support; classified/unclassified publications and technical documentation; personnel training and training equipment; contractor logistics support (CLS); studies and surveys; United States (U.S.) Government and contractor engineering, technical and logistics support services; and other related elements of logistical and program support.

(iv) *Military Department:* Air Force (KS–D–YBB)

(v) *Prior Related Cases, if any:* KS–D–YAJ

(vi) *Sales Commission, Fee, etc., Paid, Offered, or Agreed to be Paid:* None known at this time

(vii) *Sensitivity of Technology Contained in the Defense Article or Defense Services Proposed to be Sold:* See Attached Annex

(viii) *Date Report Delivered to Congress:* December 1, 2023

* As defined in Section 47(6) of the Arms Export Control Act.

POLICY JUSTIFICATION

Republic of Korea (ROK)—F–35 Munitions

The Government of the Republic of Korea has requested to buy thirty-nine (39) AIM–120C–8 Advanced Medium Range Air-to-Air Missiles (AMRAAM); two (2) AIM–120C–8 AMRAAM Guidance Sections; eighty-eight (88) KMU–556 Tail Kits for the GBU–31v1 Joint Direct-Attack Munition (JDAM); eighty-six (86) Mk–84 General Purpose (GP) 2000-lb bombs for the GBU–31v1 JDAM; seventy (70) KMU–557 Tail Kits for the GBU–31v3 JDAM; seventy (70) BLU–109C/B 2000-lb bombs for the GBU–31v3 JDAM; seventy-eight (78) KMU–572 Tail Kits for the GBU–54 Laser JDAM (LJDAM); two hundred sixty-nine (269) MAU–169 Computer Control Groups/Guidance Sections for the GBU–12 Paveway II; two hundred sixty-nine (269) MXU–650 Air Foil Groups for the GBU–12 Paveway II; three hundred forty-two (342) Mk–82 500-lb GP bombs for the GBU–12 Paveway II or GBU–54 LJDAM; twelve (12) Mk–82 inert bombs; thirty-five (35) GBU–39 Small Diameter Bomb-Increment 1 (SDB–I) All-Up-Rounds (AUR) with containers; and one hundred eighteen (118) GBU–53 Small Diameter Bomb-Increment 2 (SDB–II) AURs. Also included are AIM–120 control section spares and containers; DSU–38 Laser Illuminated Target Detectors; SDB–I Tactical Training Rounds and carriage systems; SDB–II Practical Explosive Ordnance Disposal Trainers (PEST) and Weapon Load Crew Trainer (WLCT) units; FMU–139 fuzes; Common Munitions Built-in-Test (BIT)/Reprogramming Equipment (CMBRE); ADU–891 adapter group computer test sets; Mk–84 practice bombs and other training bombs/components; munitions support and support equipment including propellant and explosive charges; classified software delivery and support; spare parts, consumables, and accessories, and repair and return support; major modifications, maintenance, and maintenance support; transportation and airlift support; classified/unclassified publications and technical documentation; personnel training and training equipment; contractor logistics support (CLS); studies and surveys; U.S. Government and contractor engineering, technical and logistics support services; and other related elements of logistical and program support. The estimated total cost is \$271 million.

This proposed sale will support the foreign policy goals and national security objectives of the U.S. by improving the security of a major ally

that is a force for political stability and economic progress in the Indo-Pacific region.

The proposed sale will improve the Republic of Korea's capability to meet current and future threats by providing its fighter fleet with a range of air-to-air and air-to-ground munitions to deter aggression in the region and ensure interoperability with U.S. forces. Korea will have no difficulty absorbing these articles and services into its armed forces.

The proposed sale of this equipment and support will not alter the basic military balance in the region.

The principal contractors will be Lockheed Martin Corporation, Ocala, FL; Raytheon Missiles and Defense, Tucson, AZ; and the Boeing Company, Huntsville, AL. The purchaser typically requests offsets. Any offset agreement will be defined in negotiations between the purchaser and the contractor.

Implementation of this proposed sale will not require the assignment of any additional U.S. Government or contractor representatives to the Republic of Korea.

There will be no adverse impact on U.S. defense readiness as a result of this proposed sale.

Transmittal No. 23–81

Notice of Proposed Issuance of Letter of Offer Pursuant to Section 36(b)(1) of the Arms Export Control Act

Annex

Item No. vii

(vii) *Sensitivity of Technology:*

1. The AIM–120C–8 Advanced Medium Range Air-to-Air Missile (AMRAAM) is a supersonic, air-launched, aerial intercept, guided missile featuring digital technology and micro-miniature, solid-state electronics. AMRAAM capabilities include look-down/shoot-down, multiple launches against multiple targets, resistance to electronic countermeasures, and interception of high- and low-flying and maneuvering targets. This potential sale will include AMRAAM guidance and control section spares and containers.

2. Joint Direct-Attack Munitions (JDAM) consist of a bomb body paired with a warhead-specific tail kit containing an Inertial Navigation System (INS)/Global Positioning System (GPS) guidance capability that converts unguided free-fall bombs into accurate, adverse weather “smart” munitions. The JDAM weapon can be delivered from modest standoff ranges at high or low altitudes against a variety of land and surface targets during the day or night. The JDAM can receive target coordinates via preplanned mission data

from the delivery aircraft, by onboard aircraft sensors (*i.e.*, FLIR, Radar, etc.) during captive carry, or from a third-party source via manual or automated aircrew cockpit entry.

a. The GBU-31v1 is a 2,000-pound JDAM, consisting of a KMU-556 tail kit and BLU-117 or Mk-84 bomb body.

b. The GBU-31v3 is a 2,000-pound JDAM, consisting of a KMU-557 tail kit and BLU-109 bomb body.

c. The GBU-54 Laser Joint Direct Attack Munition (LJDAM) is a 500-pound JDAM which incorporates all the capabilities of the JDAM guidance tail kit and adds a precision laser guidance set. The LJDAM gives the weapon system an optional semi-active laser guidance in addition to the INS/GPS guidance. This provides the optional capability to strike moving targets. The GBU-54 consists of a DSU-38 laser guidance set and bomb body with appropriate KMU-5XX tail kit.

3. The Paveway II (PWII) is a maneuverable, free-fall Laser Guided Bomb (LGB) that guides to laser energy reflected off the target. The LGB is delivered like a normal general purpose (GP) warhead, but the semi-active laser guidance corrects many of the normal errors inherent in any delivery system. Laser designation for the LGB can be provided by a variety of laser target markers or designators. The PWII consists of a non-warhead-specific MAU-209 or MAU-169 Computer Control Group (CCG) and a warhead-specific Air Foil Group (AFG) that attaches to the nose and tail of the GP bomb body.

a. The GBU-12 is a 500-pound GP bomb body fitted with the MAU-169 Computer Control Group and MXU-650 Air Foil Group to guide to its laser designated target.

b. The inert GBU-12 uses a BDU-50 inert bomb body, MAU-169 Computer Control Group and MXU-650 Air Foil Group for training and integration purposes.

4. The GBU-39 Small Diameter Bomb Increment 1 (SDB-I) All-Up-Round (AUR) is a 250-pound GPS-aided inertial navigation system, small autonomous, day or night, adverse weather, conventional, air-to-ground precision glide weapon able to strike fixed and stationary re-locatable non-hardened targets from standoff ranges. It is intended to provide aircraft with an ability to carry a high number of bombs. Aircraft are able to carry four SDBs in place of one 2,000-pound bomb.

(a) The GBU-39/B, Tactical Training Round (TTR), Small Diameter Bomb (Inert Fuze) is functionally identical to

a live tactical weapon except that the live warhead is replaced with an inert fill.

5. The GBU-53 Small Diameter Bomb-Increment II (SDB-II) All-Up-Round (AUR) is a 250-pound class precision-guided, semiautonomous, conventional, air-to-ground munition used to defeat targets through adverse weather. The SDB-II has deployable wings and fins and uses Global Positioning System/Inertial Navigation System (GPS/INS) guidance, network-enabled datalink (Link-16 and UHF), and a multi-mode seeker (millimeter wave radar, imaging infrared, semi-active laser) to autonomously search, acquire, track, and defeat a variety of moving or stationary targets, at standoff range in a variety of attack modes. The SDB-II employs a multi-effects warhead (blast, fragmentation, and shaped-charge) for maximum lethality against armored and soft targets. The SDB-II weapon system consists of the tactical AUR weapon, a 4-place common carriage system, and mission planning system munitions application program (MAP).

a. The SDB-II Practical Explosive Ordnance Disposal Trainer (PEST) is an Explosive Ordnance Disposal (EOD) training unit with sections and internal subassemblies which are identical to, or correlate to, the external hardware, sections, and internal subassemblies of the tactical AUR. The PEST does not contain energetics, a live fuze, any sensitive components, or hazardous material. It is not flight certified.

b. The SDB-II Weapon Load Crew Trainer (WLCT) is a mass mockup of the tactical AUR used for load crew and maintenance training. It does not contain energetics, a live fuze, any sensitive components, or hazardous material. It is not flight certified.

6. The FMU-139 Joint Programmable Fuze (JPF) is a multi-delay, multi-arm and proximity sensor compatible with general purpose blast, frag and hardened-target penetrator weapons. The JPF settings are cockpit selectable in flight when used with numerous precision-guided weapons.

7. Common Munitions Built-In-Test (BIT)/Reprogramming Equipment (CMBRE) is support equipment used to interface with weapon systems to initiate and report BIT results, and upload/download flight software. CMBRE supports multiple munitions platforms with a range of applications that perform preflight checks, periodic maintenance checks, loading of Operational Flight Program (OFP) data, loading of munitions mission planning data, loading of Global Positioning

System (GPS) cryptographic keys, and declassification of munitions memory.

8. The ADU-891 Adapter Group Test Set provides the physical and electrical interface between the Common Munitions Built-in-Test Reprogramming Equipment (CMBRE) and the missile.

9. The highest level of classification of defense articles, components, and services included in this potential sale is SECRET.

10. If a technologically advanced adversary were to obtain knowledge of the specific hardware and software elements, the information could be used to develop countermeasures that might reduce weapon system effectiveness or be used in the development of a system with similar or advanced capabilities.

11. A determination has been made that the Republic of Korea can provide substantially the same degree of protection for the sensitive technology being released as the U.S. Government. This sale is necessary in furtherance of the U.S. foreign policy and national security objectives outlined in the Policy Justification.

12. All defense articles and services listed in this transmittal have been authorized for release and export to the Republic of Korea.

[FR Doc. 2024-27298 Filed 11-20-24; 8:45 am]

BILLING CODE 6001-FR-P

DEPARTMENT OF DEFENSE

Office of the Secretary

[Transmittal No. 23-76]

Arms Sales Notification

AGENCY: Defense Security Cooperation Agency, Department of Defense (DoD).

ACTION: Arms sales notice.

SUMMARY: The DoD is publishing the unclassified text of an arms sales notification.

FOR FURTHER INFORMATION CONTACT: Pamela Young at (703) 953-6092, pamela.a.young14.civ@mail.mil, or dsca.ncr.rsrcmgmt.list.cns-mbx@mail.mil

SUPPLEMENTARY INFORMATION: This 36(b)(1) arms sales notification is published to fulfill the requirements of section 155 of Public Law 104-164 dated July 21, 1996. The following is a copy of a letter to the Speaker of the House of Representatives with attached Transmittal 23-76, Policy Justification, and Sensitivity of Technology.

Dated: November 18, 2024.

Stephanie J. Bost,

Alternate OSD Federal Register Liaison
Officer, Department of Defense.

BILLING CODE 6001-FR-P



DEFENSE SECURITY COOPERATION AGENCY
2800 Defense Pentagon
Washington, DC 20301-2800

November 15, 2023

The Honorable Mike Johnson
Speaker of the House
U.S. House of Representatives
H-209, The Capitol
Washington, DC 20515

Dear Mr. Speaker:

Pursuant to the reporting requirements of Section 36(b)(1) of the Arms Export Control Act, as amended, we are forwarding herewith Transmittal No. 23-76, concerning the Navy's proposed Letter(s) of Offer and Acceptance to the Republic of Korea for defense articles and services estimated to cost \$52.1 million. We will issue a news release to notify the public of this proposed sale upon delivery of this letter to your office.

Sincerely,

James A. Hursch
Director

Enclosures:

1. Transmittal
2. Policy Justification
3. Sensitivity of Technology

BILLING CODE 6001-FR-C

Transmittal No. 23-76

Notice of Proposed Issuance of Letter of Offer Pursuant to Section 36(b)(1) of the Arms Export Control Act, as amended

(i) Prospective Purchaser: Republic of Korea (ROK)

(ii) Total Estimated Value:

Major Defense Equipment * \$40.1 million

Other \$12.0 million

TOTAL \$52.1 million

(iii) Description and Quantity or
Quantities of Articles or Services under
Consideration for Purchase:

Major Defense Equipment (MDE):

Forty-two (42) AIM-9X Sidewinder
Block II+ Tactical Missiles

Ten (10) AIM-9X Sidewinder Captive
Air Training Missiles (CATM)

Five (5) AIM-9X Block II+
Sidewinder Tactical Guidance
Units (GU)

Three (3) AIM-9X Sidewinder CATM
Guidance Units (GU)

Non-MDE:

Also included are missile containers;
spare and repair parts; support and

test equipment; publications and technical documentation; personnel training and training equipment; United States (U.S.) Government and contractor representatives' technical assistance, engineering, and logistics support services; and other related elements of logistics and program support.

(iv) *Military Department: Navy (KS-P-ANR)*

(v) *Prior Related Cases, if any: KS-P-ALE*

(vi) *Sales Commission, Fee, etc., Paid, Offered, or Agreed to be Paid: None known*

(vii) *Sensitivity of Technology Contained in the Defense Article or Defense Services Proposed to be Sold: See Attached Annex*

(viii) *Date Report Delivered to Congress: November 15, 2023*

* As defined in Section 47(6) of the Arms Export Control Act.

POLICY JUSTIFICATION

Republic of Korea (ROK)—AIM-9X Block II and Block II+ (Plus) Sidewinder Missiles

The Government of the Republic of Korea has requested to buy forty-two (42) AIM-9X Sidewinder Block II+ Tactical Missiles; ten (10) AIM-9X Sidewinder Captive Air Training Missiles (CATM); five (5) AIM-9X Block II+ Sidewinder Tactical Guidance Units (GU); and three (3) AIM-9X Sidewinder CATM Guidance Units (GU). Also included are missile containers; spare and repair parts; support and test equipment; publications and technical documentation; personnel training and training equipment; U.S. Government and contractor representatives' technical assistance and engineering and logistics support services; and other related elements of logistics and program support. The estimated total program cost is \$52.1 million.

This proposed sale will support the foreign policy goals and national security objectives of the U.S. by improving the security of a major ally that is a force for political stability and economic progress in the Indo-Pacific region.

The proposed sale will improve the Republic of Korea's capability to meet current and future threats while further

enhancing interoperability with the U.S. and other allies. Korea will have no difficulty absorbing these articles into its armed forces.

The proposed sale of this equipment and support will not alter the basic military balance in the region.

The principal contractor will be Raytheon Missiles and Defense (RMD), Tucson, AZ. There are no known offset agreements proposed in connection with this potential sale.

Implementation of the proposed sale will require U.S. Government and contractor personnel to visit the ROK on a temporary basis in conjunction with program technical oversight and support requirements, including program and technical reviews, as well as to provide training and maintenance support in country.

There will be no adverse impact on U.S. defense readiness as a result of this proposed sale.

Transmittal No. 23-76

Notice of Proposed Issuance of Letter of Offer Pursuant to Section 36(b)(1) of the Arms Export Control Act

Annex

Item No. vii

(vii) *Sensitivity of Technology:*

1. The AIM-9X Block II and Block II+ (Plus) SIDEWINDER Missile represents a substantial increase in missile acquisition and kinematics performance over the AIM-9M and replaces the AIM-9X Block I Missile configuration. The missile includes a high off-boresight seeker, enhanced countermeasure rejection capability, low drag/high angle of attack airframe and the ability to integrate the Helmet Mounted Cueing System. The most current AIM-9X Block II/II+ Operational Flight Software developed for all international partner countries, which is authorized for export by USG export policy, provides fifth-generation Infra-Red Missile capabilities such as Lock-On-After-Launch, Weapons Data Link, Surface Attack, and Surface Launch. No software source code or algorithms will be released.

2. The highest level of classification of defense articles, components, and services included in this potential sale is SECRET.

3. If a technologically advanced adversary were to obtain knowledge of the specific hardware and software elements, the information could be used to develop countermeasures that might reduce weapon system effectiveness or be used in the development of a system with similar or advanced capabilities.

4. A determination has been made that the Republic of Korea (ROK) can provide substantially the same degree of protection for the sensitive technology being released as the U.S. Government. This sale is necessary in furtherance of the U.S. foreign policy and national security objectives outlined in the Policy Justification.

5. All defense articles and services listed in this transmittal have been authorized for release and export to the ROK.

[FR Doc. 2024-27300 Filed 11-20-24; 8:45 am]

BILLING CODE 6001-FR-P

DEPARTMENT OF DEFENSE

Office of the Secretary

[Transmittal No. 23-78]

Arms Sales Notification

AGENCY: Defense Security Cooperation Agency, Department of Defense (DoD).

ACTION: Arms sales notice.

SUMMARY: The DoD is publishing the unclassified text of an arms sales notification.

FOR FURTHER INFORMATION CONTACT:

Pamela Young at (703) 953-6092, pamela.a.young14.civ@mail.mil, or dsca.ncr.rsrcmgmt.list.cns-mbx@mail.mil

SUPPLEMENTARY INFORMATION: This 36(b)(1) arms sales notification is published to fulfill the requirements of section 155 of Public Law 104-164 dated July 21, 1996. The following is a copy of a letter to the Speaker of the House of Representatives with attached Transmittal 23-78, Policy Justification, and Sensitivity of Technology.

Dated: November 18, 2024.

Stephanie J. Bost,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

BILLING CODE 6001-FR-P



DEFENSE SECURITY COOPERATION AGENCY

2800 Defense Pentagon
Washington, DC 20301-2800

November 14, 2023

The Honorable Mike Johnson
Speaker of the House
U.S. House of Representatives
H-209, The Capitol
Washington, DC 20515

Dear Mr. Speaker:

Pursuant to the reporting requirements of Section 36(b)(1) of the Arms Export Control Act, as amended, we are forwarding herewith Transmittal No. 23-78, concerning the Navy's proposed Letter(s) of Offer and Acceptance to the Republic of Korea for defense articles and services estimated to cost \$650 million. We will issue a news release to notify the public of this proposed sale upon delivery of this letter to your office.

Sincerely,

James A. Hursch
Director

Enclosures:

1. Transmittal
2. Policy Justification
3. Sensitivity of Technology

BILLING CODE 6001-FR-C

Transmittal No. 23-78

Notice of Proposed Issuance of Letter of Offer Pursuant to Section 36(b)(1) of the Arms Export Control Act, as amended

(i) *Prospective Purchaser:* Republic of Korea (ROK)

(ii) *Total Estimated Value:*

Major Defense Equipment *	\$385 million
Other	\$265 million

TOTAL	\$650 million

(iii) *Description and Quantity or Quantities of Articles or Services under Consideration for Purchase:*

Major Defense Equipment (MDE):

Up to thirty-eight (38) Standard Missile 6 (SM-6) Block I Missiles

Non-MDE: Also included are MK 21 Vertical Launch System (VLS) canisters; obsolescence Engineering, Integration, and Test (EI&T) materiel and support; handling equipment; spares; training and training equipment and aids; technical publications and data; United States (U.S.) Government and contractor engineering and technical assistance, including related studies and analysis support; product support; materiel and support for demonstration and

interoperability live fire events; and other related elements of logistics and program support.

(iv) *Military Department:* Navy (KS-P-ANP)

(v) *Prior Related Cases, if any:* KS-P-AMO; KS-P-AMR; KS-P-ALM

(vi) *Sales Commission, Fee, etc., Paid, Offered, or Agreed to be Paid:* None known

(vii) *Sensitivity of Technology Contained in the Defense Article or Defense Services Proposed to be Sold:* See Attached Annex

(viii) *Date Report Delivered to Congress:* November 14, 2023

* As defined in Section 47(6) of the Arms Export Control Act.

POLICY JUSTIFICATION

Republic of Korea (ROK)—Standard Missile 6 Block I (SM-6 Blk I)

The Government of the Republic of Korea has requested to buy up to thirty-eight (38) Standard Missile 6 (SM-6) Block I missiles. Also included are MK 21 Vertical Launch System (VLS) canisters; obsolescence Engineering, Integration, and Test (EI&T) materiel and support; handling equipment; spares; training and training equipment and aids; technical publications and data; U.S. Government and contractor engineering and technical assistance, including related studies and analysis support; product support; materiel and support for demonstration and interoperability live fire events; and other related elements of logistics and program support. The estimated total program cost is \$650 million.

This proposed sale will support the foreign policy goals and national security objectives of the U.S. by improving the security of a major ally that is a force for political stability and economic progress in the Indo-Pacific region.

The proposed sale will improve the Republic of Korea's capability to meet current and future threats while further enhancing interoperability with the U.S. and other allies. Korea will have no difficulty absorbing these articles into its armed forces.

The proposed sale of this equipment and support will not alter the basic military balance in the region.

The principal contractor will be Raytheon Missiles and Defense (RMD), Tucson, AZ. There are no known offset agreements proposed in connection with this potential sale.

Implementation of the proposed sale will require U.S. Government and contractor personnel to visit the Republic of Korea on a temporary basis in conjunction with program technical oversight and support requirements, including program and technical reviews, as well as to provide training and maintenance support in country.

There will be no adverse impact on U.S. defense readiness as a result of this proposed sale.

Transmittal No. 23-78

Notice of Proposed Issuance of Letter of Offer Pursuant to Section 36(b)(1) of the Arms Export Control Act

Annex

Item No. vii

(vii) *Sensitivity of Technology:*

1. The Standard Missile-6 (SM-6) is a Navy surface-to-air missile that provides area and ship self-defense. The missile is intended to project power and contribute to raid annihilation by destroying manned fixed and rotary wing aircraft, Unmanned Aerial Vehicles (UAV), Land Attack Cruise Missiles, and Anti-Ship Cruise Missiles in flight. It was designed to fulfill the need for a vertically launched, extended range missile compatible with the AEGIS Weapon System to be used against extended range threats at sea, near land, and overland. The SM-6 combines the tested legacy of Standard Missile 2 (SM-2) propulsion and ordnance with an active radio frequency seeker allowing for over-the-horizon engagements, enhanced capability at extended ranges, and increased firepower.

2. The highest level of classification of defense articles, components, and services included in this potential sale is SECRET.

3. If a technologically advanced adversary were to obtain knowledge of the specific hardware and software elements, the information could be used to develop countermeasures that might reduce weapon system effectiveness or be used in the development of a system with similar or advanced capabilities.

4. A determination has been made that the Republic of Korea (ROK) can provide substantially the same degree of protection for the sensitive technology being released as the U.S. Government. This sale is necessary in furtherance of the U.S. foreign policy and national security objectives outlined in the Policy Justification.

5. All defense articles and services listed in this transmittal have been authorized for release and export to the ROK.

[FR Doc. 2024-27299 Filed 11-20-24; 8:45 am]

BILLING CODE 6001-FR-P

DEPARTMENT OF DEFENSE

Office of the Secretary

Board of Regents, Uniformed Services University of the Health Sciences; Notice of Federal Advisory Committee Meeting

AGENCY: Under Secretary of Defense for Personnel and Readiness (USD(P&R)), Department of Defense (DoD).

ACTION: Notice of Federal Advisory Committee meeting.

SUMMARY: The DoD is publishing this notice to announce that the following Federal Advisory Committee meeting of

the Board of Regents, Uniformed Services University of the Health Sciences (BoR USUHS) took place.

DATES: Monday, November 4, 2024, open to the public from 8 a.m. to 12 p.m. eastern time.

ADDRESSES: Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Everett Alvarez Jr. Board of Regents Room (D3001), Bethesda, MD 20814. The meeting will be held both in-person and virtually.

FOR FURTHER INFORMATION CONTACT: Dr. Glendon Diehl, Alternate Designated Federal Officer (DFO), at (301) 295-1917 or bor@usuhs.edu. Mailing address is 4301 Jones Bridge Road, Bethesda, MD 20814. Website: <https://www.usuhs.edu/ao/board-of-regents>.

SUPPLEMENTARY INFORMATION: Due to an oversight, the BoR USUHS did not provide public notification required by 41 Code of Federal Regulations (CFR) 102-3.150(a) concerning its November 4, 2024, meeting. To correct the oversight, the DFO for the BoR USUHS is providing public notice of the meeting that occurred on November 4, 2024, and based upon the circumstances, the Advisory Committee Management Officer for the Department of Defense, pursuant to 41 CFR 102-3.150(b), waives the 15-calendar day notification requirement.

This meeting was held under the provisions of chapter 10 of title 5, United States Code (U.S.C.) (commonly known as “the Federal Advisory Committee Act” or “FACA”), 5 U.S.C. 552b (commonly known as the “Government in the Sunshine Act”), and 41 CFR 102-3.140 and 102-3.150. Due to an unforeseen oversight, public notice was not provided prior to the meeting.

Purpose of the Meeting: The purpose of the meeting was to provide advice and recommendations to the Secretary of Defense, through the USD(P&R), on academic and administrative matters critical to the full accreditation and successful operation of Uniformed Services University (USU). These actions are necessary for USU to pursue its mission, which is to educate, train, and comprehensively prepare uniformed services health professionals, officers, scientists, and leaders to support the Military and Public Health Systems, the National Security and National Defense Strategies of the United States, and the readiness of our Uniformed Services.

Agenda: The schedule includes opening comments from the Chair; a report by the USU President; an update from the Assistant Secretary of Defense for Health Affairs; a brief on Military

Health System Education and Training Mission and Capability Evaluation; an update on USU Financial Plans and Strategy; and a brief on Digital Health Integration Center Concept and Artificial Intelligence Integration Discussion.

Written Statements: Pursuant to section 10(a)(3) of the FACA and 41 CFR 102–3.140, the public or interested organizations may submit written comments to the BoR USUHS about its mission or in response to an approved agenda. Individuals submitting a written statement must submit their statement to Ms. Askins-Roberts at the address noted in the **FOR FURTHER INFORMATION CONTACT** section. Written statements that do not pertain to a scheduled meeting of the BoR USUHS may be submitted at any time whereas, written statements pertaining to a specific topic being discussed at a planned meeting, then these statements must be received at least five calendar days prior to the scheduled meeting for consideration by the Board. Written statements pertaining to a scheduled meeting received after the deadline will be considered by the

Board at a later date. The DFO will compile all timely submissions with the BoR USUHS' Chair and ensure such submissions are provided to BoR USUHS members before the meeting. Interested individuals or parties that want to provide written statements concerning the BoR USUHS' November 4, 2024 meeting may submit statements to Ms. Askins-Roberts or Dr. Glendon Diehl at the address noted in the **FOR FURTHER INFORMATION CONTACT** section.

Dated: November 15, 2024.

Stephanie J. Bost,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 2024–27248 Filed 11–20–24; 8:45 am]

BILLING CODE 6001–FR–P

DEPARTMENT OF DEFENSE

Office of the Secretary

[Transmittal No. 23–69]

Arms Sales Notification

AGENCY: Defense Security Cooperation Agency, Department of Defense (DoD).

ACTION: Arms sales notice.

SUMMARY: The DoD is publishing the unclassified text of an arms sales notification.

FOR FURTHER INFORMATION CONTACT:

Pamela Young at (703) 953–6092, *pamela.a.young14.civ@mail.mil*, or *dsca.ncr.rsrcmgmt.list.cns-mbx@mail.mil*.

SUPPLEMENTARY INFORMATION: This 36(b)(1) arms sales notification is published to fulfill the requirements of section 155 of Public Law 104–164 dated July 21, 1996. The following is a copy of a letter to the Speaker of the House of Representatives with attached Transmittal 23–69, Policy Justification, and Sensitivity of Technology.

Dated: November 18, 2024.

Stephanie J. Bost,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

BILLING CODE 6001–FR–P



DEFENSE SECURITY COOPERATION AGENCY
2800 DEFENSE PENTAGON
WASHINGTON, DC 20301-2800

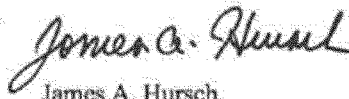
November 17, 2023

The Honorable Mike Johnson
Speaker of the House
U.S. House of Representatives
H-209, The Capitol
Washington, DC 20515

Dear Mr. Speaker:

Pursuant to the reporting requirements of Section 36(b)(1) of the Arms Export Control Act, as amended, we are forwarding herewith Transmittal No. 23-69, concerning the Navy's proposed Letter(s) of Offer and Acceptance to the Government of Japan for defense articles and services estimated to cost \$2.35 billion. We will issue a news release to notify the public of this proposed sale upon delivery of this letter to your office.

Sincerely,


James A. Hursch
Director

Enclosures:

1. Transmittal
2. Policy Justification
3. Sensitivity of Technology

BILLING CODE 6001-FR-C

Transmittal No. 23-69

Notice of Proposed Issuance of Letter of Offer Pursuant to Section 36(b)(1) of the Arms Export Control Act, as amended

(i) *Prospective Purchaser:* Government of Japan

(ii) *Total Estimated Value:*

Major Defense Equipment * ..	\$1.26 billion
Other	\$1.09 billion
TOTAL	\$2.35 billion

(iii) *Description and Quantity or Quantities of Articles or Services under Consideration for Purchase:*

Major Defense Equipment (MDE):

Two hundred (200) Tomahawk Block IV All Up Rounds (AURs) (RGM-109E)
Two hundred (200) Tomahawk Block V AURs (RGM-109E)
Fourteen (14) Tactical Tomahawk

Weapon Control Systems (TTWCS)
Non-MDE:

Also included is support for the Tomahawk Weapon System (TWS) (the All Up Round, the Tactical Tomahawk Weapon Control Systems (TTWCS) and the Mission Distribution Software Suite Centers (MDSSC)), as well as containers; feasibility studies; software; hardware; training; unscheduled missile maintenance; spares; in-service support; communication equipment; operational flight test; publications; engineering and technical expertise to maintain the TWS capability; non-recurring engineering; transportation; and other related elements of logistics and program support.

(iv) *Military Department:* Navy (JA-P-NFP, JA-P-NGO)

(v) *Prior Related Cases, if any:* None

(vi) *Sales Commission, Fee, etc., Paid, Offered, or Agreed to be Paid:* None known at this time

(vii) *Sensitivity of Technology Contained in the Defense Article or Defense Services Proposed to be Sold:* See Attached Annex

(viii) *Date Report Delivered to Congress:* November 17, 2023

* As defined in Section 47(6) of the Arms Export Control Act.

POLICY JUSTIFICATION

Japan—Tomahawk Weapon System

The Government of Japan has requested to buy two hundred (200) Tomahawk Block IV All Up Rounds (AURs) (RGM-109E); two hundred (200) Tomahawk Block V AURs (RGM-109E); and fourteen (14) Tactical Tomahawk Weapon Control Systems (TTWCS). Also included is support for the Tomahawk Weapon System (TWS) (the

All Up Round, the Tactical Tomahawk Weapon Control Systems (TTWCS) and the Mission Distribution Software Suite Centers (MDSSC)), as well as containers; feasibility studies; software; hardware; training; unscheduled missile maintenance; spares; in-service support; communication equipment; operational flight test; publications; engineering and technical expertise to maintain the TWS capability; non-recurring engineering; transportation; and other related elements of logistics and program support. The estimated total cost is \$2.35 billion.

This proposed sale will support the foreign policy goals and national security objectives of the United States (U.S.) by improving the security of a major ally that is a force for political stability and economic progress in the Indo-Pacific region.

The proposed sale will improve Japan's capability to meet current and future threats by providing a long range, conventional surface-to-surface missile with significant standoff range that can neutralize growing threats. Japan will have no difficulty absorbing these articles into its armed forces.

The proposed sale of this equipment and support will not alter the basic military balance in the region.

The principal contractor will be Raytheon, Tucson, AZ. There are no known offset agreements proposed in connection with this potential sale.

Implementation of this proposed sale will not require the assignment of any additional U.S. Government or contractor representatives to Japan.

There will be no adverse impact on U.S. defense readiness as a result of this proposed sale.

Transmittal No. 23-69

Notice of Proposed Issuance of Letter of Offer Pursuant to Section 36(b)(1) of the Arms Export Control Act

Annex

Item No. vii

(vii) *Sensitivity of Technology:*

1. The Tomahawk Block IV/V All Up Round (AUR) consists of the RGM-109E Tomahawk cruise missile assembled in a canister for surface launch. Tomahawk Block IV/V capabilities include: increased system flexibility; improved system response times; improved lethality against an increased target set; improved accuracy; improved Anti-Jam GPS Receiver (AGR) with Selective Availability Anti-Spoofing Module (SAASM) and/or M-Code capability; enhanced availability due to a 15-year maintenance interval; and two-way communications between missile and

Strike/Missile Controllers via Satellite Communications (SATCOM).

2. The Tactical Tomahawk Weapon Control System (TTWCS) consists of command and control, targeting, mission planning and distribution of the Tomahawk cruise missile.

3. The highest level of classification of defense articles, components, and services included in this potential sale is SECRET.

4. If a technologically advanced adversary were to obtain knowledge of the specific hardware and software elements, the information could be used to develop countermeasures that might reduce weapon system effectiveness or be used in the development of a system with similar or advanced capabilities.

5. A determination has been made that Japan can provide substantially the same degree of protection for the sensitive technology being released as the U.S. Government. This sale is necessary in furtherance of the U.S. foreign policy and national security objectives outlined in the Policy Justification.

6. All defense articles and services listed in this transmittal have been authorized for release and export to Japan.

[FR Doc. 2024-27301 Filed 11-20-24; 8:45 am]

BILLING CODE 6001-FR-P

ELECTION ASSISTANCE COMMISSION

Sunshine Act Meetings

AGENCY: Election Assistance Commission.

ACTION: Sunshine Act notice; notice of public meeting agenda.

SUMMARY: Public meeting of the U.S. Election Assistance Commission.

DATES: Tuesday, December 10, 2024; 9 a.m.–12 p.m. PT.

ADDRESSES: The meeting will be held in person at the Los Angeles County Registrar-Recorder/County Clerk's Office, Ballot Processing Center, 13401 Crossroads Pkwy. N, City of Industry, CA 91746. It will also be livestreamed on the U.S. Election Assistance Commission YouTube Channel: <https://www.youtube.com/channel/UCpN6i0g2rIF4ITWhwvBwwZw>.

FOR FURTHER INFORMATION CONTACT: Kristen Muthig, Telephone: (202) 897-9285, Email: kmuthig@eac.gov.

SUPPLEMENTARY INFORMATION:

Purpose: In accordance with the Government in the Sunshine Act (Sunshine Act), Public Law 94-409, as amended (5 U.S.C. 552b), the U.S. Election Assistance Commission (EAC)

will conduct an open meeting on topics related to the 2024 elections.

Agenda: During the meeting, election officials will join the EAC's Commissioners for in-depth panel discussions on the 2024 elections. Topics include election security, contingency planning, and serving voters. EAC Commissioners will also vote on the appointment of a General Counsel pursuant to section 204 of the Help America Vote Act of 2002 (HAVA) (52 U.S.C. 20924).

The full agenda will be posted in advance on the EAC website: <https://www.eac.gov>.

Background: HAVA charged the EAC to serve as a national clearinghouse and resource for the compilation of information and review of procedures with respect to the administration of federal elections. This meeting will provide information on topics that arose during the 2024 elections to help inform stakeholders as well as the general public and members of the media.

Status: This meeting will be open to the public.

Camden Kelliher,

Acting General Counsel, U.S. Election Assistance Commission.

[FR Doc. 2024-27385 Filed 11-19-24; 11:15 am]

BILLING CODE 4810-71-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. AC25-18-000]

Empire Pipeline, Inc.; Notice of Filing

Take notice that on November 5, 2024, Empire Pipeline, Inc. submitted a request for waiver of the Federal Energy Regulatory Commission's (Commission) requirement to provide its certified public accountant (CPA) certification statement for the 2024 FERC Form No. 2 on the basis of the calendar year ending December 31.

Any person desiring to intervene or to protest this filing must file in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214). Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a notice of intervention or motion to intervene, as appropriate. Such notices, motions, or protests must be filed on or before the comment date. Anyone filing a motion to intervene or protest must serve a copy

of that document on the Applicant. On or before the comment date, it is not necessary to serve motions to intervene or protests on persons other than the Applicant.

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 (<https://www.ferc.gov>). From the Commission's Home Page on the internet, this information is available on eLibrary. The full text of this document is available on eLibrary in PDF and Microsoft Word format for viewing, printing, and/or downloading. To access this document in eLibrary, type the docket number excluding the last three digits of this document in the docket number field.

User assistance is available for eLibrary and the Commission's website during normal business hours from FERC Online Support at 202-502-6652 (toll free at 1-866-208-3676) or email at ferconlinesupport@ferc.gov, or the Public Reference Room at (202) 502-8371, TTY (202) 502-8659. Email the Public Reference Room at public.referenceroom@ferc.gov.

The Commission strongly encourages electronic filings of comments, protests and interventions in lieu of paper using the "eFiling" link at <https://www.ferc.gov>. Persons unable to file electronically may mail similar pleadings to the Federal Energy Regulatory Commission, 888 First Street NE, Washington, DC 20426. Hand delivered submissions in docketed proceedings should be delivered to Health and Human Services, 12225 Wilkins Avenue, Rockville, Maryland 20852.

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

Comment Date: 5:00 p.m. Eastern Time on December 16, 2024.

Dated: November 14, 2024.

Carlos D. Clay,

Acting Deputy Secretary.

[FR Doc. 2024-27138 Filed 11-20-24; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Combined Notice of Filings #1

November 14, 2024.

Take notice that the Commission received the following exempt wholesale generator filings:

Docket Numbers: EG25-32-000.

Applicants: Richland Township Solar II, LLC.

Description: Richland Township Solar II, LLC submits Notice of Self-Certification of Exempt Wholesale Generator Status.

Filed Date: 11/14/24.

Accession Number: 20241114-5087.

Comment Date: 5 p.m. ET 12/5/24.

Docket Numbers: EG25-33-000.

Applicants: BCD 2024 Fund 4 II Lessee, LLC.

Description: BCD 2024 Fund 4 II Lessee, LLC submits Notice of Self-Certification of Exempt Wholesale Generator Status.

Filed Date: 11/14/24.

Accession Number: 20241114-5090.

Comment Date: 5 p.m. ET 12/5/24.

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

Docket Numbers: ER22-2304-001.

Applicants: Nevada Power Company.

Description: Compliance filing: NPC Transmission Line Ratings Compliance to be effective N/A.

Filed Date: 11/13/24.

Accession Number: 20241113-5135.

Comment Date: 5 p.m. ET 12/4/24.

Docket Numbers: ER24-1655-000.

Applicants: New York Independent System Operator, Inc.

Description: Motion to defer effective date and request for waiver of New York Independent System Operator, Inc. regarding fast-start resource scheduling.

Filed Date: 11/12/24.

Accession Number: 20241112-5420.

Comment Date: 5 p.m. ET 12/3/24.

Docket Numbers: ER24-2566-002.

Applicants: Northern States Power Company, a Minnesota corporation.

Description: Tariff Amendment: 2024-11-14 CapX Brookings OMA—537—Deferral of Action to be effective 12/31/9998.

Filed Date: 11/14/24.

Accession Number: 20241114-5094.

Comment Date: 5 p.m. ET 12/5/24.

Docket Numbers: ER24-2566-003.

Applicants: Northern States Power Company, a Minnesota corporation.

Description: Tariff Amendment: 2024-11-14 CapX Brookings CMA—757—Errata to be effective 6/21/2024.

Filed Date: 11/14/24.

Accession Number: 20241114-5127.

Comment Date: 5 p.m. ET 12/5/24.

Docket Numbers: ER24-2567-002.

Applicants: Northern States Power Company, a Minnesota corporation.

Description: Tariff Amendment: 2024-11-14 CapX Brookings OMA—537—Deferral of Action—Update to be effective 12/31/9998.

Filed Date: 11/14/24.

Accession Number: 20241114-5186.

Comment Date: 5 p.m. ET 12/5/24.

Docket Numbers: ER24-2568-002.

Applicants: Northern States Power Company, a Minnesota corporation.

Description: Tariff Amendment: 2024-11-14 CapX Brookings TCEA—538—Errata to be effective 6/21/2024.

Filed Date: 11/14/24.

Accession Number: 20241114-5119.

Comment Date: 5 p.m. ET 12/5/24.

Docket Numbers: ER24-2601-003.

Applicants: Louise Solar Project, LLC.

Description: Tariff Amendment: Response to Deficiency Filing to be effective 8/15/2024.

Filed Date: 11/14/24.

Accession Number: 20241114-5097.

Comment Date: 5 p.m. ET 12/5/24.

Docket Numbers: ER24-2602-002.

Applicants: Fillmore County Solar Project, LLC.

Description: Tariff Amendment: Response to Deficiency Filing to be effective 9/1/2024.

Filed Date: 11/14/24.

Accession Number: 20241114-5093.

Comment Date: 5 p.m. ET 12/5/24.

Docket Numbers: ER24-2837-001.

Applicants: Unbridled Solar, LLC.

Description: Tariff Amendment: Response to Deficiency Filing to be effective 8/23/2024.

Filed Date: 11/14/24.

Accession Number: 20241114-5099.

Comment Date: 5 p.m. ET 12/5/24.

Docket Numbers: ER24-3057-000.

Applicants: Kearsarge Riverpark I LLC.

Description: Supplement to 09/16/2024 Kearsarge Riverpark I LLC tariff filing.

Filed Date: 11/14/24.

Accession Number: 20241114-5176.

Comment Date: 5 p.m. ET 12/5/24.

Docket Numbers: ER25-425-000.

Applicants: PJM Interconnection, L.L.C.

Description: § 205(d) Rate Filing: Original NSA, Service Agreement No.

7394; AD1–128 to be effective 1/14/2025.

Filed Date: 11/14/24.

Accession Number: 20241114–5044.

Comment Date: 5 p.m. ET 12/5/24.

Docket Numbers: ER25–426–000.

Applicants: Southwest Power Pool, Inc.

Description: Tariff Amendment: 3979 Ponderosa Wind II GIA Cancellation to be effective 11/7/2024.

Filed Date: 11/14/24.

Accession Number: 20241114–5047.

Comment Date: 5 p.m. ET 12/5/24.

Docket Numbers: ER25–427–000.

Applicants: PJM Interconnection, L.L.C.

Description: Tariff Amendment: Notice of Cancellation—WMPA Service Agreement No. 5977; Queue No. AF2–161 to be effective 1/14/2025.

Filed Date: 11/14/24.

Accession Number: 20241114–5050.

Comment Date: 5 p.m. ET 12/5/24.

Docket Numbers: ER25–428–000.

Applicants: Southern California Edison Company.

Description: § 205(d) Rate Filing: 1st Amend LGIA, Coso Navy 2 et al. (TOT274 & TOT275–SA262) to be effective 11/15/2024.

Filed Date: 11/14/24.

Accession Number: 20241114–5052.

Comment Date: 5 p.m. ET 12/5/24.

Docket Numbers: ER25–429–000.

Applicants: ISO New England Inc., Eversource Energy Service Company (as agent).

Description: § 205(d) Rate Filing: ISO New England Inc. submits tariff filing per 35.13(a)(2)(iii): LSA NSTAR–001 West Springfield Local Service Agreement to be effective 10/15/2024.

Filed Date: 11/14/24.

Accession Number: 20241114–5054.

Comment Date: 5 p.m. ET 12/5/24.

Docket Numbers: ER25–430–000.

Applicants: PJM Interconnection, L.L.C.

Description: Tariff Amendment: Notice of Cancellation—WMPA Service Agreement No. 5841; Queue No. AF2–151 to be effective 1/14/2025.

Filed Date: 11/14/24.

Accession Number: 20241114–5063.

Comment Date: 5 p.m. ET 12/5/24.

Docket Numbers: ER25–431–000.

Applicants: PacifiCorp.

Description: Tariff Amendment: Notice of Termination (RS No. 782) to be effective 1/14/2025.

Filed Date: 11/14/24.

Accession Number: 20241114–5065.

Comment Date: 5 p.m. ET 12/5/24.

Docket Numbers: ER25–432–000.

Applicants: Campo Verde Solar, LLC.

Description: Initial rate filing: Liebert Shared Facilities Agreement and

Request for Waivers to be effective 11/15/2024.

Filed Date: 11/14/24.

Accession Number: 20241114–5069.

Comment Date: 5 p.m. ET 12/5/24.

Docket Numbers: ER25–433–000.

Applicants: Arizona Public Service Company.

Description: § 205(d) Rate Filing: Service Agreement No. 428, Fria Grid E&P Agreement to be effective 10/17/2024.

Filed Date: 11/14/24.

Accession Number: 20241114–5074.

Comment Date: 5 p.m. ET 12/5/24.

Docket Numbers: ER25–434–000.

Applicants: Midcontinent

Independent System Operator, Inc., Citizens Electric Corporation, Ameren Services Company.

Description: § 205(d) Rate Filing: Midcontinent Independent System Operator, Inc. submits tariff filing per 35.13(a)(2)(iii): 2024–11–14 Amended JPZ Agreement RE Integration of Citizens Electric Corporation to be effective 1/1/2025.

Filed Date: 11/14/24.

Accession Number: 20241114–5103.

Comment Date: 5 p.m. ET 12/5/24.

Docket Numbers: ER25–435–000.

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

Description: Informational Filing of 2024 Formula Rate Annual Update of Tri-State Generation and Transmission Association, Inc.

Filed Date: 11/13/24.

Accession Number: 20241113–5155.

Comment Date: 5 p.m. ET 12/4/24.

Docket Numbers: ER25–436–000.

Applicants: Southern California Edison Company.

Description: § 205(d) Rate Filing: 1st Amend LGIA, Navy 1—Cancel eTariff Record (TOT273–SA104) to be effective 11/15/2024.

Filed Date: 11/14/24.

Accession Number: 20241114–5106.

Comment Date: 5 p.m. ET 12/5/24.

Docket Numbers: ER25–437–000.

Applicants: California Independent System Operator Corporation.

Description: § 205(d) Rate Filing: 2024–11–14 EDAM Access Charge for the CAISO BAA to be effective 12/31/9998.

Filed Date: 11/14/24.

Accession Number: 20241114–5132.

Comment Date: 5 p.m. ET 12/5/24.

Docket Numbers: ER25–438–000.

Applicants: Midcontinent

Independent System Operator, Inc., Ameren Illinois Company.

Description: § 205(d) Rate Filing: Midcontinent Independent System Operator, Inc. submits tariff filing per

35.13(a)(2)(iii): 2024–11–14_SA 4393 and SA 4394 Ameren IL-Newton WCA and UCA to be effective 1/14/2025.

Filed Date: 11/14/24.

Accession Number: 20241114–5141.

Comment Date: 5 p.m. ET 12/5/24.

Docket Numbers: ER25–439–000.

Applicants: Oiko Energy Inc.

Description: Baseline eTariff Filing: FERC Electric MBR Tariff to be effective 12/31/2024.

Filed Date: 11/14/24.

Accession Number: 20241114–5207.

Comment Date: 5 p.m. ET 12/5/24.

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

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

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

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

Dated: November 14, 2024.

Carlos D. Clay,

Acting Deputy Secretary.

[FR Doc. 2024–27142 Filed 11–20–24; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY**Federal Energy Regulatory Commission****[Docket No. AC25–22–000]****Ergon Midstream, LLC; Notice of Filing**

Take notice that on November 12, 2024, Ergon Midstream, LLC requested from the Chief Accountant of the Federal Energy Regulatory Commission (Commission or FERC) approval of the accounting entries related to the acquisition of the Ohio River Valley pipeline from EnLink Midstream, LLC.

Any person desiring to intervene or to protest this filing must file in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214). Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a notice of intervention or motion to intervene, as appropriate. Such notices, motions, or protests must be filed on or before the comment date. Anyone filing a motion to intervene or protest must serve a copy of that document on the Applicant. On or before the comment date, it is not necessary to serve motions to intervene or protests on persons other than the Applicant.

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 (<https://www.ferc.gov>). From the Commission's Home Page on the internet, this information is available on eLibrary. The full text of this document is available on eLibrary in PDF and Microsoft Word format for viewing, printing, and/or downloading. To access this document in eLibrary, type the docket number excluding the last three digits of this document in the docket number field.

User assistance is available for eLibrary and the Commission's website during normal business hours from FERC Online Support at 202–502–6652 (toll free at 1–866–208–3676) or email at ferconlinesupport@ferc.gov, or the Public Reference Room at (202) 502–8371, TTY (202) 502–8659. Email the Public Reference Room at public.referenceroom@ferc.gov.

The Commission strongly encourages electronic filings of comments, protests and interventions in lieu of paper using the “eFiling” link at <https://>

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

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

Comment Date: 5:00 p.m. Eastern Time on December 6, 2024.

Dated: November 14, 2024.

Carlos D. Clay,

Acting Deputy Secretary.

[FR Doc. 2024–27140 Filed 11–20–24; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY**Federal Energy Regulatory Commission****[Docket No. CP25–15–000]****Saltville Gas Storage Company L.L.C.; Notice of Request Under Blanket Authorization and Establishing Intervention and Protest Deadline**

Take notice that on November 4, 2024, Saltville Gas Storage Company L.L.C. (Saltville), 915 N Eldridge Parkway, Suite 1100, Houston, Texas 77079, filed in the above referenced docket, a prior notice request pursuant to sections 157.205 and 157.216 of the Commission's regulations under the Natural Gas Act (NGA), and Saltville's blanket certificate issued in Docket No. CP04–15–000, for authorization to plug and abandon injection/withdrawal well EH 93 (Well EH 93) and abandon and remove associated facility piping and appurtenant equipment at its Early Grove Storage Field located in Scott County, Virginia. Saltville states abandonment of Well EH 93 is required due to the well's declining condition. The estimated cost for the project is \$1,000,000, all as more fully set forth in the request which is on file with the

Commission and open to public inspection.

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

User assistance is available for eLibrary and the Commission's website during normal business hours from FERC Online Support at (202) 502–6652 (toll free at 1–866–208–3676) or email at ferconlinesupport@ferc.gov, or the Public Reference Room at (202) 502–8371, TTY (202) 502–8659. Email the Public Reference Room at public.referenceroom@ferc.gov.

Any questions concerning this request should be directed to Estela D. Lozano, Director, Regulatory, Saltville Gas Storage Company L.L.C., 915 N Eldridge Parkway, Suite 1100, Houston, Texas 77079, or phone (713) 627–4522, or by email estela.lozano@enbridge.com.

Public Participation

There are three ways to become involved in the Commission's review of this project: you can file a protest to the project, you can file a motion to intervene in the proceeding, and you can file comments on the project. There is no fee or cost for filing protests, motions to intervene, or comments. The deadline for filing protests, motions to intervene, and comments is 5:00 p.m. Eastern Time on January 13, 2025. How to file protests, motions to intervene, and comments is explained below.

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

Protests

Pursuant to section 157.205 of the Commission's regulations under the NGA,¹ any person² or the Commission's staff may file a protest to the request. If no protest is filed within the time allowed or if a protest is filed and then withdrawn within 30 days after the allowed time for filing a protest, the proposed activity shall be deemed to be authorized effective the day after the time allowed for protest. If a protest is filed and not withdrawn within 30 days after the time allowed for filing a protest, the instant request for authorization will be considered by the Commission.

Protests must comply with the requirements specified in section 157.205(e) of the Commission's regulations,³ and must be submitted by the protest deadline, which is January 13, 2025. A protest may also serve as a motion to intervene so long as the protestor states it also seeks to be an intervenor.

Interventions

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

To intervene, you must submit a motion to intervene to the Commission in accordance with Rule 214 of the Commission's Rules of Practice and Procedure⁴ and the regulations under the NGA⁵ by the intervention deadline for the project, which is January 13, 2025. As described further in Rule 214, your motion to intervene must state, to the extent known, your position regarding the proceeding, as well as your interest in the proceeding. For an individual, this could include your status as a landowner, ratepayer, resident of an impacted community, or recreationist. You do not need to have property directly impacted by the project in order to intervene. For more information about motions to intervene, refer to the FERC website at <https://www.ferc.gov/resources/guides/how-to-intervene.asp>.

All timely, unopposed motions to intervene are automatically granted by operation of Rule 214(c)(1). Motions to

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

Comments

Any person wishing to comment on the project may do so. The Commission considers all comments received about the project in determining the appropriate action to be taken. To ensure that your comments are timely and properly recorded, please submit your comments on or before January 13, 2025. The filing of a comment alone will not serve to make the filer a party to the proceeding. To become a party, you must intervene in the proceeding.

How To File Protests, Interventions, and Comments

There are two ways to submit protests, motions to intervene, and comments. In both instances, please reference the Project docket number CP25–15–000 in your submission.

(1) You may file your protest, motion to intervene, and comments by using the Commission's eFiling feature, which is located on the Commission's website (www.ferc.gov) under the link to Documents and Filings. New eFiling users must first create an account by clicking on "eRegister." You will be asked to select the type of filing you are making; first select "General" and then select "Protest", "Intervention", or "Comment on a Filing"; or⁶

(2) You can file a paper copy of your submission by mailing it to the address below. Your submission must reference the Project docket number CP25–15–000.

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

To file via any other method: Debbie-Anne A. Reese, Secretary, Federal Energy Regulatory Commission, 12225

Wilkins Avenue, Rockville, Maryland 20852.

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

Protests and motions to intervene must be served on the applicant either by mail at: Estela D. Lozano, Director, Regulatory, Saltville Gas Storage Company L.L.C., 915 N Eldridge Parkway, Suite 1100, Houston, Texas 77079, or by email (with a link to the document) at estela.lozano@enbridge.com. Any subsequent submissions by an intervenor must be served on the applicant and all other parties to the proceeding. Contact information for parties can be downloaded from the service list at the eService link on FERC Online.

Tracking the Proceeding

Throughout the proceeding, additional information about the project will be available from the Commission's Office of External Affairs, at (866) 208–FERC, or on the FERC website at www.ferc.gov using the "eLibrary" link as described above. The eLibrary link also provides access to the texts of all formal documents issued by the Commission, such as orders, notices, and rulemakings.

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

Dated: November 14, 2024.

Carlos D. Clay,

Acting Deputy Secretary.

[FR Doc. 2024–27145 Filed 11–20–24; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Combined Notice of Filings

Take notice that the Commission has received the following Natural Gas Pipeline Rate and Refund Report filings:

Filings Instituting Proceedings

Docket Numbers: PR25–18–000.
Applicants: DTE Gas Company.

¹ 18 CFR 157.205.

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

³ 18 CFR 157.205(e).

⁴ 18 CFR 385.214.

⁵ 18 CFR 157.10.

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

Description: § 284.123 Rate Filing: Revisions to the Operating Statement to be effective 11/21/2024.

Filed Date: 11/14/24.

Accession Number: 20241114–5206.

Comment Date: 5 p.m. ET 12/5/24.

Docket Numbers: RP25–186–000.

Applicants: Sierrita Gas Pipeline LLC.

Description: Compliance filing: Sierrita Operational Purchase and Sales Report 2024 to be effective N/A.

Filed Date: 11/14/24.

Accession Number: 20241114–5118.

Comment Date: 5 p.m. ET 11/26/24.

Docket Numbers: RP25–187–000.

Applicants: National Fuel Gas Supply Corporation.

Description: Compliance filing: TSCA—Informational Filing (November 2024) to be effective N/A.

Filed Date: 11/14/24.

Accession Number: 20241114–5178.

Comment Date: 5 p.m. ET 11/26/24.

Docket Numbers: RP25–188–000.

Applicants: Discovery Gas

Transmission LLC.

Description: § 4(d) Rate Filing: 2025 HMRE Surcharge Annual Filing to be effective 1/1/2025.

Filed Date: 11/15/24.

Accession Number: 20241115–5008.

Comment Date: 5 p.m. ET 11/27/24.

Docket Numbers: RP25–189–000.

Applicants: Columbia Gulf

Transmission, LLC.

Description: § 4(d) Rate Filing: Non-Conforming Agmt—Range Resources 196009 to be effective 12/16/2024.

Filed Date: 11/15/24.

Accession Number: 20241115–5017.

Comment Date: 5 p.m. ET 11/27/24.

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

Filings in Existing Proceedings

Docket Numbers: RP24–1122–001.

Applicants: Algonquin Gas

Transmission, LLC.

Description: Supplement to 09/30/2024 OFO Penalty Disbursement Report of Algonquin Gas Transmission, LLC.

Filed Date: 11/14/24.

Accession Number: 20241114–5146.

Comment Date: 5 p.m. ET 11/26/24.

Any person desiring to protest in any of the above proceedings must file in accordance with Rule 211 of the Commission's Regulations (18 CFR 385.211) on or before 5:00 p.m. Eastern time on the specified comment date.

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

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

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Dated: November 15, 2024.

Carlos D. Clay,

Acting Deputy Secretary.

[FR Doc. 2024–27278 Filed 11–20–24; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Project No. 6634–003]

Shasta Meadows, Inc.; Notice of Availability of Environmental Assessment

In accordance with the National Environmental Policy Act of 1969 and the Federal Energy Regulatory Commission's (Commission or FERC) regulations, 18 CFR part 380, Commission staff reviewed Shasta Meadow, Inc.'s application for surrender of exemption for the Prather Creek Hydroelectric Project No. 6634 and have prepared an Environmental Assessment (EA) for the proposed surrender.¹ The exemptee proposes to leave all project works secured in place including the powerhouse and generator. The project is non-operational and no water flows through the penstock. No ground disturbing activities are proposed with surrender of

the project exemption. The project is located on private land on Prather Creek in Siskiyou County, California.

The EA contains Commission staff's analysis of the potential environmental effects of surrendering the exemption and concludes that the proposed surrender, would not constitute a major federal action that would significantly affect the quality of the human environment.

The EA may be viewed on the Commission's website at <https://www.ferc.gov> using the "eLibrary" link. Enter the docket number (P–6634) in the docket number field to access the document. For assistance, contact FERC Online Support at FERCOnlineSupport@ferc.gov or toll-free at 1–866–208–3676, or for TTY, (202) 502–8659.

You may also register online at <https://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.

All comments must be filed by December 13, 2024.

The Commission strongly encourages electronic filing. Please file comments using the Commission's eFiling system at <https://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 <https://www.ferc.gov/docs-filing/ecomment.asp>. For assistance, please contact FERC Online Support. In lieu of electronic filing, you may submit a paper copy. Submissions sent via the U.S. Postal Service must be addressed to: Debbie-Anne A. Reese, Secretary, Federal Energy Regulatory Commission, 888 First Street NE, Room 1A, Washington, DC 20426. Submissions sent via any other carrier must be addressed to: Debbie-Anne A. Reese, Secretary, Federal Energy Regulatory Commission, 12225 Wilkins Avenue, Rockville, Maryland 20852. The first page of any filing should include docket number P–6634–003.

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

¹ In accordance with the Council on Environmental Quality's regulations, the unique identification number for documents relating to this environmental review is EAXX–019–20–000–1726749309. 40 CFR 1501.5(c)(4) (2024).

contact OPP at (202)502-6595 or *OPP@ferc.gov*.

For further information, contact Rebecca Martin at 202-502-6012 or *Rebecca.Martin@ferc.gov*.

Dated: November 14, 2024.

Carlos D. Clay,

Acting Deputy Secretary.

[FR Doc. 2024-27159 Filed 11-20-24; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Combined Notice of Filings

Take notice that the Commission has received the following Natural Gas Pipeline Rate and Refund Report filings:

Filings Instituting Proceedings

Docket Numbers: PR25-17-000.

Applicants: Hope Gas, Inc.

Description: § 284.123(g) Rate Filing: HGI—November 1 2024 Rate Changes to be effective 11/1/2024.

Filed Date: 11/14/24.

Accession Number: 20241114-5037.

Comment Date: 5 p.m. ET 12/5/24.

§ 284.123(g) Protest: 5 p.m. ET 1/13/25.

Docket Numbers: RP25-182-000.

Applicants: Gas Transmission Northwest LLC.

Description: § 4(d) Rate Filing: Non-Conf/Neg Rate—GTNXP In-Service to be effective 12/13/2024.

Filed Date: 11/13/24.

Accession Number: 20241113-5105.

Comment Date: 5 p.m. ET 11/25/24.

Docket Numbers: RP25-183-000.

Applicants: Columbia Gas Transmission, LLC.

Description: Compliance filing: Columbia Gas Compliance to Antero Complaint RP24-911-000 to be effective 10/28/2024.

Filed Date: 11/13/24.

Accession Number: 20241113-5121.

Comment Date: 5 p.m. ET 11/25/24.

Docket Numbers: RP25-184-000.

Applicants: El Paso Natural Gas Company, L.L.C.

Description: § 4(d) Rate Filing: Negotiated Rate Agreements Update (EcoEnergy #617940_615797) to be effective 1/1/2025.

Filed Date: 11/13/24.

Accession Number: 20241113-5133.

Comment Date: 5 p.m. ET 11/25/24.

Docket Numbers: RP25-185-000.

Applicants: Northern Natural Gas Company.

Description: § 4(d) Rate Filing: 20241114 Negotiated Rate Filing to be effective 11/15/2024.

Filed Date: 11/14/24.

Accession Number: 20241114-5086.

Comment Date: 5 p.m. ET 11/26/24.

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

Filings in Existing Proceedings

Docket Numbers: RP24-744-006.

Applicants: Southern Natural Gas Company, L.L.C.

Description: Compliance filing: SNG Rate Case—45-Day Update of Test Period Data to be effective N/A.

Filed Date: 11/14/24.

Accession Number: 20241114-5029.

Comment Date: 5 p.m. ET 11/26/24.

Any person desiring to protest in any of the above proceedings must file in accordance with Rule 211 of the Commission's Regulations (18 CFR 385.211) on or before 5:00 p.m. Eastern time on the specified comment date.

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

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

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

Dated: November 14, 2024.

Carlos D. Clay,

Acting Deputy Secretary.

[FR Doc. 2024-27143 Filed 11-20-24; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Privacy Act of 1974; System of Records

AGENCY: Federal Energy Regulatory Commission (FERC), Department of Energy (DOE).

ACTION: Notice of a modified system of records.

SUMMARY: In accordance with the Privacy Act of 1974, all agencies are required to publish in the **Federal Register** a notice of their systems of records. Notice is hereby given that the Federal Energy Regulatory Commission (FERC) is publishing a notice of modifications to an existing FERC system of records titled "Commission Investigation Files (FERC-24)" previously titled "Commission Miscellaneous Investigation File."

DATES: Comments on this modified system of records must be received no later than 30 days after date of publication in the **Federal Register**. If no public comment is received during the period allowed for comment or unless otherwise published in the **Federal Register** by FERC, the modified system of records will become effective a minimum of 30 days after date of publication in the **Federal Register**. If FERC receives public comments, FERC shall review the comments to determine whether any changes to the notice are necessary.

ADDRESSES: Comments may be submitted in writing to Federal Energy Regulatory Commission, 888 First Street NE, Washington, DC 20426, or electronically to *privacy@ferc.gov*. Comments should indicate that they are submitted in response to "Commission Investigation Files (FERC-24)."

FOR FURTHER INFORMATION CONTACT: Mittal Desai, Chief Information Officer & Senior Agency Official for Privacy, Office of the Executive Director, Federal Energy Regulatory Commission, 888 First Street NE, Washington, DC 20426, *privacy@ferc.gov*, (202) 502-6432.

SUPPLEMENTARY INFORMATION: In accordance with the Privacy Act of 1974, FERC is updating this notice and republishing it in its entirety. This notice has one new routine use, routine use 12, and changes to routine uses 6, 9, 11, and 13. In addition, FERC is amending the following sections to reflect changes made since the publication of the last notice in the **Federal Register**: dates; addresses; for further information contact; system

name; system manager(s); purpose(s) of the system; categories of individuals covered by the system; categories of records in the system; records source categories; policies and practices for storage of records; policies and practices for retention and disposal of records; administrative, technical, and physical safeguards; records access procedures; contesting records procedures; notification procedures; exemptions promulgated for the system; and history.

SYSTEM NAME AND NUMBER:

Commission Investigation File (FERC-24).

SECURITY CLASSIFICATION:

Unclassified.

SYSTEM LOCATION:

Federal Energy Regulatory Commission, Office of the Executive Director, Chief Human Capital Officer (CHCO), Workforce Relations Division, 888 First Street NE, Washington, DC 20426.

SYSTEM MANAGER(S):

Director, Workforce Relations Division, Chief Human Capital Officer (CHCO), Office of the Executive Director, Federal Energy Regulatory Commission, 888 First Street NE, Washington, DC 20426, (202) 502-6475.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

The Rehabilitation Act, 29 U.S.C. 791 *et. seq.*

Title VII of the Civil Rights Act, 42 U.S.C. 2000e *et. seq.*

Executive Order 13164.

Executive Order 13991.

29 CFR part 1614—*Federal Sector Equal Employment Opportunity.*

5 CFR part 735—*Employee responsibilities and conduct.*

PURPOSE(S) OF THE SYSTEM:

The purpose of the system is to maintain documentation on internal investigations that require collection of information by management to process requests and/or render decisions in accordance with applicable law, rule, or regulations. This may include, among other considerations, documentation related to requests for reasonable accommodation, medical or religious accommodation, religious compensatory time off; documentation for administrative investigations related to anti-harassment allegations, ethical violations, and other allegations of misconduct; as well as documentation to render decisions and appeals stemming from any other type of investigation conducted internally.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

The categories of individuals on whom records are maintained are: (1) employees requesting exception to agency policy, adjustment to the job or adjustment to the work environment under applicable law, rules or regulations; (2) employees petitioning for informal inquiry into allegations of workplace harassment or other misconduct that are not covered under Title VII, employees that are the subject of such allegations, or employees with knowledge of such allegations; (3) employees' beneficiaries and dependents; (4) employees with members of the public such as contractors and business entities; (5) applicants and members of the public requesting reasonable accommodation; (6) attorneys representing litigants; and (7) other litigants.

CATEGORIES OF RECORDS IN THE SYSTEM:

The categories of records maintained in the system include name, employee ID number; contact information (such as address, email address, and telephone number); signature; role; office; formal reports of inquiry and supporting documentation; records of actions taken resulting from the inquiry and supporting documentation for the inquiry and the response; medical forms; medical documents; documentation from healthcare providers; religious affiliation information; pleadings; opinions; briefs; decisions; type of accommodation; determination of the accommodation, which includes name, date, and signature; other related supporting documents; and evidentiary and non-evidentiary information relating to a case or controversy in an administrative or litigation proceeding.

RECORD SOURCE CATEGORIES:

Records are obtained from employees; contractors; supervisors; office directors; Office of the General Counsel staff; Workforce Relations Division Director; and/or Workforce Relations Specialists. Records are derived from information supplied by the employee; or created by management officials to summarize findings and/or develop recommendations for action.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND PURPOSES OF SUCH USES:

In addition to those disclosures generally permitted under 5 U.S.C. 552a(b) of the Privacy Act, information maintained in this system may be disclosed to authorized entities outside FERC for purposes determined to be

relevant and necessary as a routine use pursuant to 5 U.S.C. 552a(b)(3) as follows:

1. To appropriate agencies, entities, and persons when (1) FERC suspects or has confirmed that there has been a breach of the system of records; (2) FERC has determined that as a result of the suspected or confirmed breach there is a risk of harm to individuals, the Commission (including its information systems, programs, and operations), the Federal Government, or national security; and (3) the disclosure made to such agencies, entities, and persons is reasonably necessary to assist in connection with the Commission's efforts to respond to the suspected or confirmed breach or to prevent, minimize, or remedy such harm.

2. To another Federal agency or Federal entity, when FERC determines that information from this system of records is reasonably necessary to assist the recipient agency or entity in (1) responding to a suspected or confirmed breach or (2) preventing, minimizing, or remedying the risk of harm to individuals, the recipient agency or entity (including its information systems, programs, and operations), the Federal Government, or national security, resulting from a suspected or confirmed breach.

3. To a congressional office from the record of an individual in response to an inquiry from that congressional office made at the request of that individual.

4. To the Equal Employment Opportunity Commission (EEOC) when requested in connection with investigations of alleged or possible discriminatory practices, examination of Federal affirmative employment programs, or other functions of the Commission as authorized by law or regulation.

5. To the Federal Labor Relations Authority or its General Counsel when requested in connection with investigations of allegations of unfair labor practices or matters before the Federal Service Impasses Panel.

6. To disclose information to another Federal agency, to a court, or a party in litigation before a court or in an administrative proceeding being conducted by a Federal agency, when the Government is a party to the judicial or administrative proceeding. In those cases where the Government is not a party to the proceeding, records may be disclosed if a subpoena has been signed by a judge.

7. To the Department of Justice (DOJ) for its use in providing legal advice to FERC or in representing FERC in a proceeding before a court, adjudicative body, or other administrative body,

where the use of such information by the DOJ is deemed by FERC to be relevant and necessary to the advice or proceeding, and such proceeding names as a party in interest: (a) FERC; (b) any employee of FERC in his or her official capacity; (c) any employee of FERC in his or her individual capacity where DOJ has agreed to represent the employee; or (d) the United States, where FERC determines that litigation is likely to affect FERC or any of its components.

8. To non-Federal Personnel, such as contractors, agents, or other authorized individuals performing work on a contract, service, cooperative agreement, job, or other activity on behalf of FERC or Federal Government and who have a need to access the information in the performance of their duties or activities.

9. To the National Archives and Records Administration in records management inspections and its role as Archivist.

10. To the Merit Systems Protection Board or the Board's Office of the Special Counsel, when relevant information is requested in connection with appeals, special studies of the civil service and other merit systems, review of Office of Personnel Management (OPM) rules and regulations, and investigations of alleged or possible prohibited personnel practices.

11. To appropriate Federal, State, or local agency responsible for investigating, prosecuting, enforcing, or implementing a statute, rule, regulation, or order, if the information may be relevant to a potential violation of civil or criminal law, rule, regulation, order.

12. To appropriate agencies, entities, and person(s) that are a party to a dispute, when FERC determines that information from this system of records is reasonably necessary for the recipient to assist with the resolution of the dispute; the name, address, telephone number, email address, and affiliation; of the agency, entity, and/or person(s) seeking and/or participating in dispute resolution services, where appropriate.

13. To Office of Personnel Management (OPM) and Government Accountability Office (GAO) during the course of on-site inspections or human resources audits.

POLICIES AND PRACTICES FOR STORAGE OF RECORDS:

Records are maintained in paper or electronic format. Electronic records are stored on a Shared Drive. Access to electronic records is controlled by the organization's Single Sign-On and Multi-Factor Authentication solution. Paper records are maintained in lockable file cabinets in a lockable

room. Data center buildings are guarded and monitored by security personnel, cameras, ID checks, and other physical security measures. Physical access to the server rooms is limited to authorized personnel only. Access to electronic and paper records is restricted to those employees whose official duties require access.

POLICIES AND PRACTICES FOR RETRIEVAL OF RECORDS:

Records may be retrieved by employee's name or employee ID number.

POLICIES AND PRACTICES FOR RETENTION AND DISPOSAL OF RECORDS:

Records are retained and disposed of in accordance with the schedule approved under the National Archives and Records Administration's General Records' Schedule 2.3: Employee Relations Records—as follows:

- *Item 010:* Disposition Authority: DAA–GRS2022–0001–0001. Temporary. Destroy when 3 years old, but longer retention is authorized if required for business use.
- *Item 020:* Disposition Authority: DAA–GRS2022–0001–0002. Temporary. Destroy 3 years after employee separation from the agency or all appeals are concluded, whichever is later, but longer retention is authorized if required for business use.

ADMINISTRATIVE, TECHNICAL, AND PHYSICAL SAFEGUARDS:

See Policies and Practices for Storage of Records.

RECORD ACCESS PROCEDURES:

Individuals requesting access to the contents of records must submit a request through the Freedom of Information Act (FOIA) office. The FOIA website is located at: <https://www.ferc.gov/foia>. Requests may be submitted through the following portal: <https://www.ferc.gov/enforcement-legal/foia/electronic-foia-privacy-act-request-form>. Written requests for access to records should be directed to: Director, Office of External Affairs, Federal Energy Regulatory Commission, 888 First Street NE, Washington, DC 20426.

CONTESTING RECORD PROCEDURES:

See Records Access Procedures.

NOTIFICATION PROCEDURES:

Generalized notice is provided by the publication of this notice. For specific notice, see Records Access Procedure, above.

EXEMPTIONS PROMULGATED FOR THE SYSTEM:

This system of records is exempted from certain provisions of the Privacy

Act under Exemption 2 of the Freedom of Information Act which exempts from mandatory disclosure records that are "related solely to the internal personnel rules and practices of an agency. The exemptions claimed for this system are pursuant to 5 U.S.C. 552a(k)(2).

HISTORY:

65 FR 21748 (April 24, 2000); 86 FR 64923 (November 19, 2021).

Dated: November 14, 2024.

Carlos D. Clay,

Acting Deputy Secretary.

[FR Doc. 2024–27163 Filed 11–20–24; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. AC25–19–000]

MarkWest New Mexico, L.L.C.; Notice of Filing

Take notice that on November 5, 2024, MarkWest New Mexico, L.L.C., submitted a request for a two-year waiver of the Federal Energy Regulatory Commission's (Commission) requirement to provide its certified public accountant (CPA) certification statement for the 2024 and 2025 FERC Form No. 2 on the basis of the calendar year ending December 31.

Any person desiring to intervene or to protest this filing must file in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214). Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a notice of intervention or motion to intervene, as appropriate. Such notices, motions, or protests must be filed on or before the comment date. Anyone filing a motion to intervene or protest must serve a copy of that document on the Applicant. On or before the comment date, it is not necessary to serve motions to intervene or protests on persons other than the Applicant.

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 (<https://www.ferc.gov>). From the Commission's Home Page on the internet, this information is available on eLibrary. The full text of this document is

available on eLibrary in PDF and Microsoft Word format for viewing, printing, and/or downloading. To access this document in eLibrary, type the docket number excluding the last three digits of this document in the docket number field.

User assistance is available for eLibrary and the Commission's website during normal business hours from FERC Online Support at 202-502-6652 (toll free at 1-866-208-3676) or email at ferconlinesupport@ferc.gov, or the Public Reference Room at (202) 502-8371, TTY (202) 502-8659. Email the Public Reference Room at public.reference.room@ferc.gov.

The Commission strongly encourages electronic filings of comments, protests and interventions in lieu of paper using the "eFiling" link at <https://www.ferc.gov>. Persons unable to file electronically may mail similar pleadings to the Federal Energy Regulatory Commission, 888 First Street NE, Washington, DC 20426. Hand delivered submissions in docketed proceedings should be delivered to Health and Human Services, 12225 Wilkins Avenue, Rockville, Maryland 20852.

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

Comment Date: 5:00 p.m. Eastern Time on December 16, 2024.

Dated: November 14, 2024.

Carlos D. Clay,

Acting Deputy Secretary.

[FR Doc. 2024-27139 Filed 11-20-24; 8:45 am]

BILLING CODE 6717-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. CP25-12-000]

Rover Pipeline LLC; Notice of Application and Establishing Intervention Deadline

Take notice that on October 31, 2024, Rover Pipeline LLC (Rover), 1300 Main Street, Houston, Texas 77002, filed an

application under section 7c, of the Natural Gas Act (NGA), and Part 157 and 284 of the Commission's regulations requesting authorization for its Rover-Bulger CS and Harmon Creek MS Expansion Project (Project). The Project consists of constructing certain facilities necessary to expand the existing Harmon Creek Receipt Meter Station and Bulger Compressor Station located at Rover's existing Bulger Compressor Station in Washington County, Pennsylvania. The Project will provide Rover's customers with an expanded source of supply and is designed to receive up to an additional 400,000 Dth/d. Rover estimates the total cost of the Project to be \$21,995,477, all as more fully set forth in the application which is on file with the Commission and open for public inspection.

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

User assistance is available for eLibrary and the Commission's website during normal business hours from FERC Online Support at (202) 502-6652 (toll free at 1-866-208-3676) or email at ferconlinesupport@ferc.gov, or the Public Reference Room at (202) 502-8371, TTY (202) 502-8659. Email the Public Reference Room at public.reference.room@ferc.gov.

Any questions regarding the proposed project should be directed to Blair Lichtenwalter, Senior Director, Regulatory Affairs, 1300 Main Street, Houston, Texas 77002, by phone at (713) 989-2605, or by email at Blair.Lichtenwalter@energytransfer.com.

Pursuant to section 157.9 of the Commission's Rules of Practice and Procedure,¹ within 90 days of this Notice the Commission staff will either: complete its environmental review and place it into the Commission's public record (eLibrary) for this proceeding; or issue a Notice of Schedule for Environmental Review. If a Notice of Schedule for Environmental Review is issued, it will indicate, among other

milestones, the anticipated date for the Commission staff's issuance of the final environmental impact statement (FEIS) or environmental assessment (EA) for this proposal. The filing of an EA in the Commission's public record for this proceeding or the issuance of a Notice of Schedule for Environmental Review will serve to notify Federal and State agencies of the timing for the completion of all necessary reviews, and the subsequent need to complete all Federal authorizations within 90 days of the date of issuance of the Commission staff's FEIS or EA.

Water Quality Certification

Rover stated that a water quality certificate under section 401 of the Clean Water Act is required for the project from the Pennsylvania Department of Environmental Protection. When available, Rover should submit to the Commission a copy of the request for certification for the Commission authorization, including the date the request was submitted to the certifying agency, and either (1) a copy of the certifying agency's decision or (2) evidence of waiver of water quality certification.

Public Participation

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

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

Comments

Any person wishing to comment on the project may do so. Comments may include statements of support or objections, to the project as a whole or specific aspects of the project. The more specific your comments, the more useful they will be.

¹ 18 CFR 157.9.

Protests

Pursuant to sections 157.10(a)(4)² and 385.211³ of the Commission's regulations under the NGA, any person⁴ may file a protest to the application. Protests must comply with the requirements specified in section 385.2001⁵ of the Commission's regulations. A protest may also serve as a motion to intervene so long as the protestor states it also seeks to be an intervenor.

To ensure that your comments or protests are timely and properly recorded, please submit your comments on or before December 5, 2024.

There are three methods you can use to submit your comments or protests to the Commission. In all instances, please reference the Project docket number CP25–12–000 in your submission.

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

(2) You may file your comments or protests electronically by using the eFiling feature, which is located on the Commission's website (www.ferc.gov) under the link to Documents and Filings. With eFiling, you can provide comments in a variety of formats by attaching them as a file with your submission. New eFiling users must first create an account by clicking on "eRegister." You will be asked to select the type of filing you are making; first select "General" and then select "Comment on a Filing"; or

(3) You can file a paper copy of your comments or protests by mailing them to the following address below. Your written comments must reference the Project docket number (CP25–12–000).

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

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

The Commission encourages electronic filing of comments (options 1 and 2 above) and has eFiling staff available to assist you at (202) 502–8258 or FercOnlineSupport@ferc.gov.

Persons who comment on the environmental review of this project will be placed on the Commission's environmental mailing list, and will receive notification when the environmental documents (EA or EIS) are issued for this project and will be notified of meetings associated with the Commission's environmental review process.

The Commission considers all comments received about the project in determining the appropriate action to be taken. However, the filing of a comment alone will not serve to make the filer a party to the proceeding. To become a party, you must intervene in the proceeding. For instructions on how to intervene, see below.

Interventions

Any person, which includes individuals, organizations, businesses, municipalities, and other entities,⁶ has the option to file a motion to intervene in this proceeding. Only intervenors have the right to request rehearing of Commission orders issued in this proceeding and to subsequently challenge the Commission's orders in the U.S. Circuit Courts of Appeal.

To intervene, you must submit a motion to intervene to the Commission in accordance with Rule 214 of the Commission's Rules of Practice and Procedure⁷ and the regulations under the NGA⁸ by the intervention deadline for the project, which is December 5, 2024. As described further in Rule 214, your motion to intervene must state, to the extent known, your position regarding the proceeding, as well as your interest in the proceeding. For an individual, this could include your status as a landowner, ratepayer, resident of an impacted community, or recreationist. You do not need to have property directly impacted by the project in order to intervene. For more information about motions to intervene, refer to the FERC website at <https://www.ferc.gov/resources/guides/how-to/intervene.asp>.

There are two ways to submit your motion to intervene. In both instances, please reference the Project docket number CP25–12–000 in your submission.

(1) You may file your motion to intervene by using the Commission's eFiling feature, which is located on the Commission's website (www.ferc.gov) under the link to Documents and Filings. New eFiling users must first create an account by clicking on

"eRegister." You will be asked to select the type of filing you are making; first select "General" and then select "Intervention." The eFiling feature includes a document-less intervention option; for more information, visit <https://www.ferc.gov/docs-filing/efiling/document-less-intervention.pdf>; or

(2) You can file a paper copy of your motion to intervene, along with three copies, by mailing the documents to the address below. Your motion to intervene must reference the Project docket number CP25–12–000.

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

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

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

Protests and motions to intervene must be served on the applicant either by mail at: Blair Lichtenwalter, Senior Director, Regulatory Affairs, Rover Pipeline LLC, 1300 Main Street, Houston, Texas 77002, or by email (with a link to the document) at Blair.Lichtenwalter@energytransfer.com. Any subsequent submissions by an intervenor must be served on the applicant and all other parties to the proceeding. Contact information for parties can be downloaded from the service list at the eService link on FERC Online. Service can be via email with a link to the document.

All timely, unopposed⁹ motions to intervene are automatically granted by operation of Rule 214(c)(1).¹⁰ Motions to intervene that are filed after the intervention deadline are untimely, and may be denied. Any late-filed motion to intervene must show good cause for being late and must explain why the time limitation should be waived and provide justification by reference to factors set forth in Rule 214(d) of the Commission's Rules and Regulations.¹¹ A person obtaining party status will be placed on the service list maintained by the Secretary of the Commission and will receive copies (paper or electronic) of all documents filed by the applicant and by all other parties.

² 18 CFR 157.10(a)(4).

³ 18 CFR 385.211.

⁴ Persons include individuals, organizations, businesses, municipalities, and other entities. 18 CFR 385.102(d).

⁵ 18 CFR 385.2001.

⁶ 18 CFR 385.102(d).

⁷ 18 CFR 385.214.

⁸ 18 CFR 157.10.

⁹ The applicant has 15 days from the submittal of a motion to intervene to file a written objection to the intervention.

¹⁰ 18 CFR 385.214(c)(1).

¹¹ 18 CFR 385.214(b)(3) and (d).

Tracking the Proceeding

Throughout the proceeding, additional information about the project will be available from the Commission's Office of External Affairs, at (866) 208-FERC, or on the FERC website at www.ferc.gov using the "eLibrary" link as described above. The eLibrary link also provides access to the texts of all formal documents issued by the Commission, such as orders, notices, and rulemakings.

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

Intervention Deadline: 5:00 p.m. Eastern Time on December 5, 2024.

Dated: November 14, 2024.

Carlos D. Clay,

Acting Deputy Secretary.

[FR Doc. 2024-27144 Filed 11-20-24; 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 exempt wholesale generator filings:

Docket Numbers: EG25-35-000.

Applicants: Hecate Energy Frye Solar, LLC.

Description: Hecate Energy Frye Solar, LLC submits Notice of Self-Certification of Exempt Wholesale Generator Status.

Filed Date: 11/15/24.

Accession Number: 20241115-5071.

Comment Date: 5 p.m. ET 12/6/24.

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

Docket Numbers: ER24-10-002.

Applicants: Idaho Power Company.

Description: Compliance filing: Order 2023-A Compliance Filing and Errata to be effective 1/1/2024.

Filed Date: 11/15/24.

Accession Number: 20241115-5113.

Comment Date: 5 p.m. ET 12/6/24.

Docket Numbers: ER24-3053-001.

Applicants: PJM Interconnection, L.L.C.

Description: Tariff Amendment: Request to Defer Action on WMPA SA

No. 7347, AG1-480; Docket No. ER24-3053-000 to be effective 12/31/9998.

Filed Date: 11/15/24.

Accession Number: 20241115-5069.

Comment Date: 5 p.m. ET 12/6/24.

Docket Numbers: ER24-3116-001.

Applicants: Duke Energy Business Services LLC, PJM Interconnection, L.L.C.

Description: Tariff Amendment: Duke Energy Business Services LLC submits tariff filing per 35.17(b); Duke Ohio submits Amendment to Pending Filing of SA No. 3141 to be effective 11/25/2024.

Filed Date: 11/15/24.

Accession Number: 20241115-5040.

Comment Date: 5 p.m. ET 12/6/24.

Docket Numbers: ER25-435-000.

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

Description: Informational Filing of 2024 Formula Rate Annual Update of Tri-State Generation and Transmission Association, Inc.

Filed Date: 11/13/24.

Accession Number: 20241113-5155.

Comment Date: 5 p.m. ET 12/4/24.

Docket Numbers: ER25-440-000.

Applicants: Florida Power & Light Company.

Description: § 205(d) Rate Filing: Rate Schedule No. 352 Seminole Tupelo DSS to be effective 1/14/2025.

Filed Date: 11/14/24.

Accession Number: 20241114-5233.

Comment Date: 5 p.m. ET 12/5/24.

Docket Numbers: ER25-441-000.

Applicants: Richland Township Solar II, LLC.

Description: Baseline eTariff Filing: Richland Township Solar II, LLC MBR Tariff to be effective 1/14/2025.

Filed Date: 11/14/24.

Accession Number: 20241114-5254.

Comment Date: 5 p.m. ET 12/5/24.

Docket Numbers: ER25-442-000.

Applicants: BCD 2024 Fund 4 II Lessee, LLC.

Description: Baseline eTariff Filing: BCD 2024 Fund 4 II Lessee, LLC MBR Tariff to be effective 1/14/2025.

Filed Date: 11/14/24.

Accession Number: 20241114-5255.

Comment Date: 5 p.m. ET 12/5/24.

Docket Numbers: ER25-443-000.

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

Description: § 205(d) Rate Filing: Initial Filing of Facility Use Agreements to be effective 1/14/2025.

Filed Date: 11/15/24.

Accession Number: 20241115-5032.

Comment Date: 5 p.m. ET 12/6/24.

Docket Numbers: ER25-444-000.

Applicants: PJM Interconnection, L.L.C.

Description: § 205(d) Rate Filing: Original GIA, SA No. 7399; Project Identifier No. AF2-233 to be effective 9/9/2024.

Filed Date: 11/15/24.

Accession Number: 20241115-5050.

Comment Date: 5 p.m. ET 12/6/24.

Docket Numbers: ER25-445-000.

Applicants: Southwest Power Pool, Inc.

Description: § 205(d) Rate Filing: Tri-State Generation and Transmission Association, Inc. Formula Rate Revisions to be effective 2/1/2025.

Filed Date: 11/15/24.

Accession Number: 20241115-5052.

Comment Date: 5 p.m. ET 12/6/24.

Docket Numbers: ER25-446-000.

Applicants: Midcontinent Independent System Operator, Inc.

Description: § 205(d) Rate Filing: 2024-11-15 SA 3670 Termination of ATC-Springfield Solar Farm E&P (J1171) to be effective 11/16/2024.

Filed Date: 11/15/24.

Accession Number: 20241115-5053.

Comment Date: 5 p.m. ET 12/6/24.

Docket Numbers: ER25-447-000.

Applicants: PJM Interconnection, L.L.C.

Description: § 205(d) Rate Filing: Amendment to WMPA, Service Agreement No. 6254; AD2-135 to be effective 1/15/2025.

Filed Date: 11/15/24.

Accession Number: 20241115-5061.

Comment Date: 5 p.m. ET 12/6/24.

Docket Numbers: ER25-448-000.

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

Description: § 205(d) Rate Filing: Ministerial Clean-Up Filing, Tariff Template Section to be effective 11/1/2022.

Filed Date: 11/15/24.

Accession Number: 20241115-5067.

Comment Date: 5 p.m. ET 12/6/24.

Docket Numbers: ER25-449-000.

Applicants: McFarland Storage C, LLC.

Description: § 205(d) Rate Filing: McFarland Storage C, LLC Shared Facilities Agreement to be effective 11/16/2024.

Filed Date: 11/15/24.

Accession Number: 20241115-5104.

Comment Date: 5 p.m. ET 12/6/24.

Docket Numbers: ER25-450-000.

Applicants: McFarland Storage C, LLC.

Description: § 205(d) Rate Filing: McFarland Storage C, LLC LGIA Co-Tenancy Agreement to be effective 11/16/2024.

Filed Date: 11/15/24.

Accession Number: 20241115-5112.

Comment Date: 5 p.m. ET 12/6/24.

Docket Numbers: ER25–451–000.
Applicants: 50LW 8me LLC.
Description: Baseline eTariff Filing: 50LW 8me LLC MBR Tariff to be effective 1/1/2025.
Filed Date: 11/15/24.
Accession Number: 20241115–5118.
Comment Date: 5 p.m. ET 12/6/24.
Docket Numbers: ER25–452–000.
Applicants: Tri-State Generation and Transmission Association, Inc.
Description: § 205(d) Rate Filing: Proposed Amendments to Transmission Formula Rate Template to be effective 2/1/2025.
Filed Date: 11/15/24.
Accession Number: 20241115–5121.
Comment Date: 5 p.m. ET 12/6/24.
Docket Numbers: ER25–453–000.
Applicants: PJM Interconnection, L.L.C.
Description: Tariff Amendment: Notice of Cancellation of ISA, SA No. 6475; Queue No. AE1–079 to be effective 1/15/2025.
Filed Date: 11/15/24.
Accession Number: 20241115–5125.
Comment Date: 5 p.m. ET 12/6/24.
Docket Numbers: ER25–454–000.
Applicants: PJM Interconnection, L.L.C.
Description: Tariff Amendment: Notice of Cancellation of ISA, SA No. 6454; Queue No. AE1–237 to be effective 1/15/2025.
Filed Date: 11/15/24.
Accession Number: 20241115–5128.
Comment Date: 5 p.m. ET 12/6/24.
Docket Numbers: ER25–455–000.
Applicants: PJM Interconnection, L.L.C.
Description: Tariff Amendment: Notice of Cancellation of ISA, SA No. 6239; Queue No. AE2–343 to be effective 1/15/2025.
Filed Date: 11/15/24.
Accession Number: 20241115–5130.
Comment Date: 5 p.m. ET 12/6/24.
Docket Numbers: ER25–456–000.
Applicants: ISO New England Inc.
Description: § 205(d) Rate Filing: Effective Date Revision for Day-Ahead Ancillary Services for ER24–275, ER24–2883 to be effective 2/28/2025.
Filed Date: 11/15/24.
Accession Number: 20241115–5136.
Comment Date: 5 p.m. ET 12/6/24.
Docket Numbers: ER25–457–000.
Applicants: Central Hudson Gas & Electric Corporation.
Description: § 205(d) Rate Filing: Revision to FERC Rate Schedule 202 to be effective 10/21/2024.
Filed Date: 11/15/24.
Accession Number: 20241115–5146.
Comment Date: 5 p.m. ET 12/6/24.
 Take notice that the Commission received the following PURPA 210(m)(3) filings:

Docket Numbers: QM25–1–000.
Applicants: NorthWestern Energy Public Service Corporation.
Description: Application of NorthWestern Energy Public Service Corporation to Terminate Its Mandatory Purchase Obligation under the Public Utility Regulatory Policies Act of 1978.
Filed Date: 11/15/24.
Accession Number: 20241115–5166.
Comment Date: 5 p.m. ET 12/6/24.
 The filings are accessible in the Commission's eLibrary system (<https://elibrary.ferc.gov/idmws/search/fercgensearch.asp>) by querying the docket number.
 Any person desiring to intervene, to protest, or to answer a complaint in any of the above proceedings must file in accordance with Rules 211, 214, or 206 of the Commission's Regulations (18 CFR 385.211, 385.214, or 385.206) on or before 5:00 p.m. Eastern time on the specified comment date. Protests may be considered, but intervention is necessary to become a party to the proceeding.

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

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

Dated: November 15, 2024.

Carlos D. Clay,

Acting Deputy Secretary.

[FR Doc. 2024–27277 Filed 11–20–24; 8:45 am]

BILLING CODE 6717–01–P

ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–OLEM–2023–0573; FRL–12422–01–OMS]

Information Collection Request Submitted to the Office of Management and Budget for Review and Approval; Comment Request; RCRA Section 3007 Survey for Container Reconditioning Facilities (New)

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: The Environmental Protection Agency (EPA) has submitted an information collection request (ICR), RCRA Section 3007 Survey for Drum Reconditioning Facilities (EPA ICR Number 2800.01, OMB Control Number 2050–NEW) to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act. This is a request for approval of a new collection. Public comments were previously requested via the **Federal Register** on April 24, 2024, during a 60-day comment period. This notice allows for an additional 30 days for public comments.

DATES: Comments may be submitted on or before December 23, 2024.

ADDRESSES: Submit your comments, referencing Docket ID Number EPA–HQ–OLEM–2023–0573, to EPA online using www.regulations.gov (our preferred method), 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.

Submit written comments and recommendations to OMB for the proposed information collection 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:

Patrick Wise, Office of Resource Conservation and Recovery, Materials Recovery and Waste Management Division (MC 5303P), Environmental

Protection Agency, 1200 Pennsylvania Ave. NW, Washington, DC 20460; telephone number: 202-566-0520; email address: wise.patrick@epa.gov.

SUPPLEMENTARY INFORMATION: This is a request for approval of a new collection. 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.

Public comments were previously requested via the **Federal Register** on April 24, 2024, during a 60-day comment period (89 FR 31199). This notice allows for an additional 30 days for public comments. 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>.

Abstract: This information collection will provide the EPA with necessary information about the operations of drum reconditioners and similar facilities that clean out and recondition used industrial containers. The Agency needs this information to determine whether future regulatory or non-regulatory action is needed to address environmental issues identified in the EPA's Drum Reconditioner Damage Case Report, published in September 2022. The data collected through this ICR will advance the Agency's mission of protecting human health and the environment by determining the current engineering controls and standard practices employed at these facilities, and by collecting additional information about the environmental impacts these facilities may have on surrounding communities and the wider environment. All information submitted to the agency in response to the ICR that is claimed as confidential will be managed in accordance with applicable laws and EPA's regulations governing treatment of confidential business information at 40 CFR part 2, subpart B. Any information determined to constitute a trade secret will be protected under 18 U.S.C. 1905.

Form Numbers: None.

Respondents/affected entities: This ICR applies to all facilities engaged in drum and/or industrial container reconditioning and/or recycling.

Respondent's obligation to respond: Mandatory under section 3007 of RCRA (42 U.S.C. 6927).

Estimated number of respondents: 216 (total).

Frequency of response: One-time response.

Total estimated burden: 1,333 hours (per year). Burden is defined at 5 CFR 1320.03(b).

Total estimated cost: \$136,000 (per year), which includes \$0 annualized capital or operation & maintenance costs.

Changes in the Estimates: Not applicable; this is a new ICR, so there is no previous burden.

Courtney Kerwin,

Director, Information Engagement Division.

[FR Doc. 2024-27311 Filed 11-20-24; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

[EPA-HQ-OLEM-2018-0690, FRL-12420-01-OMS]

Information Collection Request Submitted to OMB for Review and Approval; Comment Request; General Hazardous Waste Facility Standards (Renewal)

AGENCY: Environmental Protection Agency.

ACTION: Notice.

SUMMARY: The Environmental Protection Agency (EPA) has submitted an information collection request (ICR), General Facility Standards (EPA ICR Number 1571.14, OMB Control Number 2050-0120) to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act. This is a proposed extension of the ICR, which is currently approved through January 31, 2025. Public comments were previously requested via the **Federal Register** on May 13, 2024, during a 60-day comment period. This notice allows for an additional 30 days for public comments. **DATES:** Comments may be submitted on or before December 23, 2024.

ADDRESSES: Submit your comments, referencing Docket ID No. EPA-HQ-OLEM-2018-0690, to EPA online using www.regulations.gov (our preferred method), or by mail to: EPA Docket Center, U.S. Environmental Protection Agency, Mail Code 28221T, 1200 Pennsylvania Avenue 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.

Submit written comments and recommendations to OMB for the proposed information collection 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:

Peggy Vyas, Environmental Protection Agency, 1200 Pennsylvania Ave. NW, Washington, DC 20460; telephone number: 202-566-0453; vyas.peggy@epa.gov.

SUPPLEMENTARY INFORMATION: This is a proposed extension of the ICR, which is currently approved through January 31, 2025. 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.

Public comments were previously requested via the **Federal Register** on May 13, 2024 during a 60-day comment period (89 FR 41433). This notice allows for an additional 30 days for public comments. 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>.

Abstract: Section 3004 of the Resource Conservation and Recovery Act (RCRA), as amended, requires the EPA to develop standards for hazardous waste treatment, storage, and disposal facilities (TSDFs) as may be necessary to protect human health and the environment. Subsections 3004(a)(1), (3), (4), (5), and (6) specify that these standards include, but not be limited to, the following requirements:

- Maintaining records of all hazardous wastes identified or listed under subtitle C that are treated, stored, or disposed of, and the manner in which such wastes were treated, stored, or disposed of;
- Operating methods, techniques, and practices for treatment, storage, or disposal of hazardous waste;

- Location, design, and construction of such hazardous waste treatment, disposal, or storage facilities;

- Contingency plans for effective action to minimize unanticipated damage from any treatment, storage, or disposal of any such hazardous waste; and

- Maintaining or operating such facilities and requiring such additional qualifications as to ownership, continuity of operation, training for personnel, and financial responsibility as may be necessary or desirable.

The regulations implementing these requirements are codified in 40 CFR parts 264 and 265. The collection of this information enables the EPA to properly determine whether owners/operators or hazardous waste treatment, storage, and disposal facilities meet the requirements of Section 3004(a) of RCRA.

Form Numbers: None.

Respondents/affected entities: Business and other for-profit, as well as State, Local, and Tribal governments.

Respondent's obligation to respond: Mandatory (RCRA section 3004).

Estimated number of respondents: 1,080.

Frequency of response: On occasion.

Total estimated burden: 548,719 hours per year. Burden is defined at 5 CFR 1320.03(b).

Total estimated cost: \$37,660,196 (per year), which includes \$310,045 annualized capital or operation & maintenance costs.

Changes in the Estimates: There is decrease of 9,322 hours with this renewal. This decrease is due to a decrease in the overall number of facilities. This corresponds to an increase in the number of facilities in post-closure.

Courtney Kerwin,

Director, Information Engagement Division.

[FR Doc. 2024-27308 Filed 11-20-24; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

[EPA-HQ-OLEM-2024-0360; FRL 12146-02-OLEM]

Interim Framework for Advancing Consideration of Cumulative Impacts; Request for Comments

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: The Environmental Protection Agency (EPA) is announcing a 90-day public comment period on the newly developed document *Interim*

Framework for Advancing Consideration of Cumulative Impacts. The framework document is available at <https://www.epa.gov/cumulative-impacts> and in the docket (Docket ID No. EPA-HQ-OLEM-2024-0360). The Framework is intended to provide Environmental Protection Agency (EPA) programs with a foundation for developing approaches to incorporate analysis and consideration of cumulative impacts into their work, with the goal of achieving results that improve health and quality of life in America's communities.

DATES: Comments must be received on or before February 19, 2025.

ADDRESSES: You may send comments, identified by Docket ID No. EPA-HQ-OLEM-2024-0360 by the following method:

- *Federal eRulemaking Portal:* <https://www.regulations.gov/>. Follow the online instructions for submitting comments.

Instructions: All submissions received must include the Docket ID No. for this action. Comments received may be posted without change to <https://www.regulations.gov/>, including any personal information provided.

FOR FURTHER INFORMATION CONTACT: Charles Lee, Office of Environmental Justice and External Civil Rights (2201A), Environmental Protection Agency, 1200 Pennsylvania Ave NW, Washington DC 20460; telephone number: 202-564-2597; email address: Lee.Charles@epa.gov.

SUPPLEMENTARY INFORMATION: For EPA programs and regions, this newly developed document, *Interim Framework for Advancing Consideration of Cumulative Impacts* provides a shared reference point as they determine when and how to analyze and consider cumulative impacts. This framework is not intended to provide detailed instructions on how to consider cumulative impacts in specific contexts, nor does it set the expectation that the principles and approaches to considering cumulative impacts will be applied in every programmatic context. The EPA's programs will incorporate the Framework into their processes and programs, as appropriate, feasible, and consistent with applicable law, in ways that reflect programmatic and context-specific needs. Public input will be considered for potential incorporation into the document by the EPA for this non-regulatory action. Public input will also inform the EPA's expanding knowledge along with results from scientific research and program evaluation. The Interim Cumulative

Impacts Framework can be found in the docket and at <https://www.epa.gov/cumulative-impacts/interim-framework-advancing-consideration-cumulative-impacts>.

Barry N. Breen,

Principal Deputy Assistant Administrator.

[FR Doc. 2024-27063 Filed 11-20-24; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

[EPA-HQ-OLEM-2016-0465, FRL-12421-01-OMS]

Information Collection Request Submitted to OMB for Review and Approval; Comment Request; Information Requirements for Boilers and Industrial Furnaces (Renewal)

AGENCY: Environmental Protection Agency

ACTION: Notice.

SUMMARY: The Environmental Protection Agency (EPA) has submitted an information collection request (ICR), Information Requirements for Boilers and Industrial Furnaces, EPA ICR Number 1361.19, OMB Control Number 2050-0073) to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act. This is a proposed extension of the ICR, which is currently approved through January 31, 2025. Public comments were previously requested via the **Federal Register** on May 13, 2024 during a 60-day comment period. This notice allows for an additional 30 days for public comments.

DATES: Comments may be submitted on or before December 23, 2024.

ADDRESSES: Submit your comments, referencing Docket ID No. EPA-HQ-OLEM-2016-0465, to EPA online using www.regulations.gov (our preferred method), or by mail to: EPA Docket Center, U.S. Environmental Protection Agency, Mail Code 28221T, 1200 Pennsylvania Avenue 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.

Submit written comments and recommendations to OMB for the proposed information collection 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:

Peggy Vyas, Environmental Protection Agency, 1200 Pennsylvania Ave. NW, Washington, DC 20460; telephone number: 202–566–0453; vyas.peggy@epa.gov.

SUPPLEMENTARY INFORMATION: This is a proposed extension of the ICR, which is currently approved through January 31, 2025. 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.

Public comments were previously requested via the **Federal Register** on May 13, 2024 during a 60-day comment period (89 FR 41432). This notice allows for an additional 30 days for public comments. 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>.

Abstract: EPA regulates the burning of hazardous waste in boilers, incinerators, and industrial furnaces (BIFs) under 40 CFR parts 63, 264, 265, 266 and 270. This ICR describes the paperwork requirements that apply to the owners and operators of BIFs. This includes the general facility requirements at 40 CFR parts 264 and 265, subparts B thru H; the requirements applicable to BIF units at 40 CFR part 266; and the RCRA Part B permit application and modification requirements at 40 CFR part 270.

Form Numbers: None.

Respondents/affected entities: Business or other for-profit.

Respondent’s obligation to respond: Mandatory (per 40 CFR 264, 265, and 270).

Estimated number of respondents: 36.

Frequency of response: On occasion.

Total estimated burden: 39,758 hours per year. Burden is defined at 5 CFR 1320.03(b).

Total estimated cost: \$0 in annualized capital/startup, and \$2,823,121 in annualized operation & maintenance costs.

Changes in the Estimates: There is no change in burden hours associated with

this renewal and the O&M costs have stayed the same.

Courtney Kerwin,

Director, Information Engagement Division.

[FR Doc. 2024–27313 Filed 11–20–24; 8:45 am]

BILLING CODE 6560–50–P

FEDERAL RESERVE SYSTEM

Change in Bank Control Notices; Acquisitions of Shares of a Bank or Bank Holding Company

The notificants listed below have applied under the Change in Bank Control Act (Act) (12 U.S.C. 1817(j)) and § 225.41 of the Board’s Regulation Y (12 CFR 225.41) to acquire shares of a bank or bank holding company. The factors that are considered in acting on the applications are set forth in paragraph 7 of the Act (12 U.S.C. 1817(j)(7)).

The public portions of the applications listed below, as well as other related filings required by the Board, if any, are available for immediate inspection at the Federal Reserve Bank(s) indicated below and at the offices of the Board of Governors. This information may also be obtained on an expedited basis, upon request, by contacting the appropriate Federal Reserve Bank and from the Board’s Freedom of Information Office at <https://www.federalreserve.gov/foia/request.htm>. Interested persons may express their views in writing on the standards enumerated in paragraph 7 of the Act.

Comments received are subject to public disclosure. In general, comments received will be made available without change and will not be modified to remove personal or business information including confidential, contact, or other identifying information. Comments should not include any information such as confidential information that would not be appropriate for public disclosure.

Comments regarding each of these applications must be received at the Reserve Bank indicated or the offices of the Board of Governors, Ann E. Misback, Secretary of the Board, 20th Street and Constitution Avenue, NW, Washington DC 20551–0001, not later than December 6, 2024.

A. Federal Reserve Bank of Chicago (Colette A. Fried, Assistant Vice President) 230 South LaSalle Street, Chicago, Illinois 60690–1414.

Comments can also be sent electronically to

Comments.applications@chi.frb.org:

1. *J. Bradley Barr, individually and as trustee of the J. Bradley Barr Trust and*

the Drew M. Clanton Trust, all of Gold Canyon, Arizona; Drew M. Clanton, Lincoln, Nebraska; Noah Barr, Waukegan, Iowa; and Luke Barr, Gold Canyon, Arizona; to form the Barr Family Control Group, a group acting in concert, to retain voting shares of Bank Iowa Corporation, and thereby indirectly retain voting shares of Bank Iowa, both of West Des Moines, Iowa.

B. Federal Reserve Bank of Minneapolis (Mark Rauzi, Vice President), 90 Hennepin Avenue, Minneapolis, Minnesota 55480–0291. Comments can also be sent electronically to MA@mpls.frb.org:

1. *The Estate of Leon Langemeier (the Estate) and Bart Langemeier, individually and as personal representative of the Estate, both of Red Lodge, Montana;* each to retain voting shares of The Bridger Company, and thereby indirectly retain voting shares of Bank of Bridger, National Association, both of Bridger, Montana. Additionally, the Estate to join the Langemeier Family Shareholder Group, a group acting in concert.

Board of Governors of the Federal Reserve System.

Michele Taylor Fennell,

Associate Secretary of the Board.

[FR Doc. 2024–27324 Filed 11–20–24; 8:45 am]

BILLING CODE 6210–01–P

DEPARTMENT OF DEFENSE

GENERAL SERVICES ADMINISTRATION

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

[OMB Control No. 9000–0059; Docket No. 2024–0053; Sequence No. 16]

Information Collection; North Carolina Sales Tax Certification

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

ACTION: Notice and request for comments.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995, and the Office of Management and Budget (OMB) regulations, DoD, GSA, and NASA invite the public to comment on an extension concerning North Carolina sales tax certification. DoD, GSA, and NASA invite comments on: whether the proposed collection of information is necessary for the proper performance of the functions of Federal Government acquisitions, including whether the

information will have practical utility; the accuracy of the estimate of the burden of the proposed information collection; ways to enhance the quality, utility, and clarity of the information to be collected; and ways to minimize the burden of the information collection on respondents, including the use of automated collection techniques or other forms of information technology. OMB has approved this information collection for use through May 31, 2025. DoD, GSA, and NASA propose that OMB extend its approval for use for three additional years beyond the current expiration date.

DATES: DoD, GSA, and NASA will consider all comments received by January 21, 2025.

ADDRESSES: DoD, GSA, and NASA invite interested persons to submit comments on this collection through <https://www.regulations.gov> and follow the instructions on the site. This website provides the ability to type short comments directly into the comment field or attach a file for lengthier comments. If there are difficulties submitting comments, contact the GSA Regulatory Secretariat Division at 202–501–4755 or GSARegSec@gsa.gov.

Instructions: All items submitted must cite OMB Control No. 9000–0059, North Carolina Sales Tax Certification. Comments received generally will be posted without change to <https://www.regulations.gov>, including any personal and/or business confidential information provided. To confirm receipt of your comment(s), please check www.regulations.gov, approximately two-to-three days after submission to verify posting.

FOR FURTHER INFORMATION CONTACT: Zenaida Delgado, Procurement Analyst, at telephone 202–969–7207, or zenaida.delgado@gsa.gov.

SUPPLEMENTARY INFORMATION:

A. OMB Control Number, Title, and Any Associated Form(s)

9000–0059, North Carolina Sales Tax Certification.

B. Need and Uses

This clearance covers the information that contractors must submit to comply with the requirements of the Federal Acquisition Regulation clause at 52.229–2, North Carolina State and Local Sales and Use Tax. This clause requires contractors for construction or vessel repair to be performed in North Carolina to provide certified statements of the cost of the property purchased from each vendor and the amount of sales or use taxes paid. The North Carolina Sales and Use Tax Act

authorizes counties and incorporated cities and towns, to obtain each year from the Commissioner of Revenue of the State of North Carolina, a refund of sales and use taxes indirectly paid on building materials, supplies, fixtures, and equipment that become a part of or are annexed to any building or structure in North Carolina. However, to substantiate a refund claim for sales or use taxes paid on purchases of building materials, supplies, fixtures, or equipment by a contractor, the Government must secure from the contractor certified statements setting forth the cost of the property purchased from each vendor and the amount of sales or use taxes paid. Similar certified statements by subcontractors must be obtained by the general contractor and furnished to the Government.

The Government will use the information as evidence to establish exemption from State and local taxes.

C. Annual Burden

Respondents: 182.

Total Annual Responses: 182.

Total Burden Hours: 227.5.

Obtaining Copies: Requesters may obtain a copy of the information collection documents from the GSA Regulatory Secretariat Division by calling 202–501–4755 or emailing GSARegSec@gsa.gov. Please cite OMB Control No. 9000–0059, North Carolina Sales Tax Certification.

Janet Fry,

*Director, Federal Acquisition Policy Division,
Office of Governmentwide Acquisition Policy,
Office of Acquisition Policy, Office of
Governmentwide Policy.*

[FR Doc. 2024–27315 Filed 11–20–24; 8:45 am]

BILLING CODE 6820–EP–P

DEPARTMENT OF DEFENSE

**GENERAL SERVICES
ADMINISTRATION**

**NATIONAL AERONAUTICS AND
SPACE ADMINISTRATION**

[OMB Control No. 9000–0048; Docket No. 2024–0053; Sequence No. 15]

**Information Collection; Certain Federal
Acquisition Regulation Part 15
Requirements**

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

ACTION: Notice and request for comments.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995, and

the Office of Management and Budget (OMB) regulations, DoD, GSA, and NASA invite the public to comment on an extension concerning certain Federal Acquisition Regulation (FAR) part 15 requirements. DoD, GSA, and NASA invite comments on: whether the proposed collection of information is necessary for the proper performance of the functions of Federal Government acquisitions, including whether the information will have practical utility; the accuracy of the estimate of the burden of the proposed information collection; ways to enhance the quality, utility, and clarity of the information to be collected; and ways to minimize the burden of the information collection on respondents, including the use of automated collection techniques or other forms of information technology. OMB has approved this information collection for use through March 31, 2025. DoD, GSA, and NASA propose that OMB extend its approval for use for three additional years beyond the current expiration date.

DATES: DoD, GSA, and NASA will consider all comments received by January 21, 2025.

ADDRESSES: DoD, GSA, and NASA invite interested persons to submit comments on this collection through <https://www.regulations.gov> and follow the instructions on the site. This website provides the ability to type short comments directly into the comment field or attach a file for lengthier comments. If there are difficulties submitting comments, contact the GSA Regulatory Secretariat Division at 202–501–4755 or GSARegSec@gsa.gov.

Instructions: All items submitted must cite OMB Control No. 9000–0048, Certain Federal Acquisition Regulation Part 15 Requirements. Comments received generally will be posted without change to <https://www.regulations.gov>, including any personal and/or business confidential information provided. To confirm receipt of your comment(s), please check www.regulations.gov, approximately two-to-three days after submission to verify posting.

FOR FURTHER INFORMATION CONTACT: Zenaida Delgado, Procurement Analyst, at telephone 202–969–7207, or zenaida.delgado@gsa.gov.

SUPPLEMENTARY INFORMATION:

A. OMB Control Number, Title, and Any Associated Form(s)

9000–0048, Certain Federal Acquisition Regulation Part 15 Requirements.

B. Need and Uses

This clearance covers the information that offerors and contractors must submit to comply with the following FAR requirements:

1. FAR 15.407–2(e), Make-or-buy programs. When prospective contractors are required to submit proposed make-or-buy program plans for negotiated acquisitions, paragraph (e) requires the following information in their proposal:

(a) A description of each major item or work effort;

(b) Categorization of each major item or work effort as “must make,” “must buy,” or “can either make or buy”;

(c) For each item or work effort categorized as “can either make or buy,” a proposal either to “make” or to “buy”;

(d) Reasons for categorizing items and work efforts as “must make” or “must buy,” and proposing to “make” or to “buy” those categorized as “can either make or buy”;

(e) Designation of the plant or division proposed to make each item or perform each work effort, and a statement as to whether the existing or proposed new facility is in or near a labor surplus area;

(f) Identification of proposed subcontractors, if known, and their location and size status;

(g) Any recommendations to defer make-or-buy decisions when categorization of some items or work efforts is impracticable at the time of submission; and

(h) Any other information the contracting officer requires in order to evaluate the program.

2. FAR 52.215–1(c)(2)(iv)—Authorized Negotiators. This provision requires firms offering supplies or services to the Government under negotiated solicitations to provide the names, titles, and telephone and facsimile numbers (and electronic addresses if available) of authorized negotiators to assure that discussions are held with authorized individuals.

Contracting officers use this information during contract negotiations and it becomes part of the official contract file.

3. FAR 52.215–9, Changes or Additions to Make-or-Buy Program. This clause requires the contractor to submit, in writing, for the contracting officer’s advance approval a notification and justification of any proposed change in the make-or-buy program incorporated in the contract.

Contracting officers use the information collected regarding make-or-buy programs at FAR 15.407–2(e) and 52.215–9 to ensure negotiation of reasonable contract prices, satisfactory

performance, or implementation of socioeconomic policies.

4. FAR 52.215–14—Integrity of Unit Prices. This clause requires offerors and contractors under negotiated solicitations and contracts to identify those supplies which they will not manufacture or to which they will not contribute significant value, if requested by the contracting officer or when contracting without adequate price competition.

When a contract action is priced on the basis of a cost estimate, contracting officers use this information to determine whether the intrinsic value of an item has been distorted through allocation of overhead costs and whether such items should be considered for breakout.

5. FAR 52.215–19—Notification of Ownership Changes. This clause requires contractors to notify the administrative contracting officer when the contractor becomes aware that a change in its ownership has occurred, or is certain to occur, that could result in changes in the valuation of its capitalized assets in the accounting records.

The notification of ownership change enables the Government to adequately administer the cost principle at FAR 31.205–52, Asset valuations resulting from business combinations, which addresses the allowability of certain costs resulting from asset valuations following business combinations.

6. FAR 52.215–22, Limitations on Pass-Through Charges—Identification of Subcontract Effort. This provision requires offerors submitting a proposal for a contract, task order, or delivery order to provide the following information with their proposal:

(a) The total cost of the work to be performed by the offeror, and the total cost of the work to be performed by each subcontractor;

(b) If the offeror intends to subcontract more than 70 percent of the total cost of work to be performed, the amount of the offeror’s indirect costs and profit/fee applicable to the work to be performed by the subcontractor(s), and a description of the value added by the offeror as related to the work to be performed by the subcontractor(s); and

(c) If any subcontractor proposed intends to subcontract to a lower-tier subcontractor more than 70 percent of the total cost of work to be performed, the amount of the subcontractor’s indirect costs and profit/fee applicable to the work to be performed by the lower-tier subcontractor(s) and a description of the added value provided by the subcontractor as related to the

work to be performed by the lower-tier subcontractor(s).

7. FAR 52.215–23, Limitations on Pass-Through Charges. This clause requires contractors to provide a description of the value added by the contractor or subcontractor, as applicable, as related to the subcontract effort if the effort changes from the amount identified in the proposal such that it exceeds 70 percent of the total cost of work to be performed.

Contracting officers use the information collected at FAR 52.215–22 and 52.215–23 to assess the value added by a contractor or subcontractor in relation to proposed, billed, or claimed indirect costs or profit/fee on work performed by a subcontractor. This information is required to ensure that pass-through charges under contracts and subcontracts are not excessive.

C. Annual Burden

Respondents: 122,097.

Total Annual Responses: 139,074.

Total Burden Hours: 43,027 (43,022 reporting hours + 5 recordkeeping hours).

Obtaining Copies: Requesters may obtain a copy of the information collection documents from the GSA Regulatory Secretariat Division by calling 202–501–4755 or emailing GSARegSec@gsa.gov. Please cite OMB Control No. 9000–0048, Certain Federal Acquisition Regulation Part 15 Requirements.

Janet Fry,

*Director, Federal Acquisition Policy Division,
Office of Governmentwide Acquisition Policy,
Office of Acquisition Policy, Office of
Governmentwide Policy.*

[FR Doc. 2024–27314 Filed 11–20–24; 8:45 am]

BILLING CODE 6820–EP–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. FDA–2016–D–2565]

510(k) Third Party Review Program and Third Party Emergency Use Authorization Review; Guidance for Industry, Food and Drug Administration Staff, and Third Party Review Organizations; 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 a final guidance entitled “510(k) Third Party

Review Program and Third Party Emergency Use Authorization (EUA) Review.” This guidance provides FDA’s current thinking regarding the 510(k) Third Party (3P510k) Review Program and review of EUA requests by a third party review organization (3PEUA review). The 3P510k Review Program and 3PEUA review create an alternative process for manufacturers to seek review of 510(k) submissions and EUA requests to assist FDA in reviewing in a timely manner.

DATES: The announcement of the guidance is published in the **Federal Register** on November 21, 2024.

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 Docket No. FDA–2016–D–2565 for “510(k) Third Party Review Program and Third Party Emergency Use Authorization (EUA) Review.” Received comments will be placed in the docket 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, 240–402–7500.

- **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, 240–402–7500.

You may submit comments on any guidance at any time (see 21 CFR 10.115(g)(5)).

An electronic copy of the guidance document is available for download from the internet. See the **SUPPLEMENTARY INFORMATION** section for information on electronic access to the guidance. Submit written requests for a

single hard copy of the guidance document entitled “510(k) Third Party Review Program and Third Party Emergency Use Authorization (EUA) Review” to the Office of Policy, Center for Devices and Radiological Health, Food and Drug Administration, 10903 New Hampshire Ave., Bldg. 66, Rm. 5431, Silver Spring, MD 20993–0002. Send one self-addressed adhesive label to assist that office in processing your request.

FOR FURTHER INFORMATION CONTACT:

Joshua Nipper, Center for Devices and Radiological Health, Food and Drug Administration, 10903 New Hampshire Ave., Bldg. 66, Rm. 2438, Silver Spring, MD 20993–0002, 301–796–6524.

SUPPLEMENTARY INFORMATION:

I. Background

FDA is announcing the availability of the “510(k) Third Party Review Program and Third Party Emergency Use Authorization (EUA) Review” guidance. This guidance updates the previously issued “510(k) Third Party Review Program” guidance to further clarify the 3P510k Review Program and outline how FDA may use third party review organizations to conduct an initial review of EUA requests for all devices, including in vitro diagnostics, under section 564 of the Federal Food, Drug, and Cosmetic Act (FD&C Act) (21 U.S.C. 360bbb–3) and consistent with section 565(i) of the FD&C Act (21 U.S.C. 360bbb–4(i)).

This guidance distinguishes FDA’s expectations for the 3P510k Review Program and for 3PEUA review; describes the factors FDA will use in determining device type eligibility for review by 3P510k Review Organizations; describes FDA’s expectations for third party review organizations when conducting substantial reviews of 510(k) submissions and EUA requests; outlines FDA’s process for the recognition, rerecognition, suspension, and withdrawal of recognition for 3P510k Review Organizations; and describes the expectations regarding compensation to third party review organizations. This guidance also outlines FDA’s current thinking on leveraging the International Medical Device Regulators Forum’s documents for the 3P510k Review Program. This guidance supersedes “510(k) Third Party Review Program; Guidance for Industry, Food and Drug Administration Staff, and Third Party Review Organizations” issued on March 12, 2020 (85 FR 14489).

A notice of availability of the draft guidance appeared in the **Federal Register** of December 21, 2023 (88 FR

88395). FDA considered comments received and revised the guidance as appropriate in response to the comments, including clarifying the relationship between 510k Review Organizations and EUA Third Party Review Organizations, and conflicts of interest requirements for personnel of Third Party Review Organizations.

This guidance is being issued consistent with FDA’s good guidance practices regulation (21 CFR 10.115). The guidance represents the current thinking of FDA on 510(k) Third Party Review Program and Third Party Emergency Use Authorization (EUA) Review. It does not establish any rights for any person and is not binding on FDA or the public. You can use an alternative approach if it satisfies the

requirements of the applicable statutes and regulations.

II. Electronic Access

Persons interested in obtaining a copy of the guidance may do so by downloading an electronic copy from the internet. A search capability for all Center for Devices and Radiological Health guidance documents is available at <https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance/guidance-documents-medical-devices-and-radiation-emitting-products>. This guidance document is also available at <https://www.regulations.gov> and <https://www.fda.gov/regulatory-information/search-fda-guidance-documents>. Persons unable to download an electronic copy of “510(k) Third Party Review Program and Third Party

Emergency Use Authorization (EUA) Review” may send an email request to CDRH-Guidance@fda.hhs.gov to receive an electronic copy of the document. Please use the document number GUI01500013 and complete title to identify the guidance you are requesting.

III. Paperwork Reduction Act of 1995

While this guidance contains no new collection of information, it does refer to previously approved FDA collections of information. The previously approved collections of information are subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3501–3521). The collections of information in the following table have been approved by OMB:

21 CFR part; guidance; or FDA form	Topic	OMB control No.
“510(k) Third Party Review Program”	510(k) Third Party Review Program	0910–0375
“Requests for Feedback on Medical Device Submissions: The Pre-Submission Program and Meetings with Food and Drug Administration Staff”.	Q-submissions	0910–0756
“Emergency Use Authorization of Medical Products and Related Authorities; Guidance for Industry and Other Stakeholders”.	Emergency Use Authorization	0910–0595
“Guidance for Industry and Food and Drug Administration Staff; Center for Devices and Radiological Health Appeals Processes”.	CDRH Appeals Processes	0910–0738

Dated: November 12, 2024.
Kimberlee Trzeciak,
Deputy Commissioner for Policy, Legislation, and International Affairs.
[FR Doc. 2024–27085 Filed 11–20–24; 8:45 am]
BILLING CODE 4164–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration
[Docket No. FDA–2024–N–3609]

Development of an Enhanced Systematic Process for the Food and Drug Administration’s Post-Market Assessment of Chemicals in Food; Public Meeting; Request for Comments; Extension of Comment Period

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice of public meeting; request for comments; extension of comment period.

SUMMARY: The Food and Drug Administration (FDA or we) is extending the comment period for the notice of public meeting; request for

comments, published in the **Federal Register** of August 12, 2024. In that notice, FDA announced a public meeting entitled “Development of an Enhanced Systematic Process for the Food and Drug Administration’s Post-Market Assessment of Chemicals in Food.” FDA hosted the public meeting on September 25, 2024, and is now extending the comment period to allow interested persons additional time to submit comments about approaches to systematic post-market assessment of chemicals in food.

DATES: FDA is extending the comment period announced in the notice of public meeting; request for comments published August 12, 2024 (89 FR 65633). Either electronic or written comments must be submitted by January 21, 2025.

ADDRESSES: You may submit comments as follows. Please note that late, untimely filed comments will not be considered. The <https://www.regulations.gov> electronic filing system will accept comments until 11:59 p.m. Eastern Time at the end of January 21, 2025. Comments received by mail/hand delivery/courier (for written/paper submissions) will be considered

timely if they are received on or before that date.

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 Docket No. FDA-2024-N-3609 for “Development of an Enhanced Systematic Process for the Food and Drug Administration’s Post-Market Assessment of Chemicals in Food; Public Meeting; Extension of the Comment Period.” Received comments, those filed in a timely manner (see **ADDRESSES**), will be placed in the docket 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, 240-402-7500.

- **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.” We will review this copy, including the claimed confidential information, in our 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>.

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, 240-402-7500.

FOR FURTHER INFORMATION CONTACT: Keronica Richardson, Office of Policy, Regulations, and Information, Human Foods Program, Food and Drug Administration, 5001 Campus Dr., College Park, MD 20740, 240-402-2371.

SUPPLEMENTARY INFORMATION: In the **Federal Register** of August 12, 2024, we published a notice announcing a public meeting entitled “Development of an Enhanced Systematic Process for FDA’s Post-Market Assessment of Chemicals in Food.” The notice explained that the public meeting would address a variety of topics related to development of an enhanced systematic process for FDA’s post-market assessment of chemicals in food, including:

- Principles for the post-market assessment process,
- Steps in the post-market assessment process,
- Prioritizing chemicals for post-market assessment, and
- Engaging stakeholders throughout the post-market assessment process (89 FR 65633 at 65635). We also provided an opportunity for public comment during the meeting. The docket for public comments was scheduled to close on December 6, 2024.

On September 25, 2024, we hosted the public meeting at the FDA White Oak Campus. A transcript of the meeting is available at <https://www.fda.gov/media/182622/download?attachment>.

We have received a request for a 60-day extension of the comment period. In general, the request explained that trade associations representing various parts of the food supply chain faced significant challenges to providing comment by December 6, 2024, and noted that the comment period overlapped with the holiday season and other FDA initiatives.

We have considered the requests and are extending the comment period until January 21, 2025. We believe that the extension will allow adequate time for interested persons to submit comments.

Dated: November 13, 2024.

Kimberlee Trzeciak,

Deputy Commissioner for Policy, Legislation, and International Affairs.

[FR Doc. 2024-27289 Filed 11-20-24; 8:45 am]

BILLING CODE 4164-01-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Health Resources and Services Administration

Inclusion of Terrain Factors in the Definition of Rural Area for Federal Office of Rural Health Policy Grants

AGENCY: Health Resources and Services Administration (HRSA), Department of Health and Human Services.

ACTION: Final notice.

SUMMARY: HRSA’s Federal Office of Rural Health Policy (FORHP) is modifying the definition of “rural area” for the purposes of determining geographic eligibility to apply for or receive services funded by FORHP’s rural health grants. With a data-driven methodology, this update to the definition of rural area will integrate the new Road Ruggedness Score (RRS) released in 2023 by the Economic Research Service of the U.S. Department of Agriculture. This notice responds to comments received on proposed modifications to HRSA’s FORHP definition published in the **Federal Register** on April 26, 2024.

DATES: All changes will go into effect as of November 21, 2024, and will apply to FORHP’s Notices of Funding Opportunity released in Fiscal Year (FY) 2025 and future years.

FOR FURTHER INFORMATION CONTACT: Greta Stuhlsatz, Statistician, Policy Research Division, FORHP, HRSA, 5600 Fishers Lane, Rockville, Maryland 20857; (301) 443-0835 and ruralpolicy@hrsa.gov.

SUPPLEMENTARY INFORMATION: This notice updates the definition of rural area used for HRSA’s FORHP rural health grants programs. HRSA published a notice in the **Federal Register** on April 26, 2024, seeking public comment on proposed modifications to the definition of rural area for the purposes of determining eligibility for its rural health grant programs (89 FR 32451). HRSA proposed a data-driven methodology to update the definition of rural area by integrating the new RRS released in 2023 by the Economic Research Service of the U.S. Department of Agriculture. The RRS characterizes topographic variability, or ruggedness, of roads. A

technical clarification was also proposed in response to terminology changes by the U.S. Census Bureau. This notice includes a summary of responses to the public comments received.

Background

In FY 2024, HRSA's FORHP considered the following areas to be rural for purposes of FORHP's grant programs:

- (1) All non-metro counties,
- (2) All outlying metro counties without an Urbanized Area,
- (3) All metro census tracts with RUCA codes 4–10, and
- (4) Metro census tracts of at least 400 square miles in area with population density of 35 or less per square mile with RUCA codes 2–3.

In the **Federal Register** notice published April 26, 2024, HRSA proposed modifying its existing FORHP rural definition by adding census tracts of at least 20 square miles in area in metropolitan counties with RRS 5 (highly rugged) and RUCA code 2 or 3 to FORHP's definition of rural area. Only census tracts that meet all criteria—RRS 5 and RUCA 2 or 3 with an area of 20 or more square miles—would be newly eligible under the proposed update.

In addition to the proposed rugged terrain update, in HRSA's notice, FORHP provided a technical clarification in response to the U.S. Census Bureau's 2020 terminology changes removing urban clusters and urbanized areas. FORHP's FY 2024 definition excludes outlying metropolitan counties with an *Urbanized Area* while the U.S. Census Bureau no longer uses this terminology. To retain the distinction in FORHP's definition of rural area between urban areas with population of 50,000 or more and urban areas with a population less than 50,000, FORHP will identify and categorize urban areas based on population size. With this technical clarification, HRSA is updating FORHP's rural definition by striking the phrase "outlying metropolitan counties without an urbanized area." and replacing it with "outlying metropolitan counties with no population from an urban area of 50,000 or more people."

Summary of Comments and Responses

HRSA received 27 comments in response to the notice published April 26, 2024. Comments responded to both the proposed expansion of the definition of rural area and the technical clarification following the removal of urbanized areas and urban clusters by the U.S. Census Bureau. Most of the

comments received (26) were in full or partial support of either or both components of the change—the technical clarification and the expanded eligibility criteria to include rugged terrain factors. One comment was out of scope of this proposal.

Technical Clarification in Response to Census Terminology Changes

Comment: All comments that referenced the technical clarification to retain the distinction between urban areas with population over and under 50,000 in FORHP's definition of rural area were supportive of changing FORHP's definition to remove reference to Urbanized Areas and instead categorize urban areas based on population size.

Response: We thank the commenters for their support. After consideration of the comments received, we are implementing the technical clarification as proposed.

Adding Rugged Terrain Data to the Definition of Rural Area

Many comments were in favor of expanding the definition to include rugged terrain using the RRS developed by the Economic Research Service. We thank the commenters for their support.

Some comments suggested modifications or alternatives to the proposed change.

Comment: Some commenters suggested expanding the definition by including small counties with a high density of census tracts that are RRS 3, 4, and 5. Further, commenters suggested we specifically include all census tracts in a county that are greater than 20 square miles in area with RUCA codes of 2 or 3 if the county has 12 or fewer census tracts and over 80 percent of census tracts within the county are RRS 3–5.

Response: Including census tracts greater than 20 square miles with RUCA of 2–3 within metropolitan counties is consistent with the proposed change. The additional county-level criteria suggested—limiting the expansion to only counties with 12 or fewer census tracts and calculating the percentage of tracts per county with RRS 3 through 5—would not achieve the objective of the programs or be operationally feasible for the purposes of grantmaking. First, aggregating measures defined at the census tract level to create a single county-level estimate would not further FORHP's goal of identifying rural census tracts within metropolitan counties using the individual characteristics and data from those tracts to understand local conditions. Second, this proposal could introduce

state and regional inconsistencies because county sizes vary widely across the United States. In effect, this proposal would treat counties and states differently based primarily on their geographic size. Finally, the complexity of the proposed calculation is inconsistent with FORHP's intent to use clear, consistent, and data-driven criteria that can be easily understood and applied nationwide. For these reasons, we are finalizing the language as proposed.

Comment: A commenter suggested including census tracts with RRS 3 (slightly rugged) and RRS 4 (moderately rugged) in addition to the proposed RRS 5 tracts in the expanded rural definition.

Response: Including census tracts with RRS 5 that meet the proposed criteria for size and RUCA code adds 84 census tracts and 305,000 people. RRS 3 and RRS 4 includes census tracts in and around major urban areas such as Nashville, Tennessee, and census tracts in northern New Jersey. Given their lesser topographic variation and their close proximity to major urban hubs and urban amenities, we are not considering these RRS 3 and RRS 4 tracts for the purpose of our rural area definition and are finalizing as proposed.

Comment: A commenter suggested that Hawaii should be exempt from the requirement that census tracts with rugged terrain be at least 20 square miles in area due to the unique geography of the state.

Response: Small census tracts are common in densely populated areas in all parts of the United States. Applying a different standard in one state would not further FORHP's goal of using clear, data-driven criteria that can be consistently applied nationwide to identify rural areas. For these reasons, we are not adopting this suggestion.

Comment: Some commenters suggested that road ruggedness should be used as a factor for defining rural areas, but FORHP should explore, for the future, alternative approaches for identification of mountainous roads.

Response: We thank the commenters for their support for using road ruggedness. FORHP continuously monitors ongoing national research and analysis efforts related to developing new geographic data sources and defining rural areas. We welcome suggestions for alternative data sets that are national in scope and that would identify mountainous roads more accurately. As new methods and data become available, FORHP may consider updating the definition.

Comment: A commenter suggested that the definition should focus on

service area rather than specific addresses of providers.

Response: The purpose of FORHP's rural definition is to delineate the land area of the United States as rural or non-rural. The areas identified as rural by this definition may include both service areas and specific provider addresses.

After consideration of the public comments received, HRSA is implementing the rugged terrain inclusion in the definition of rural area as proposed. FORHP is making this change consistent with its program authority to award grants to support rural health and rural health care services.

Updated Definition of Rural Area

HRSA is updating FORHP's rural definition to include geographic areas meeting any one of the following criteria:

- (1) Non-metropolitan counties
- (2) Outlying metropolitan counties with no population from an urban area of 50,000 or more people
- (3) Census tracts with RUCA codes 4–10 in metropolitan counties
- (4) Census tracts of at least 400 square miles in area with population density of 35 or less per square mile with RUCA codes 2–3 in metropolitan counties
- (5) Census tracts with RRS 5 and RUCA codes 2–3 that are at least 20 square miles in area in metropolitan counties

The changes will go into effect as of November 21, 2024. These changes will apply to FORHP's Notices of Funding Opportunity for FY 2025 and future years for programs that require funded activities and services be provided in rural areas, as defined by HRSA. FORHP will ensure information about the updated rural definition is available to the public on the HRSA website and in funding opportunities. These changes reflect FORHP's desire to accurately identify rural areas using a data-driven methodology that relies on established geographic identifiers and standard, national-level data sources.

Impact

Incorporating rugged terrain data into the definition of rural area using the adopted method adds 84 census tracts and approximately 305,000 people to the 60.8 million people living in FORHP-designated rural areas. This is an increase of 0.5 percent in the total number of people living in rural areas. Table 1 show the number of newly rural census tracts by state.

TABLE 1—NUMBER OF NEWLY RURAL CENSUS TRACTS BY STATE

State	Number of tracts
CA	24
OR	16
NC	12
WA	9
TN	7
CO	6
WV	6
MT	2
AK	1
MD	1
Total	84

Note: Table shows the number of newly rural census tracts with RRS 5 and RUCA codes 2–3 that are at least 20 square miles in area in metropolitan counties. Data in this table are based on 2010 census tract geographies and 2020 metropolitan county delineations. For a complete list of impacted census tracts see <https://www.hrsa.gov/rural-health/about-us/what-is-rural/data-files>.

Carole Johnson,
Administrator.

[FR Doc. 2024–27133 Filed 11–20–24; 8:45 am]

BILLING CODE 4165–15–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Human Genome Research Institute; Notice of Closed Meeting

Pursuant to section 1009 of the Federal Advisory Committee Act, as amended, notice is hereby given of the following meeting.

The meeting will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: Center for Inherited Disease Research Access Committee.

Date: January 10, 2025.

Time: 11:30 a.m. to 12:30 p.m.

Agenda: To review and evaluate grant applications.

Address: National Human Genome Research Institute, National Institutes of Health, 6700B Rockledge Drive, Room 3172, Bethesda, MD 20892 (Virtual).

Contact Person: Barbara J. Thomas, Ph.D., Scientific Review Officer, Scientific Review Branch, National Human Genome Research Institute, National Institutes of Health, 6700B

Rockledge Drive, Room 3172, Bethesda, MD 20892, (301) 402–8837, barbara.thomas@nih.gov.

(Catalogue of Federal Domestic Assistance Program Nos. 93.172, Human Genome Research, National Institutes of Health, HHS)

Dated: November 15, 2024.

David W. Freeman,

Supervisory Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2024–27167 Filed 11–20–24; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Substance Abuse and Mental Health Services Administration

Agency Information Collection Activities: Proposed Collection; Comment Request

In compliance with section 3506(c)(2)(A) of the Paperwork Reduction Act of 1995 concerning the opportunity for public comment on proposed collections of information, the Substance Abuse and Mental Health Services Administration (SAMHSA) will publish periodic summaries of proposed projects. To request more information on the proposed projects or to obtain a copy of the information collection plans, call the SAMHSA Reports Clearance Officer at (240) 276–0361.

Comments are invited on: (a) Whether the proposed collections of information are necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden of the proposed collection of information; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology.

Proposed Project: Minority AIDS Initiative: Substance Use Disorder Prevention and Treatment Pilot Program (MAI PT Pilot) Data Collection Instruments

The Substance Abuse and Mental Health Services Administration's (SAMHSA) Center for Substance Abuse Prevention (CSAP) and Center for Substance Abuse Treatment (CSAT) are requesting approval from the Office of Management and Budget (OMB) to monitor the Minority AIDS Initiative: Substance Use Disorder Prevention and Treatment Pilot Program (MAI PT Pilot)

through administration of a suite of data collection instruments for grant compliance and programmatic performance monitoring. This package describes the data collection activities and proposed instruments. Two instruments will facilitate grant compliance monitoring, and the third instrument is designed for program performance monitoring.

- The *MAI PT Pilot—Organizational Readiness Assessment (MAI-ORA)* is a one-time self-assessment tool intended to guide MAI PT Pilot grant recipients to objectively assess their capacity to provide substance use prevention, substance use disorder or co-occurring mental health disorder treatment, and HIV, viral hepatitis, and sexually transmitted infection prevention, screening, testing, and referral services for racial and ethnic individuals vulnerable to these conditions. Results from the MAI-ORA will allow SAMHSA to determine grantee readiness and capacity to implement their grant program, so that SAMHSA can provide additional support, as needed, to ensure grant compliance.

- The *MAI PT Pilot—Programmatic Progress Report (MAI-PPR)* is a template that grantees will use to report annual progress and will be used to monitor grant compliance.

- The *MAI PT Pilot—Online Reporting Tool (MAI-PORT)* will be used to conduct programmatic performance monitoring. The MAI-PORT is comprised of two main sections: (1) Annual Targets Report section for MAI PT Pilot grant recipients to report annual federal fiscal year programmatic goals, and (2) Quarterly Performance Report for grantees to report grant activities implemented during each federal fiscal quarter. In developing the MAI-PORT Annual Targets Report and the Quarterly Performance Report, CSAP/CSAT sought the ability to elicit programmatic information that demonstrates impact at the program aggregate level.

Data collected through the MAI-PORT are necessary to ensure SAMHSA and grantees comply with requirements under the Government Performance and Results Act Modernization Act of 2010 (GPRA) that requires regular reporting of performance measures. Additionally, data collected through these tools will provide critical information to SAMHSA's Government Project Officers (GPOs) related to grant oversight,

including barriers and facilitators that the grantees have experienced, and an understanding of the technical assistance needed to help grantees implement their programs. The information also provides a mechanism to ensure grantees are meeting the requirements of the grant funding announcement as outlined in their notice of grant award. In addition, the tools reflect CSAP's and CSAT's desire to elicit pertinent program level data that can be used not only to guide future programs and practices, but also to respond to stakeholder, congressional and agency inquiries.

Background and Purpose

According to the Centers for Disease Control and Prevention (CDC), the spread of HIV in the United States is mainly through anal or vaginal sex or by sharing drug-use equipment. Although these risk factors are the same for everyone, due to a range of social, economic, and demographic factors, such as stigma, discrimination, income, education, and geographic region, some racial and ethnic groups are more affected than others. In 2021, CDC reported that although Black/African Americans represented 13 percent of the US population, they accounted for 42 percent (15,305) of the 36,801 new HIV diagnoses; Latino/Hispanic people represent 18.7 percent of the US population but accounted for 29 percent (10,494) of HIV diagnoses (CDC, 2024; United States Census Bureau, 2024).^{1 2} Between 2017 and 2021, American Indian/Alaska Native (AI/AN), Native Hawaiian and other Pacific Islander populations were the only demographic groups identified by the CDC with an increase in HIV diagnoses in the United States (CDC, 2024).³ Of the 31,800 new HIV infections in 2022, CDC reports that 71% (22,500) were among gay and bisexual men.⁴

Viral hepatitis also impacts some racial and ethnic groups disproportionately. In 2020, non-Hispanic blacks were 1.4 times as likely to die from viral hepatitis, as compared to non-Hispanic whites (Office of Minority Health, 2022). Non-Hispanic blacks were almost twice as likely to die from hepatitis C as compared to the white population, and while having comparable case rates for hepatitis B in 2020, non-Hispanic blacks were 2.5 times more likely to die from hepatitis B than non-Hispanic whites (Office of

Minority Health, 2022). Additionally, the percentage of people aged 12 or older with past year substance use disorder (SUD) differed by race and ethnicity with the highest rates among American Indian/Alaska Native populations (24.0 percent), followed by Black, non-Hispanic populations (18.4 percent) (SAMHSA, 2023).⁵

The data clearly show the disproportionate burden faced by minority racial and ethnic groups and that these three issues should not be regarded as separate diseases acting independently, rather as a syndemic. To address this, SAMHSA is taking a syndemic approach to HIV, viral hepatitis, and substance use disorder through the MAI PT Pilot program. The purpose of this program is to provide substance use prevention, SUD treatment, HIV, and viral hepatitis prevention and treatment services for racial and ethnic medically underserved individuals vulnerable to a SUD and/or mental health condition, HIV, viral hepatitis, and other infectious disease (e.g., sexually transmitted infection (STI)). The populations of focus for this program are individuals who are particularly vulnerable to or living with HIV/AIDS, including an emphasis on gay, bisexual, and other men who have sex with men, men who have sex with men and women (MSMW), Black, Latino, and AI/AN men who have sex with men (MSM), Asian and Pacific Islander, Black women, transgender men and women, youth aged 13–24 years, and People who Inject Drugs (PWID).

SAMHSA's MAI PT Pilot is informed by the key strategies and priority jurisdictions outlined in the Ending the HIV Epidemic in the U.S. (EHE) initiative, Viral Hepatitis National Strategic Plan and STI National Strategic Plan. The program also supports the National HIV/AIDS Strategy (NHAS) and 2023–2026 SAMHSA Strategic Plan. Recipients will be expected to take a syndemic approach to SUD, HIV, viral hepatitis, and STI by providing SUD prevention and treatment to racial and ethnic individuals at risk for or living with HIV. MAI PT Pilot is authorized under Sections 509 and 516 of the Public Health Service Act, as amended.

Annualized Data Collection Burden

Table 1 and Table 2 provides an overview of the data collection method,

Laboratory. <https://www.samhsa.gov/sites/default/files/samhsa-strategic-plan.pdf>.

¹ 2020 Census Illuminates Racial and Ethnic Composition of the Country.

² HIV Diagnoses.

³ HIV in the United States by Race/Ethnicity: HIV Diagnoses.

⁴ Fast Facts: HIV and Gay and Bisexual Men.

⁵ Substance Abuse and Mental Health Services Administration. (2023). Strategic Plan: Fiscal Year 2023–2026. Publication No. PEP23–06–00–002. National Mental Health and Substance Use Policy

frequency of data collection, and number of data collections for each data collection instruments.

TABLE 1—GRANT COMPLIANCE: MAI-ORA AND MAI-PPR

Instrument	Data collection method	Frequency of data collection	Maximum number of data collections	Attachment No.
MAI-ORA	Grantees submit into SPARS	Once	Once in Year 1	1
MAI-PPR	Grantees submit into eRA	Annually	Annually: 5 times (1 time per year in Years 1–5).	2

TABLE 2—PROGRAM PERFORMANCE MONITORING: MAI-PORT

Instrument	Data collection method	Frequency of data collection	Maximum number of data collections	Attachment No.
MAI-PORT	Grantees submit into SPARS	Yearly: Annual Targets Report (ATR). Quarterly: Quarterly Performance Report (QPR).	Yearly: 5 times (1 time per year in Years 1–5). Quarterly: 20 times (4 times per year in Years 1–5).	3

The estimated time to complete each instrument by year is shown in Tables 3 through 8.

TABLE 3—ESTIMATES OF ANNUAL BURDEN FOR MAI PT DATA COLLECTION: YEAR 1

Instrument	Number of respondents	Responses per respondent	Total number of responses	Hours per response	Total burden hours	Average hourly wage ¹	Total respondent cost
MAI-ORA	8	1	8	14	112	\$48.35	\$5,415.20
MAI-PPR	8	1	8	3	24	48.35	1,160.40
MAI-PORT/ATR	8	1	8	1	8	48.35	386.80
MAI-PORT/QPR	8	4	32	2	64	48.35	3,094.40
Total	8	7	56	20	208	48.35	10,056.80

¹ Average hourly wage is based on the mean hourly wage for state government managers, as reported in the 2022 Occupational Employment (OES) by the Bureau of Labor Statistics (BLS) found at https://www.bls.gov/oes/current/naics4_999200.htm#11-0000. Accessed on January 15, 2024.

TABLE 4—ESTIMATES OF ANNUAL BURDEN FOR MAI PT DATA COLLECTION: YEAR 2

Instrument	Number of respondents	Responses per respondent	Total number of responses	Hours per response	Total burden hours	Average hourly wage ¹	Total respondent cost
MAI-ORA	8	0	0	14	0	\$48.35	\$0.00
MAI-PPR	8	1	8	3	24	48.35	1,160.40
MAI-PORT/ATR	8	1	8	1	8	48.35	386.80
MAI-PORT/QPR	8	4	32	2	64	48.35	3,094.40
Total	8	6	48	20	96	48.35	4,641.60

¹ Average hourly wage is based on the mean hourly wage for state government managers, as reported in the 2022 Occupational Employment (OES) by the Bureau of Labor Statistics (BLS) found at https://www.bls.gov/oes/current/naics4_999200.htm#11-0000. Accessed on January 15, 2024.

TABLE 5—ESTIMATES OF ANNUAL BURDEN FOR MAI PT DATA COLLECTION: YEAR 3

Instrument	Number of respondents	Responses per respondent	Total number of responses	Hours per response	Total burden hours	Average hourly wage ¹	Total respondent cost
MAI-ORA	8	0	0	14	0	\$48.35	\$0.00
MAI-PPR	8	1	8	3	24	48.35	1,160.40
MAI-PORT/ATR	8	1	8	1	8	48.35	386.80
MAI-PORT/QPR	8	4	32	2	64	48.35	3,094.40
Total	8	6	48	20	96	\$48.35	\$4,641.60

¹ Average hourly wage is based on the mean hourly wage for state government managers, as reported in the 2022 Occupational Employment (OES) by the Bureau of Labor Statistics (BLS) found at https://www.bls.gov/oes/current/naics4_999200.htm#11-0000. Accessed on January 15, 2024.

TABLE 6—ESTIMATES OF ANNUAL BURDEN FOR MAI PT DATA COLLECTION: YEAR 4

Instrument	Number of respondents	Responses per respondent	Total number of responses	Hours per response	Total burden hours	Average hourly wage ¹	Total respondent cost
MAI-ORA	8	0	0	14	0	\$48.35	\$0.00
MAI-PPR	8	1	8	3	24	48.35	1,160.40
MAI-PORT/ATR	8	1	8	1	8	48.35	386.80
MAI-PORT/QPR	8	4	32	2	64	48.35	3,094.40
Total	8	6	48	20	96	48.35	4,641.60

¹ Average hourly wage is based on the mean hourly wage for state government managers, as reported in the 2022 Occupational Employment (OES) by the Bureau of Labor Statistics (BLS) found at https://www.bls.gov/oes/current/naics4_999200.htm#11-0000. Accessed on January 15, 2024.

TABLE 7—ESTIMATES OF ANNUAL BURDEN FOR MAI PT DATA COLLECTION: YEAR 5

Instrument	Number of respondents	Responses per respondent	Total number of responses	Hours per response	Total burden hours	Average hourly wage ¹	Total respondent cost
MAI-ORA	8	0	0	14	0	\$48.35	\$0.00
MAI-PPR	8	1	8	3	24	48.35	1,160.40
MAI-PORT/ATR	8	1	8	1	8	48.35	386.80
MAI-PORT/QPR	8	4	32	2	64	48.35	3,094.40
Total	8	6	48	20	96	48.35	4,641.60

¹ Average hourly wage is based on the mean hourly wage for state government managers, as reported in the 2022 Occupational Employment (OES) by the Bureau of Labor Statistics (BLS) found at https://www.bls.gov/oes/current/naics4_999200.htm#11-0000. Accessed on January 15, 2024.

TABLE 8—ESTIMATES OF ANNUAL BURDEN FOR MAI PT DATA COLLECTION: ALL YEARS

Instrument	Number of respondents	Responses per respondent	Total number of responses	Hours per response	Total burden hours	Average hourly wage ¹	Total respondent cost
MAI-ORA	8	1	8	14	112	\$48.35	\$5,415.20
MAI-PPR	8	5	40	3	120	48.35	5,802.00
MAI-PORT/ATR	8	5	40	1	40	48.35	1,934.00
MAI-PORT/QPR	8	20	160	2	320	48.35	15,472.00
Total	8	31	248	20	592	48.35	28,623.20

¹ Average hourly wage is based on the mean hourly wage for state government managers, as reported in the 2022 Occupational Employment (OES) by the Bureau of Labor Statistics (BLS) found at https://www.bls.gov/oes/current/naics4_999200.htm#11-0000. Accessed on January 15, 2024.

No comments were received during the 60-Day **Federal Register** comment period. However, the instruments have been revised to reflect comments received from the cognitive testing. Changes include:

MAI PT Pilot Organizational Readiness Assessment (MAI-ORA)

- Added/revised instructions throughout to clarify meaning.
- Added list of definitions in appendix.
- Combined:
 - service delivery and leveraging resources sections and
 - four narrative sections and moved to the end of the instrument.
- Simplified/reformatted tables to improve flow and reduce grantee burden.
- Revised measures to clarify meaning, eliminate compound constructs, and reduce social desirability bias.
- Renumbered measures.

MAI PT Pilot—Programmatic Progress Report (MAI-PPR)

- Corrected typographical error in Public Burden Statement: Changed annual burden estimate from 24 hours to 3 hours.
- Added:
 - general instructions in the beginning,
 - instructions in Section 1 table, and
 - additional instructions and examples throughout.
- Omitted:
 - bottom three signature rows in Section 1 table and
 - budget section.

MAI PT Pilot Online Reporting Tool (MAI-PORT)

- Added/updated instructions for clarification.
- Added:
 - skip patterns to reduce grantee burden,
 - two questions regarding content focus and level of implementation of planned prevention strategy, and
 - items to QPR regarding details of inactive strategies.
- Updated:

- Race/ethnicity measures in ATR and QPR to be compliant with OMB's Statistical Policy Directive No. 15.
 - SOGI measures in ATR and QPR.
 - Appendix A: Added/revised definitions and
 - Appendix B: Revised title from "list of EBPs" to "List of Prevention Strategies," and added additional prevention strategies.
 - Standardized language (e.g., direct/individual-based, indirect/population based, unduplicated count).
 - Reordered reached/served items of ATR and QPR so that "reached" is listed first.
 - Eliminated demographics for "reached" in ATR and QPR.
 - Grantees are now asked to report whether interventions are EBPP in ATR (added new status "community-defined evidence practice" and "other" criteria response options).
- Written comments and recommendations concerning the proposed information collection should be sent by December 23, 2024 to the SAMHSA Desk Officer at the Office of Information and Regulatory Affairs, Office of Management and Budget

(OMB). To ensure timely receipt of comments, and to avoid potential delays in OMB's receipt and processing of mail sent through the U.S. Postal Service, commenters are encouraged to submit their comments to OMB via email to: OIRA_Submission@omb.eop.gov. Although commenters are encouraged to send their comments via email, commenters may also fax their comments to: 202-395-7285. Commenters may also mail them to: Office of Management and Budget, Office of Information and Regulatory Affairs, New Executive Office Building, Room 10102, Washington, DC 20503.

Krishna Palipudi,

Social Science Analyst.

[FR Doc. 2024-27294 Filed 11-20-24; 8:45 am]

BILLING CODE 4162-20-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Substance Abuse and Mental Health Services Administration

Agency Information Collection Activities: Submission for OMB Review; Comment Request

Periodically, the Substance Abuse and Mental Health Services Administration (SAMHSA) will publish a summary of information collection requests under OMB review, in compliance with the Paperwork Reduction Act (44 U.S.C. chapter 35). To request a copy of these documents, call the SAMHSA Reports Clearance Officer on (240) 276-0361.

Project: Training and Technical Assistance (TTA) Program Monitoring

The Substance Abuse and Mental Health Administration (SAMHSA) will monitor program performance of its Training and Technical Assistance (TTA) programs. The TTAs disseminate

current behavioral health services research from the National Institute on Drug Abuse, National Institute on Alcohol Abuse and Alcoholism, National Institute of Mental Health, National Institute of Justice, and other sources, as well as other SAMHSA programs. To accomplish this, the TTA programs develop and update state-of-the-art, research-based curricula and professional development training.

The TTA programs hold a variety of events: technical assistance, meetings, trainings, and presentations. A TTA technical assistance event is defined as a jointly planned consultation generally involving a series of contacts between the TTA and an outside organization/institution during which the TTA provides expertise and gives direction toward resolving a problem or improving conditions. Technical assistance events can be categorized into universal, targeted, and intensive. Other TTA events such as meetings, training, presentations, strategic planning and learning collaboratives are utilized to support technical assistance. These events are TTA-sponsored or co-sponsored events in which a group of people representing one or more agencies other than the TTAs work cooperatively on a project, problem, and/or policy. SAMHSA intends to use three (3) instruments for program monitoring of TTA events as well as ongoing quality improvement, which are described below.

1. *TTA Event Description Form (EDF)*: The EDF collects event information. The form includes 10 questions of TTA faculty/staff relating to the event focus and format. It allows the TTAs and SAMHSA to track the number of events held (See Attachment 1).

2. *TTA Post Event Form*: The Post Event Form will be administered immediately following the event. The form includes 16 questions of each

individual that participated in the event (Attachment 2). The instrument asks the participants to report on general demographic information (gender, race, sexual orientation, level of education, primary profession), principal employment setting, employment zip code, satisfaction with the event, if they expect the event to benefit them professionally, if they expect the event to change their practice and if they would recommend the event to a colleague.

3. *TTA Follow-up Form*: The Follow-up Form will be administered 60-days after all events that last a minimum of three (3) hours. The form will be administered to a minimum of 25% of participants who consent to participate in the follow-up process. The includes 13 questions (Attachment 3). The instrument asks the participants to report if the information provided at the event benefited their professional development, will change their practice, if they will use the information in their future work, if information will be shared with colleagues, how the event supported their work responsibilities, how the TTA can improve the events, and what other topics participants would like to see TTAs address and in what format.

The information collected on the three TTA forms will assist SAMHSA in documenting the numbers and types of participants in TTA events, describing the extent to which participants report improvement in their professional development, and which method is most effective in disseminating knowledge to various audiences. This type of information is crucial to support SAMHSA in complying with GPRA reporting requirements and will inform future development of knowledge dissemination activities.

The chart below summarizes the annualized burden for this project.

Type of respondent	Number of respondents	Responses per respondent	Total responses	Hours per response	Total annual burden hours	Hourly wage cost	Total hour cost
TTA Faculty/Staff:							
TTA Event Description Form	113	48	5,424	.16	867.84	\$28.89	\$25,071.90
Meeting and Presentations Respondents:							
TTA Post-Event Form	300,057	1	300,057	.16	48,009.00	28.89	1,386,983.48
TTA Follow-up Form	13,566	1	13,566	.16	2,170.56	28.89	62,707.48
Total	313,736	.....	319,047	.....	51,047.40	.....	1,474,762.86

Summary Table

Instruments	Number of respondents	Responses per respondents	Annual burden hours
TTA Event Description Form	113	48	867.84
TTA Post Event Form	300,057	1	48,009.00

Instruments	Number of respondents	Responses per respondents	Annual burden hours
TTA Follow up Form	13,566	1	2,170.56
Total	313,736	.....	51,047.40

Send comments to SAMHSA Reports Clearance Officer, 5600 Fisher Lane, Room 15E57A, Rockville, MD 20852 OR email a copy at samhsapra@samhsa.hhs.gov. Written comments should be received by January 21, 2025.

Alicia Broadus,
Public Health Advisor.
[FR Doc. 2024–27199 Filed 11–20–24; 8:45 am]
BILLING CODE 4162–20–P

DEPARTMENT OF HOMELAND SECURITY
U.S. Customs and Border Protection
[OMB Control Number 1651–0008]

Agency Information Collection Activities; Extension; Application for Identification Card (CBP Form 3078)

AGENCY: U.S. Customs and Border Protection (CBP), Department of Homeland Security.
ACTION: 30-Day notice and request for comments.

SUMMARY: The Department of Homeland Security, U.S. Customs and Border Protection (CBP) will be submitting the following information collection request to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995 (PRA). The information collection is published in the **Federal Register** to obtain comments from the public and affected agencies.
DATES: Comments are encouraged and must be submitted (no later than December 23, 2024) to be assured of consideration.

ADDRESSES: Written comments and/or suggestions regarding the item(s) contained in this notice should be sent within 30 days of publication of this notice to www.reginfo.gov/public/do/PRAMain. Please submit written comments and/or suggestions in English. 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: Requests for additional PRA information should be directed to Seth Renkema,

Chief, Economic Impact Analysis Branch, U.S. Customs and Border Protection, Office of Trade, Regulations and Rulings, 90 K Street NE, 10th Floor, Washington, DC 20229–1177, Telephone number 202–325–0056 or via email CBP_PRA@cbp.dhs.gov. Please note that the contact information provided here is solely for questions regarding this notice. Individuals seeking information about other CBP programs should contact the CBP National Customer Service Center at 877–227–5511, (TTY) 1–800–877–8339, or CBP website at <https://www.cbp.gov/>.

SUPPLEMENTARY INFORMATION: CBP invites the general public and other Federal agencies to comment on the proposed and/or continuing information collections pursuant to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). This proposed information collection was previously published in the **Federal Register** (89 FR 78324) on September 25, 2024, allowing for a 60-day comment period. This notice allows for an additional 30 days for public comments. This process is conducted in accordance with 5 CFR 1320.8. Written comments and suggestions from the public and affected agencies should address one or more of the following four points: (1) whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility; (2) the accuracy of the agency’s estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used; (3) suggestions to enhance the quality, utility, and clarity of the information to be collected; and (4) suggestions to 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 comments that are submitted will be summarized and included in the request for approval. All comments will become a matter of public record.

Overview of This Information Collection
Title: Application for Identification Card (CBP Form 3078).
OMB Number: 1651–0008.
Form Number: 3078.
Current Actions: CBP proposes to extend the expiration date of this information collection. There is no change to the burden hours or to the information collected.
Type of Review: Extension (without change).
Affected Public: Businesses.
Abstract: CBP Form 3078, *Application for Identification Card*, is completed for the purpose of collecting an applicant’s information to conduct a meaningful background investigation to determine whether the applicant meets the criteria to obtain an Identification Card that is used to gain access to CBP Customs Security Areas (CSA). This form collects biographical information and is usually completed by airport employees, CBP Security Area Identification, Warehouse Officer or Employee, Container Station Employee, Foreign Trade Zone Employee, CES Employee, licensed Cartmen or Lightermen whose duties require receiving, transporting, or otherwise handling imported merchandise which has not been released from CBP custody. This form may be submitted electronically or to the local CBP office at the port of entry that the respondent will be requesting access to the Federal Inspection Section (FIS). Form 3078 is authorized by 19 U.S.C. 66, 1551, 1555, 1565, 1624, 1641; and 19 CFR 112.41, 112.42, 118, 122.182, and 146.6. This form is accessible at: <https://www.cbp.gov/newsroom/publications/forms?title=3078&=Apply>.
Type of Information Collection: Form 3078.
Estimated Number of Respondents: 200,000.
Estimated Number of Annual Responses per Respondent: 1.
Estimated Number of Total Annual Responses: 200,000.
Estimated Time per Response: 17 minutes.
Estimated Total Annual Burden Hours: 56,667.

Dated: November 18, 2024.

Seth D. Renkema,

*Branch Chief, Economic Impact Analysis
Branch, U.S. Customs and Border Protection.*

[FR Doc. 2024-27329 Filed 11-20-24; 8:45 am]

BILLING CODE 9111-14-P

DEPARTMENT OF HOMELAND SECURITY

U.S. Customs and Border Protection

[OMB Control Number 1651-0078]

Agency Information Collection Activities; Revision; Automated Clearinghouse

AGENCY: U.S. Customs and Border Protection (CBP), Department of Homeland Security.

ACTION: 30-Day notice and request for comments.

SUMMARY: The Department of Homeland Security, U.S. Customs and Border Protection (CBP) will be submitting the following information collection request to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995 (PRA). The information collection is published in the **Federal Register** to obtain comments from the public and affected agencies.

DATES: Comments are encouraged and must be submitted (no later than December 23, 2024) to be assured of consideration.

ADDRESSES: Written comments and/or suggestions regarding the item(s) contained in this notice should be sent within 30 days of publication of this notice to www.reginfo.gov/public/do/PRAMain. Please submit written comments and/or suggestions in English. 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:

Requests for additional PRA information should be directed to Seth Renkema, Chief, Economic Impact Analysis Branch, U.S. Customs and Border Protection, Office of Trade, Regulations and Rulings, 90 K Street NE, 10th Floor, Washington, DC 20229-1177, Telephone number 202-325-0056 or via email CBP_PRA@cbp.dhs.gov. Please note that the contact information provided here is solely for questions regarding this notice. Individuals seeking information about other CBP programs should contact the CBP National Customer Service Center at 877-227-5511, (TTY) 1-800-877-8339,

or CBP website at <https://www.cbp.gov/>.

SUPPLEMENTARY INFORMATION: CBP invites the general public and other Federal agencies to comment on the proposed and/or continuing information collections pursuant to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). This proposed information collection was previously published in the **Federal Register** (89 FR 76864) on September 19, 2024, allowing for a 60-day comment period. This notice allows for an additional 30 days for public comments. This process is conducted in accordance with 5 CFR 1320.8. Written comments and suggestions from the public and affected agencies should address one or more of the following four points: (1) whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility; (2) the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used; (3) suggestions to enhance the quality, utility, and clarity of the information to be collected; and (4) suggestions to 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 comments that are submitted will be summarized and included in the request for approval. All comments will become a matter of public record.

Overview of This Information Collection

Title: Automated Clearinghouse.

OMB Number: 1651-0078.

Form Number: 400, 401.

Current Actions: This submission will extend the collection's expiration with an increase in the estimated annual burden hours. CBP Form 401's corresponding burden has been added to the collection. No change to the program or method of collection.

Type of Review: Revision.

Affected Public: Companies enrolled in the Automated Broker Interface (ABI).

Abstract: The Automated Clearinghouse (ACH) allows participants in the Automated Broker Interface (ABI) to transmit daily statements, deferred tax, and bill payments electronically through a financial institution directly to a CBP account. ACH debit and credit allow the payer to exercise more control over the

payment process. In order to participate in ACH debit or credit, companies must complete CBP Form 400 (for debit) or 401 (for credit), *ACH Application*. Participants also use this form to notify CBP of changes to bank information or contact information. The ACH procedure is authorized by 19 U.S.C. 58a-58c and 66 and provided for by 19 CFR 24.25 and 24.26. CBP Forms 400 and 401 are accessible at <https://www.cbp.gov/newsroom/publications/forms>.

Type of Information Collection: Form 400 ACH Debit.

Estimated Number of Respondents: 6,710.

Estimated Number of Annual Responses per Respondent: 1.

Estimated Number of Total Annual Responses: 6,710.

Estimated Time per Response: 5 minutes.

Estimated Total Annual Burden Hours: 559.

Type of Information Collection: Form 401 ACH Credit.

Estimated Number of Respondents: 144.

Estimated Number of Annual Responses per Respondent: 1.

Estimated Number of Total Annual Responses: 144.

Estimated Time per Response: 5 minutes.

Estimated Total Annual Burden Hours: 12.

Dated: November 18, 2024.

Seth D. Renkema,

*Branch Chief, Economic Impact Analysis
Branch, U.S. Customs and Border Protection.*

[FR Doc. 2024-27328 Filed 11-20-24; 8:45 am]

BILLING CODE 9111-14-P

DEPARTMENT OF HOMELAND SECURITY

U.S. Customs and Border Protection

Revocation of AmSpec LLC (Christiansted, St. Croix, USVI)

as a Customs-Accredited Laboratory and Customs-Approved Gauger

AGENCY: U.S. Customs and Border Protection, Department of Homeland Security.

ACTION: General notice of revocation of AmSpec LLC (Christiansted, St. Croix, USVI) as a Customs-accredited laboratory and Customs-approved gauger.

SUMMARY: Notice is hereby given, pursuant to the U.S. Customs and Border Protection (CBP) regulations, that CBP has revoked the accreditation and approval for AmSpec LLC's

Christiansted, St. Croix, USVI, laboratory and gauging facility to test petroleum and petroleum products for customs purposes and to gauge petroleum and petroleum products for customs purposes.

DATES: The effective date of revocation is October 24, 2024.

FOR FURTHER INFORMATION CONTACT: Dr. Eugene Bondoc, Laboratories and Scientific Services, U.S. Customs and Border Protection, CB-03 Mail Stop #1110, Washington, DC 20229-1110, tel. 202-344-1060.

SUPPLEMENTARY INFORMATION: Notice is hereby given, in accordance with the provisions of Sections 151.12(k)(2)(i) and 151.13(i)(2)(i) of Title 19, Code of Federal Regulations (CFR), that CBP has revoked the accreditation and approval of the AmSpec, LLC laboratory and gauging facility at 9010 Estate Cottage, Suite 3, Christiansted, St. Croix, USVI 00820, to test petroleum and petroleum products and to gauge petroleum and petroleum products for customs purposes. The duration of the revocation of accreditation and approval is indefinite.

Inquiries regarding the entity's status as an approved gauger and/or as an accredited laboratory may be directed to CBP by calling (202) 344-1060 or by sending an email to CBPGaugersLabs@cbp.dhs.gov. Please reference the website listed below for a complete listing of CBP approved gaugers and accredited laboratories. <http://www.cbp.gov/about/labs-scientific/commercial-gaugers-and-laboratories>.

Dated: November 15, 2024.

Larry D. Fluty,

Assistant Commissioner, Laboratories and Scientific Services.

[FR Doc. 2024-27252 Filed 11-20-24; 8:45 am]

BILLING CODE 9111-14-P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[Docket ID: FEMA-2024-0033; OMB No. 1660-0130]

Agency Information Collection Activities: Proposed Collection; Comment Request; Generic Clearance for the Collection of Qualitative Feedback on Agency Service Delivery

AGENCY: Federal Emergency Management Agency, Department of Homeland Security.

ACTION: 60-Day notice of extension; request for comments.

SUMMARY: The Federal Emergency Management Agency (FEMA), as part of its continuing effort to reduce paperwork and respondent burden, invites the general public to take this opportunity to comment on an extension, without change, of a currently approved information collection. In accordance with the Paperwork Reduction Act of 1995, this notice seeks comments concerning the Generic Clearance for the Collection of Qualitative Feedback on Agency Service Delivery.

DATES: Comments must be submitted on or before January 21, 2025.

ADDRESSES: To avoid duplicate submissions to the docket, please submit comments at www.regulations.gov under Docket ID FEMA-2024-0033. Follow the instructions for submitting comments.

All submissions received must include the agency name and Docket ID. Regardless of the method used for submitting comments or material, all submissions will be posted, without change, to the Federal eRulemaking Portal at <http://www.regulations.gov>, and will include any personal information you provide. Therefore, submitting this information makes it public. You may wish to read the Privacy and Security Notice that is available via a link on the homepage of www.regulations.gov.

FOR FURTHER INFORMATION CONTACT: Krista Westinson, Sr. PRA Clearance Officer, Information Management Division, 202-394-6377, and FEMA-HQ-Forms@fema.dhs.gov. You may contact the Information Management Division for copies of the proposed collection of information at email address: FEMA-Information-Collections-Management@fema.dhs.gov.

SUPPLEMENTARY INFORMATION: Executive Order 12862 directs Federal agencies to provide service to the public that matches or exceeds the best service available in the private sector. In order to work continuously to ensure that our programs are effective and meet our customers' needs, the Federal Emergency Management Agency (FEMA) (hereafter "the Agency") seeks to obtain OMB approval of a generic clearance to collect qualitative feedback on our service delivery. By qualitative feedback, we mean information that provides useful insights on perceptions and opinions but not statistical surveys that yield quantitative results that can be generalized to the population of study.

Collection of Information

Title: Generic Clearance for the Collection of Qualitative Feedback on Agency Service Delivery.

Type of Information Collection: Extension, without change, of a currently approved information collection.

OMB Number: 1660-0130.

FEMA Forms: None.

Abstract: The information collection activity will garner qualitative customer and stakeholder feedback in an efficient, timely manner, in accordance with the Administration's commitment to improving service delivery. This feedback will provide insights into customer or stakeholder perceptions, experiences, and expectations; provide an early warning of issues with service; or focus attention on areas where communication, training, or changes in operations might improve delivery of products or services. These collections will allow for ongoing, collaborative, and actionable communications between the Agency and its customers and stakeholders. It will also allow feedback to contribute directly to the improvement of program management. Feedback collected under this generic clearance will provide useful information, but it will not yield data that can be generalized to the overall population. This type of generic clearance for qualitative information will not be used for quantitative information collections that are designed to yield reliably actionable results, such as monitoring trends over time or documenting program performance. Such data uses require more rigorous designs that address: The target population to which generalizations will be made, the sampling frame, the sample design (including stratification and clustering), the precision requirements or power calculations that justify the proposed sample size, the expected response rate, methods for assessing potential nonresponse bias, the protocols for data collection, and any testing procedures that were or will be undertaken prior to fielding the study. Depending on the degree of influence the results are likely to have, such collections may still be eligible for submission for other generic mechanisms that are designed to yield quantitative results.

Affected Public: Individuals or Households.

Estimated Number of Respondents: 1,075,000.

Estimated Number of Responses: 1,075,000.

Estimated Total Annual Burden Hours: 268,783.

Estimated Total Annual Respondent Cost: \$12,269,944.

Estimated Respondents' Operation and Maintenance Costs: None.

Estimated Respondents' Capital and Start-Up Costs: None.

Estimated Total Annual Cost to the Federal Government: \$2,322,734.

Comments

Comments may be submitted as indicated in the **ADDRESSES** caption above. Comments are solicited to (a) evaluate whether the proposed data collection is necessary for the proper performance of the Agency, including whether the information shall have practical utility; (b) 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; (c) enhance the quality, utility, and clarity of the information to be collected; and (d) 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.

Millicent Brown Wilson,

Records Management Branch Chief, Office of the Chief Administrative Officer, Mission Support, Federal Emergency Management Agency, Department of Homeland Security.

[FR Doc. 2024-27321 Filed 11-20-24; 8:45 am]

BILLING CODE 9111-19-P

DEPARTMENT OF HOMELAND SECURITY

[Docket No. CISA-2024-0023]

Revision of a Currently Approved Information Collection for Chemical-Terrorism Vulnerability Information (CVI)

AGENCY: Cybersecurity and Infrastructure Security Agency, DHS.

ACTION: 30-Day notice and request for comments; renewal of Information Collection Request (ICR): 1670-0015.

SUMMARY: The Infrastructure Security Division (ISD) within the Cybersecurity and Infrastructure Security Agency (CISA) 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. The submission proposes to renew the information collection for an additional three years and to update both the burden estimates

and the statutory authority for the information collection. CISA previously published this ICR in the **Federal Register** on September 13, 2024, for a 60-day public comment period. One unrelated public comment was submitted.¹ The purpose of this notice is to allow additional 30 days for public comments.

DATES: Comments will be accepted until December 23, 2024.

ADDRESSES: Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to www.reginfo.gov/public/do/PRAMain. Find this particular information collection by selecting "Currently under 30-day Review—Open for Public Comments" or by using the search function. All submissions received must include the agency name "CISA" and docket number CISA-2024-0023.

Comments that include trade secrets, confidential commercial or financial information, Chemical-terrorism Vulnerability Information (CVI),² Sensitive Security Information (SSI),³ or Protected Critical Infrastructure Information (PCII)⁴ should be coordinated with the point of contact for this notice provided in the **FOR FURTHER INFORMATION CONTACT** section.

The Office of Management and Budget is particularly interested in comments which:

1. Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;
2. Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;
3. Enhance the quality, utility, and clarity of the information to be collected; and
4. Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or

¹ The unrelated public comment may be viewed at <https://www.regulations.gov/comment/CISA-2024-0023-0002>.

² For more information about CVI see 6 CFR 27.400 and the CVI Procedural Manual at www.dhs.gov/publication/safeguarding-cvi-manual.

³ For more information about SSI see 49 CFR part 1520 and the SSI Program web page at www.tsa.gov/for-industry/sensitive-security-information.

⁴ For more information about PCII see 6 CFR part 29 and the PCII Program web page at www.dhs.gov/pcii-program.

other forms of information technology, *e.g.*, permitting electronic submissions of responses.

FOR FURTHER INFORMATION CONTACT: Annie Hunziker Boyer, 703-603-5000, CISARegulations@mail.cisa.dhs.gov.

SUPPLEMENTARY INFORMATION: The Chemical Facility Anti-Terrorism Standards (CFATS) Program identified and regulated the security of high-risk chemical facilities using a risk-based approach. Pursuant to section 5 of the Protecting and Securing Chemical Facilities from Terrorist Attacks Act of 2014 (Pub. L. 113-254, as amended by Pub. L. 116-150; 6 U.S.C. 621 note), authorization had been granted for CFATS until July 27, 2023. Congress did not act to reauthorize the program in time and, as such, the authorization expired on July 28, 2023. Therefore, regulations written pursuant to CFATS authority are not currently active. While regulatory text for the CFATS regulation, including information protection requirements, is located in part 27 of title 6 of the Code of Federal Regulations (CFR), the text is inactive due to the lapse in authority.

CISA continues to possess and safeguard the information provided to CISA under the CFATS program prior to the program's lapse in authority on July 28, 2023. CISA also continues to receive requests for these government records and has continued to treat any information previously designated as CVI prior to the July 28, 2023 lapse consistent with the previously established CVI information handling protection regime. As a result, prior to granting access to information safeguarded as CVI, CISA verifies that the requestor is a CVI Authorized User. If that requestor has a need to know but is not a CVI Authorized User, CISA will provide the requestor with CVI training. The requestor then submits an application to become a CVI Authorized User.

CISA is authorized to safeguard information provided to CISA under CFATS prior to July 28, 2023 under 6 U.S.C. 652(e)(1)(J), which grants CISA the authority to safeguard information from unauthorized disclosure and to ensure that the information is handled and used only for the performance of official duties.⁵

It is the Administration's position that CFATS should be reauthorized. However, even without statutory reauthorization, there is both a reason to

⁵ 6 U.S.C. 652(e)(1)(J): (J) To ensure that any material received pursuant to this chapter is protected from unauthorized disclosure and handled and used only for the performance of official duties.

continue collecting this information (i.e., enabling individuals with a need to know but who are not CVI Authorized Users to access historical government records safeguarded as CVI) as well as existing statutory authority to do so under 6 U.S.C. 652(e)(1)(J). Once CFATS is reauthorized, the training and application to become a CVI Authorized User will be made accessible to the public.

The current information collection for the CVI program (IC 1670–0015) will expire on November 30, 2024.

CISA proposes three revisions from the previously approved collection. Specifically, to renew the information collection for an additional three years, increase the loaded average hourly wage rate of respondents from \$79.75 to \$101.87 based on updated BLS wage and compensation data, and to cite 6 U.S.C. 652(e)(1)(J) as its statutory authority rather than 6 U.S.C. 623.

This process is conducted in accordance with 5 CFR 1320.8.

CISA’s Methodology in Estimating the Burden for the Chemical-Terrorism Vulnerability Information Authorization

Number of Respondents

The current information collection estimated that 20,000 respondents submit a request to become a CVI Authorized User Number annually. The table below provides the number of respondents over the past three years (i.e., Calendar Year (CY) 2020 through CY 2022).

	CY 2020	CY 2021	CY 2022
Number of Respondents	11,444	12,931	14,252

Due to past fluctuations and uncertainty regarding the number of future respondents, CISA believes that 20,000 continues to be a reasonable estimate when CFATS is reauthorized. Therefore, CISA proposes to retain the estimated annual number of respondents.

Estimated Time per Respondent

In the current information collection, the estimated time per respondent to prepare and submit a CVI Authorization is 0.50 hours (30 minutes). CISA proposes to retain the estimated time per respondent.

Annual Burden Hours

The annual burden hours for the CVI Authorization is [0.50 hours × 20,000 respondents × 1 response per respondent], which equals 10,000 hours.

Total Capital/Startup Burden Cost

Prior to the expiration of CFATS’ statutory authorization, the instrument through which the information was collected electronically was a web interface incorporated into CISA’s Chemical Security Assessment Tool (CSAT). Since the lapse, and until reauthorization, the instrument is a PDF form sent via email to respondents. The PDF form is filled out by respondents and returned to CISA via email. When the CFATS program is reauthorized, a web-enabled interface will be made accessible to the public. Thus, for the purposes of this notice, CISA continues to assume there is no annualized capital or start-up costs incurred by respondents for this information collection.

Total Recordkeeping Burden

There are no recordkeeping burden costs incurred by respondents for this information collection.

Total Annual Burden Cost

CISA assumes that respondents are generally Site Security Officers (SSOs), although other types of respondents may also complete this instrument (e.g., State, and local government employees and contractors). For the purpose of this notice, CISA maintains this assumption. To estimate the total annual burden, CISA multiplied the annual burden of 10,000 hours by the loaded average hourly wage rate of SSOs of \$101.87 per hour.⁶ Therefore, the total annual burden cost for the CVI Authorization instrument is \$1,018,700 [10,000 total annual burden hours × \$101.87 per hour].

Analysis

Agency: Department of Homeland Security, Cybersecurity and Infrastructure Agency, Infrastructure Security Division.

Title: CFATS Chemical-terrorism Vulnerability Information.

OMB Number: 1670–0015.

Instrument: Chemical-terrorism Vulnerability Information Training and Authorized User Application.

Frequency: “On occasion” and “Other”.

Affected Public: Business or other for-profit.

Number of Respondents: 20,000 respondents (rounded estimate).

Estimated Time per Respondent: 0.50 hours.

Total Burden Hours: 10,000 annual burden hours.

Total Burden Cost (capital/startup): \$0.

⁶ The wage used for an SSO equals that of Managers, All (11–9199), with a load factor of 1.4481 to account for benefits in addition to wages <https://www.bls.gov/oes/2023/may/oes119199.htm>. The load factor is estimated by dividing total compensation by total wages and salaries for the Management, Professional and Related series (\$72/\$49.72), which can be found at <https://www.bls.gov/news.release/eccec.t04.htm>.

Total Recordkeeping Burden: \$0.
Total Burden Cost: \$1,001,275.

Robert J. Costello,
Chief Information Officer, Department of Homeland Security, Cybersecurity and Infrastructure Security Agency.
[FR Doc. 2024–27287 Filed 11–20–24; 8:45 am]
BILLING CODE 9111–LF–P

DEPARTMENT OF HOMELAND SECURITY
[Docket No. CISA–2024–0005]
Notice of President’s National Infrastructure Advisory Council Meeting
AGENCY: Cybersecurity and Infrastructure Security Agency (CISA), Department of Homeland Security (DHS).
ACTION: Notice of partial closure Federal Advisory Committee Act (FACA) meeting; request for comments.

SUMMARY: CISA is publishing this notice to announce the following President’s National Infrastructure Advisory Council (NIAC) meeting.

DATES:
Meeting Registration: Registration is required to attend the meeting and must be received no later than 5 p.m. eastern standard time (EST) on December 6, 2024. For more information on how to participate, please contact NIAC@mail.cisa.dhs.gov.

Speaker Registration: Registration to speak during the meeting’s public comment period must be received no later than 5 p.m. EST on December 6, 2024.

Written Comments: Written comments must be received no later than 5 p.m. EST on December 6, 2024.

Meeting Date: The NIAC will meet on December 11, 2024, from 1 p.m. to 5:15

p.m. EST. The meeting may close early if the council has completed its business.

ADDRESSES: The National Infrastructure Advisory Council's open session will be held in person at 1650 17th St. NW, Washington, DC; however, members of the public may participate virtually, only. Requests to participate will be accepted and processed in the order in which they are received. For virtual access to the meeting, information on services for individuals with disabilities, or to request special assistance, please email NIAC@mail.cisa.dhs.gov by 5:00 p.m. EST on December 6, 2024. The NIAC is committed to ensuring all participants have equal access regardless of disability status. If you require a reasonable accommodation due to a disability to fully participate, please contact Jonathan Dunn at NIAC@mail.cisa.dhs.gov as soon as possible.

Comments: The council will consider public comments on issues as listed in the **SUPPLEMENTARY INFORMATION** section below. Associated materials for potential discussions during the meeting will be available for review at <https://www.cisa.gov/niac> by December 4, 2024. Comments should be submitted by 5 p.m. EST on December 6, 2024, and must be identified by Docket Number CISA–2024–0005. Comments may be submitted by one of the following methods:

- **Federal eRulemaking Portal:** www.regulations.gov. Please follow the instructions for submitting written comments.

- **Email:** NIAC@mail.cisa.dhs.gov. Include the Docket Number CISA–2024–0005 in the subject line of the email.

Instructions: All submissions received must include the words “Department of Homeland Security” and the Docket Number for this action. Comments received will be posted without alteration to www.regulations.gov, including any personal information provided. You may wish to read the Privacy & Security Notice which is available via a link on the homepage of www.regulations.gov.

Docket: For access to the docket and comments received by the National Infrastructure Advisory Council, please go to www.regulations.gov and enter docket number CISA–2024–0005.

A public comment period will take place from 3:35 p.m. to 3:45 p.m. EST. Speakers who wish to participate in the public comment period must email NIAC@mail.cisa.dhs.gov to register. Speakers should limit their comments to 3 minutes and will speak in order of registration. Please note that the public

comment period may end before the time indicated, depending on the number of speakers who register to participate.

FOR FURTHER INFORMATION CONTACT: Jonathan Dunn, 202–731–1020, NIAC@mail.cisa.dhs.gov.

SUPPLEMENTARY INFORMATION: The NIAC is established under section 10 of E.O. 13231 issued on October 16, 2001, as amended and continued under the authority of E.O. 14109, dated September 29, 2023. Notice of this meeting is given under 10(a) of the Federal Advisory Committee Act (FACA), Public Law 92–463 (5 U.S.C. ch. 10). The NIAC provides the President, through the Secretary of Homeland Security, advice on the security and resilience of the Nation's critical infrastructure sectors.

This meeting will be partially closed to the public, with the closure time of the meeting yet to be determined. Members of the public who register to participate virtually will be informed what portion of the meeting will be closed.

Agenda: The National Infrastructure Advisory Council will meet on Wednesday, December 11, 2024, from 1 p.m. to 5:15 p.m. EST to discuss NIAC activities. The open session will include: (1) public comment period; (2) presentation, deliberation and vote on the Disaster Response and Resiliency Report; (3) presentation, deliberation and vote on the Promoting Infrastructural Health Report; (4) presentation, deliberation and vote on the Expanding Workforce Report.

In the closed session, the meeting time has yet to be determined, senior White House officials will discuss priorities and potential threats concerning the nation's critical Infrastructure. The premature disclosure of this information could frustrate the successful implementation of protective measures designed to keep our country safe. Therefore, this portion of the meeting is required to be closed pursuant to section 10(d) of FACA and the Government in the Sunshine Act, 5 U.S.C. 552b(c)(1).

Dated: November 14, 2024.

Jonathan M. Dunn,

Designated Federal Officer, National Infrastructure Advisory Council, Cybersecurity and Infrastructure Security Agency, Department of Homeland Security.

[FR Doc. 2024–27288 Filed 11–20–24; 8:45 am]

BILLING CODE 9111–LF–P

DEPARTMENT OF THE INTERIOR

Office of the Secretary

[256D0102DM, DS6CS00000, DLSN00000.000000, DX.6CS25]

Notice of Senior Executive Service Performance Review Board Appointments

AGENCY: Office of the Secretary, Interior.

ACTION: Notice of appointments.

SUMMARY: This notice provides the names of individuals appointed to serve on the Department of the Interior Senior Executive Service (SES) Performance Review Board.

DATES: These appointments take effect upon November 21, 2024.

FOR FURTHER INFORMATION CONTACT:

Mark Green, Deputy Assistant Secretary—Human Capital and Diversity/Chief Human Capital Officer, by email at Mark_Green@ios.doi.gov, or by telephone at (202) 208–3100.

SUPPLEMENTARY INFORMATION: The individuals appointed to serve on the Department of the Interior SES Performance Review Board are as follows:

ANDERSON, JIM
BRUNO, JASON
CALDWELL, MIKE
CURRIER, PATTY
DUTSCHKE, AMY
FINNEGAN, COLLEEN
LUPO, FRANK
MATRAGRANO, KAREN
MORROW, HEIDI
O'NEAL, JASON
WEBER, WENDI
WEYERS, HOLLY

Authority: 5 U.S.C. 4314.

Mark D. Green,

Deputy Assistant Secretary—Human Capital and Diversity, Chief Human Capital Officer.

[FR Doc. 2024–27290 Filed 11–20–24; 8:45 am]

BILLING CODE 4334–63–P

DEPARTMENT OF THE INTERIOR

[FWS–R4–ES–2024–N052;
FVHC98220410150–XXX–FF04H00000]

Deepwater Horizon Natural Resource Damage Assessment Alabama Trustee Implementation Group Final Restoration Plan IV and Environmental Assessment: Wetlands, Coastal, and Nearshore Habitats; Nutrient Reduction; Birds; Oysters; and Provide and Enhance Recreational Opportunities and Finding of No Significant Impact

AGENCY: Department of the Interior.

ACTION: Notice of availability.

SUMMARY: The natural resource trustee agencies for the Alabama Trustee Implementation Group (Alabama TIG) have prepared the “Final Restoration Plan IV and Environmental Assessment: Wetlands, Coastal, and Nearshore Habitats; Nutrient Reduction; Birds, Oysters; and Provide and Enhance Recreational Opportunities” (Final RP/EA) and a Finding of No Significant Impact (FONSI). The Final RP/EA selects projects to partially restore resources injured in the Deepwater Horizon (DWH) oil spill. The Final RP/EA evaluates a reasonable range of 11 project alternatives under the Oil Pollution Act (OPA), including criteria set forth in the OPA natural resource damage assessment (NRDA) regulations, and the National Environmental Policy Act (NEPA) and its implementing regulations. A No Action alternative is also analyzed for each restoration type. The total cost to implement the Alabama TIG’s seven preferred alternatives is approximately \$24,000,000.

ADDRESSES: *Obtaining Documents:* You may download the Final RP/EA and FONSI at <https://www.gulfspace.com/restoration.noaa.gov/restoration-areas/alabama>. Alternatively, you may request a USB flash drive containing the Final RP/EA and FONSI (see **FOR FURTHER INFORMATION CONTACT**).

FOR FURTHER INFORMATION CONTACT: Nanciann Regalado, at nanciann_regalado@fws.gov or 678–296–6805. Individuals in the United States who are deaf, deafblind, hard of hearing, or have a speech disability may dial 711 (TTY, TDD, or TeleBraille) to access telecommunications relay services. Individuals outside the United States should use the relay services offered within their country to make international calls to the point-of-contact in the United States.

SUPPLEMENTARY INFORMATION:

Introduction

On April 20, 2010, the mobile offshore drilling unit Deepwater Horizon, which was drilling a well for BP Exploration and Production, Inc. (BP), experienced a significant explosion, fire, and subsequent sinking in the Gulf of Mexico, resulting in the release of millions of barrels of oil and other discharges into the Gulf. Under the authority of the Oil Pollution Act 1990 (OPA; 33 U.S.C. 2701 *et seq.*), designated Federal and State Trustees, acting on behalf of the public, assessed the injuries to natural resources and prepared the “Deepwater Horizon Oil Spill Final Programmatic Damage Assessment and Restoration Plan and

Final Programmatic Environmental Impact Statement” (Final PDARP/PEIS), and subsequent Record of Decision (ROD), which sets forth the governance structure and process for DWH restoration planning under the OPA’s natural resource damage assessment (NRDA). On April 4, 2016, the United States District Court for the Eastern District of Louisiana entered a Consent Decree resolving civil claims by the Trustees against BP.

The Alabama TIG is composed of the Alabama Department of Conservation and Natural Resources, the Geological Survey of Alabama, the Environmental Protection Agency, the U.S. Department of the Interior, the National Oceanic and Atmospheric Administration, and the U.S. Department of Agriculture. The Alabama TIG selects and implements restoration projects under the TIG’s management authority in accordance with the Consent Decree. The Final PDARP/PEIS, ROD, Consent Decree, and information on the DWH Trustees can be found at <https://www.gulfspace.com/restoration.noaa.gov/restoration-planning/gulf-plan>.

Background

On April 19, 2024, the Alabama TIG announced on its website that it had reviewed projects analyzed in previous restoration plans; identified projects that could provide restoration benefits to the Alabama restoration area if selected, continued, or expanded upon; and had initiated drafting its fourth restoration plan and environmental assessment. The RP/EA includes a reasonable range of 11 restoration alternatives (projects) for the 5 restoration types indicated in the plan’s title. On June 24, 2024, the Alabama TIG released the Draft RP/EA IV for a 30-day public review period (89 FR 52498). The Alabama TIG accepted public comments through July 24, 2024. To facilitate public understanding of the document, the Alabama TIG held a webinar on July 10, 2024, during which public comments were solicited. After the public review period closed, the Alabama TIG reviewed the comments received, prepared responses to those comments, finalized the plan, and prepared a FONSI.

Overview of the Alabama TIG’s Final RP/EA

The Final RP/EA and FONSI are being released in accordance with OPA, its implementing NRDA regulations found in the Code of Federal Regulations (CFR) at 15 CFR part 990, the National Environmental Policy Act (42 U.S.C. 4321 *et seq.*) and its implementing regulations found at 40 CFR parts 1500–

1508, the Final PDARP/PEIS, and the Consent Decree. The Final RP/EA provides OPA and NEPA analyses for a reasonable range of 11 alternatives listed below under the restoration types from which funds will be allocated. One project, Lower Perdido Islands Habitat Restoration—Phase II, will be funded through two restoration type allocations: the Wetlands, Coastal, and Nearshore Habitat restoration type and the Birds restoration type. Two projects, the Lower Perdido Islands Habitat Restoration—Phase II project and the Walker Island Expansion project, were considered under both the Wetlands, Coastal, and Nearshore Habitat restoration type and the Birds restoration type and are shown under both restoration types below. The seven alternatives selected for implementation are denoted with an asterisk (*).

Wetlands, Coastal, and Nearshore Habitats Restoration Type:

- Lower Perdido Islands Habitat Restoration Phase II*
 - Walker Island Expansion
- Nutrient Reduction Restoration Type:
- Puppy Creek—Juniper Creek—Big Creek Nutrient Reduction*
 - Bayou la Batre Nutrient Reduction
- Birds Restoration Type:
- Stewardship of Coastal Alabama Beach Nesting Bird Habitat*
 - Lower Perdido Islands Habitat Restoration—Phase II*
 - Walker Island Expansion
- Oysters Restoration Type:
- Improving Resilience for Oysters by Linking Brood Reefs and Sink Reefs (Large-scale)—Component 4—Mid-lower Mobile Bay, AL*
 - Oyster Grow-Out and Restoration Reef Replacement—5-year continuation*
 - Oyster Grow-Out and Restoration Reef Replacement—3-year continuation
- Provide and Enhance Recreational Opportunities Restoration Type:
- Bayfront Park Restoration and Improvement Phases Ia and Ib*
 - Laguna Cove Little Lagoon Natural Resource Protection—Large Scale Amenities
 - Laguna Cove Little Lagoon Natural Resource Protection—Small Scale Amenities*

The total estimated cost to implement the seven selected alternatives is approximately \$24,000,000. Restoration planning in the Alabama Restoration Area will continue.

Administrative Record

The documents comprising the Administrative Record for the Final RP/EA can be viewed electronically at <https://www.doi.gov/deepwaterhorizon/adminrecord> under folder 6.5.3.2.5.

Authority

The authority for this action is the Oil Pollution Act of 1990 (33 U.S.C. 2701 *et seq.*), its implementing Natural Resource Damage Assessment regulations found at 15 CFR part 990, and the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*) and its implementing regulations found at 40 CFR parts 1500–1508.

Mary Josie Blanchard,

Department of the Interior, Director of Gulf of Mexico Restoration.

[FR Doc. 2024–27302 Filed 11–20–24; 8:45 am]

BILLING CODE 4333–15–P

DEPARTMENT OF THE INTERIOR**Bureau of Land Management**

[BLM_AK_FRN_MO4500171969; AA–6676–L, AA–6676–M]

Alaska Native Claims Selection

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of decision approving lands for conveyance.

SUMMARY: The Bureau of Land Management (BLM) hereby provides constructive notice that it will issue an appealable decision approving conveyance of the surface estate in certain lands to Koliganek Natives Limited, for the Native village of Koliganek, pursuant to the Alaska Native Claims Settlement Act of 1971 (ANCSA). The subsurface estate in the same lands will be conveyed to Bristol Bay Native Corporation when the surface estate is conveyed to Koliganek Natives Limited.

DATES: Any party claiming a property interest in the lands affected by the decision may appeal the decision in accordance with the requirements of 43 CFR part 4 within the time limits set out in the **SUPPLEMENTARY INFORMATION** section.

ADDRESSES: You may obtain a copy of the decision from the Bureau of Land Management, Alaska State Office, 222 West Seventh Avenue, #13, Anchorage, AK 99513–7504.

FOR FURTHER INFORMATION CONTACT: Alban Burton, Land Law Examiner, Adjudication Section, BLM Alaska State Office, 907–271–1312, or aburton@blm.gov. Individuals in the United States who are deaf, deafblind, hard of hearing, or have a speech disability may dial 711 (TTY, TDD, or TeleBraille) to access telecommunications relay services. Individuals outside the United States should use the relay services

offered within their country to make international calls to the point of contact in the United States.

SUPPLEMENTARY INFORMATION: As required by 43 CFR 2650.7(d), notice is hereby given that the BLM will issue an appealable decision to Koliganek Natives Limited. The decision approves conveyance of the surface estate in certain lands pursuant to ANCSA (43 U.S.C. 1601, *et seq.*), as amended. As provided by ANCSA, the subsurface estate in the same lands will be conveyed to Bristol Bay Native Corporation when the surface estate is conveyed to Koliganek Natives Limited. The lands are located in the vicinity of Koliganek, Alaska, and are described as:

Seward Meridian, Alaska

T. 5 S., R. 46 W.,
Secs. 16 and 17.
Containing 1,249.13 acres.
T. 5 S., R. 48 W.,
Sec. 16.
Containing 618.40 acres.
Aggregating a total of 1,867.53 acres.

The decision addresses public access easements, if any, to be reserved to the United States pursuant to sec. 17(b) of ANCSA (43 U.S.C. 1616(b)), in the lands described above.

The BLM will also publish notice of the decision once a week for four consecutive weeks in both the Bristol Bay Times and Dutch Harbor Fisherman newspaper.

Any party claiming a property interest in the lands affected by the decision may appeal the decision in accordance with the requirements of 43 CFR part 4 within the following time limits:

1. Unknown parties, parties unable to be located after reasonable efforts have been expended to locate, parties who fail or refuse to sign their return receipt, and parties who receive a copy of the decision by regular mail which is not certified, return receipt requested, shall have until December 23, 2024 to file an appeal.

2. Parties receiving service of the decision by certified mail shall have 30 days from the date of receipt to file an appeal.

Parties who do not file an appeal in accordance with the requirements of 43 CFR part 4 shall be deemed to have waived their rights. Notices of appeal transmitted by facsimile will not be accepted as timely filed.

Alban L. Burton,

Land Law Examiner, Adjudication Section.

[FR Doc. 2024–27257 Filed 11–20–24; 8:45 am]

BILLING CODE 4331–10–P

DEPARTMENT OF THE INTERIOR**Bureau of Land Management**

[BLM_AK_FRN_MO4500183283; AA–75568]

Alaska Native Claims Selection

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of decision approving lands for conveyance.

SUMMARY: The Bureau of Land Management (BLM) hereby provides constructive notice that it will issue an appealable decision approving conveyance of the surface and subsurface estates in certain lands to Cook Inlet Region, Inc., an Alaska Native regional corporation, pursuant to the Alaska Native Claims Settlement Act of 1971 (ANCSA) and the Act of January 2, 1976.

DATES: Any party claiming a property interest in the lands affected by the decision may appeal the decision in accordance with the requirements of 43 CFR part 4 within the time limits set out in the **SUPPLEMENTARY INFORMATION** section.

ADDRESSES: You may obtain a copy of the decision from the Bureau of Land Management, Alaska State Office, 222 West Seventh Avenue, #13, Anchorage, AK 99513–7504.

FOR FURTHER INFORMATION CONTACT: Cameron Means, BLM Alaska State Office, 907–271–3152, or cmeans@blm.gov. Individuals in the United States who are deaf, deafblind, hard of hearing, or have a speech disability may dial 711 (TTY, TDD, or TeleBraille) to access telecommunications relay services. Individuals outside the United States should use the relay services offered within their country to make international calls to the point of contact in the United States.

SUPPLEMENTARY INFORMATION: As required by 43 CFR 2650.7(d), notice is hereby given that the BLM will issue an appealable decision to Cook Inlet Region, Inc. The decision approves conveyance of the surface and subsurface estates in certain lands pursuant to ANCSA (43 U.S.C. 1601), and the Act of January 2, 1976 (43 U.S.C. 1611 note), as amended. The lands are located in the vicinity of Anchorage, Alaska, and are described as:

A portion of lot 7, U.S. Survey No. 10050, Alaska.

Containing approximately 272 acres.

The decision addresses public access easements, if any, to be reserved to the United States pursuant to sec. 17(b) of

ANCSA (43 U.S.C. 1616(b)), in the lands described above.

The BLM will also publish notice of the decision once a week for four consecutive weeks in the "Anchorage Daily News" newspaper.

Any party claiming a property interest in the lands affected by the decision may appeal the decision in accordance with the requirements of 43 CFR part 4 within the following time limits:

1. Unknown parties, parties unable to be located after reasonable efforts have been expended to locate, parties who fail or refuse to sign their return receipt, and parties who receive a copy of the decision by regular mail which is not certified, return receipt requested, shall have until December 23, 2024 to file an appeal.

2. Parties receiving service of the decision by certified mail shall have 30 days from the date of receipt to file an appeal.

Parties who do not file an appeal in accordance with the requirements of 43 CFR part 4 shall be deemed to have waived their rights. Notices of appeal transmitted by facsimile will not be accepted as timely filed.

Cameron G. Means,

Land Law Examiner, Adjudication Section.

[FR Doc. 2024-27249 Filed 11-20-24; 8:45 am]

BILLING CODE 4331-10-P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[BLM_AK_FRN_MO4500183122;
AKAK106400581; F-86061,
AKAK106577809; F-16301,
AKAK106460876; AA-61299,
AKAK106577812; F-16304,
AKAK106560439; F-85667,
AKAK106397277; AA-61005,
AKAK106560451; F-85702, and
AKAK106400580; F-86060]

Public Land Order No. 7952; Partial Revocation of Public Land Order Nos. 5169, 5173, 5179, 5180, 5184, 5186, 5188, and 5242, as Amended, Modified, or Corrected, and Opening of Additional Lands for Selection by Alaska Native Vietnam-era Veterans; Alaska

AGENCY: Bureau of Land Management, Interior.

ACTION: Public Land Order.

SUMMARY: This order partially revokes eight Public Land Orders (PLOs) insofar as they affect approximately 11,163,252 acres of public lands in the Central Yukon area of Alaska and opens these lands to allow for allotment selection by eligible Alaska Native Vietnam-era

Veterans and possible conveyance under the Alaska Native Vietnam-era Veterans Land Allotment Program (Allotment Program) established by the John D. Dingell, Jr. Conservation, Management, and Recreation Act of 2019 (Dingell Act).

DATES: This PLO takes effect on November 21, 2024.

FOR FURTHER INFORMATION CONTACT:

Brittany Templeton, Realty Specialist, Bureau of Land Management (BLM) Alaska State Office, 222 West Seventh Avenue, Mailstop #13, Anchorage, AK 99513-7504, (907) 271-4214, or btempleton@blm.gov. Individuals in the United States who are deaf, deafblind, hard of hearing, or have a speech disability may dial 711 (TTY, TDD, or TeleBraille) to access telecommunications relay services. Individuals outside the United States should use the relay services offered within their country to make international calls to the point of contact in the United States.

SUPPLEMENTARY INFORMATION: The eight PLOs revoked in part by this order were established pursuant to Executive Order 10355 and section 17(d)(1) of the Alaska Native Claims Settlement Act (ANCSA). The BLM analyzed partial revocation of these PLOs and opening of the affected lands for allotment selections and possible conveyances under the Allotment Program in the Central Yukon Proposed Resource Management Plan (RMP) and Final Environmental Impact Statement. This order implements the recommendation in BLM's Record of Decision approving the Central Yukon RMP to open ANCSA 17(d)(1) lands to allotment selection under the Allotment Program, except where the ANCSA 17(d)(1) withdrawals overlap with PLO No. 5150, as amended, modified, or corrected.

Before approving the Central Yukon RMP, BLM analyzed the effects of this action and determined, pursuant to section 810 of the Alaska National Interest Lands Conservation Act, that this action would not significantly restrict subsistence uses or have a disproportionate negative effect on environmental justice communities.

PLO No. 5169 and 5173, as amended, modified, or corrected, withdrew public lands for selection by Village and Regional Corporations under section 11(a)(3) of ANCSA, and for classification. PLO No. 5179, as amended, modified, or corrected, withdrew public lands in aid of legislation concerning addition to, or creation of, units of the National Park, National Forest, Wildlife Refuge, and Wild and Scenic Rivers systems, and to

allow for classification of the lands. PLO No. 5180, as amended, modified, or corrected, withdrew public lands to allow for classification and for the protection of the public interest in these lands. PLO No. 5184, as amended, modified, or corrected, withdrew public lands to allow for classification or reclassification of some of areas withdrawn by section 11 of ANCSA. PLO No. 5186, as amended, modified, or corrected, withdrew public lands for classification and protection of the public interest in lands not selected by the State of Alaska. PLO No. 5188, as amended, modified, or corrected, withdrew the lands in former reservations for classification and protection of the public interest for the use and benefit of Alaska Natives pursuant to section 17(d)(1) of ANCSA. PLO No. 5242, as amended, modified, or corrected, withdrew lands pending determination of certain Native communities under section 11(b)(3) of ANCSA, and classification of lands not conveyed pursuant to section 14 of ANCSA.

Order

By virtue of the authority vested in the Secretary of the Interior by section 204 of the Federal Land Policy and Management Act of 1976, 43 U.S.C. 1714, and section 17(d)(1) of the Alaska Native Claims Settlement Act of 1971, 43 U.S.C. 1616(d)(1), it is ordered as follows:

1. Subject to valid existing rights, Public Land Order No. 5169 (37 FR 5572), 5173 (37 FR 5575), 5179 (37 FR 5579), 5180 (37 FR 5583), 5184 (37 FR 5588), 5186 (37 FR 5589), 5188 (37 FR 5591), and 5242 (37 FR 15513) and any amendments, modifications, or corrections to these Orders, are hereby partially revoked to allow for allotment selection under the Allotment Program, and for no other purposes, insofar as they affect the following described Federal lands in the Central Yukon planning area:

Fairbanks Meridian, Alaska

- T. 2 N., R. 1 E.,
Sec. 19, lot 2.
- T. 26 N., R. 1 E., unsurveyed,
Secs. 1 thru 25.
- T. 26 N., R. 2 E., unsurveyed,
Sec. 3;
Secs. 4 and 5, excepting U.S. No. Survey 12476;
Secs. 6 thru 11, secs. 14 thru 22, and Sec. 30.
- T. 26 N., R. 1 W., unsurveyed,
Secs. 1 thru 24 and secs. 27 and 28;
Sec. 29, excepting U.S. Survey No. 13893;
Sec. 30.
- T. 1 N., R. 2 W.,
Sec. 21, W¹/₂NW¹/₄NW¹/₄SE¹/₄;

- Sec. 28, that portion excluded from Tentative Approvals F-028735 issued February 20, 1985, and March 3, 1998;
- Sec. 30, lots 1 thru 12;
- Sec. 32, that portion excluded from Tentative Approval F-028735 issued February 20, 1985;
- Sec. 33, that portion excluded from Tentative Approvals F-028735 issued February 20, 1985, and March 3, 1998;
- tract 38, those portions excluded from Mental Health Approval F-031637 issued March 11, 2008;
- tracts 40, 41, and 43;
- M.S. Nos. 2081, 2409, 2485, and 2530.
- T. 26 N., R. 2 W., unsurveyed, Secs. 1 thru 28.
- T. 1 N., R. 3 W., lot 1, U.S. Survey No. 4012.
- T. 26 N., R. 3 W., unsurveyed, Secs. 1 thru 24.
- T. 26 N., R. 4 W., unsurveyed, Secs. 1 thru 24 and Secs. 26 thru 29.
- T. 25 N., R. 5 W., unsurveyed, Secs. 5 thru 8;
- Sec. 17, N $\frac{1}{2}$;
- Sec. 18, N $\frac{1}{2}$.
- T. 26 N., R. 5 W., unsurveyed, Secs. 1 thru 21;
- Sec. 23, N $\frac{1}{2}$ and SE $\frac{1}{4}$;
- Sec. 24 and Secs. 28 thru 33.
- T. 5 N., R. 6 W., lots 1 and 2, U.S. Survey No. 5610A.
- T. 6 N., R. 6 W.
- T. 7 N., R. 6 W., lot 1, U.S. Survey No. 9253.
- T. 25 N., R. 6 W., unsurveyed, Secs. 1 thru 12;
- Sec. 13, N $\frac{1}{2}$;
- Sec. 14, N $\frac{1}{2}$ and SW $\frac{1}{4}$;
- Secs. 15 thru 22;
- Sec. 23 W $\frac{1}{2}$;
- Sec. 26 NW $\frac{1}{4}$;
- Sec. 27, N $\frac{1}{2}$;
- Sec. 28, N $\frac{1}{2}$;
- Secs. 29 and 30.
- T. 26 N., R. 6 W., unsurveyed.
- T. 34 N., R. 6 W., unsurveyed, Secs. 4 thru 9, Secs. 16 thru 21, and Secs. 28 thru 33.
- T. 35 N., R. 6 W., unsurveyed, Secs. 19, 20, and 21 and Secs. 28 thru 33.
- T. 1 N., R. 7 W., U.S. Survey No. 5096.
- T. 6 N., R. 7 W., Sec. 17, that portion excluded from Interim Conveyance Nos. 587 and 588 as material site right-of-way F-025508;
- Sec. 30, that portion excluded from Interim Conveyance Nos. 587 and 588 as material site right-of-way F-025509.
- T. 7 N., R. 7 W.
- T. 24 N., R. 7 W., unsurveyed, Secs. 2 thru 8.
- Tps. 25 thru 28 N., R. 7 W., unsurveyed.
- T. 29 N., R. 7 W., unsurveyed, Secs. 19, 20, 21, 35, and 36.
- T. 33 N., R. 7 W., unsurveyed, Secs. 1, 2, 3, 10, and 11.
- T. 34 N., R. 7 W., unsurveyed, Secs. 22 thru 27 and Secs. 34, 35, and 36.
- T. 35 N., R. 7 W., unsurveyed, Sec. 18.
- T. 3 N., R. 8 W., Sec. 1.
- T. 4 N., R. 8 W., Secs. 10 thru 14, Secs. 23 thru 26, and Secs. 35 and 36.
- T. 7 N., R. 8 W.
- T. 24 N., R. 8 W., unsurveyed, Sec. 1;
- Sec. 2, E $\frac{1}{2}$;
- Sec. 11, E $\frac{1}{2}$;
- Sec. 12.
- T. 25 N., R. 8 W., unsurveyed, Secs. 1 thru 27;
- Sec. 28, E $\frac{1}{2}$;
- Sec. 30, W $\frac{1}{2}$;
- Secs. 34, 35, and 36.
- Tps. 26 and 27 N., R. 8 W., unsurveyed.
- T. 28 N., R. 8 W., unsurveyed, Secs. 1, 2, and 3 and Secs. 10 thru 36.
- T. 29 N., R. 8 W., unsurveyed.
- T. 5 N., R. 9 W., Tract A, that portion described as (protracted) Sec. 31.
- T. 24 N., R. 9 W., unsurveyed, Secs. 4, 5, and 6.
- T. 25 N., R. 9 W., unsurveyed, Secs. 1 thru 34;
- Sec. 35, N $\frac{1}{2}$ and SW $\frac{1}{4}$;
- Sec. 36, NW $\frac{1}{4}$.
- T. 26 N., R. 9 W., Secs. 1 thru 6, Secs. 9 thru 16, and Secs. 20 thru 36, unsurveyed.
- T. 27 N., R. 9 W., unsurveyed.
- T. 29 N., R. 9 W., unsurveyed, Secs. 23 thru 26 and Secs. 34, 35, and 36.
- T. 2 N., R. 10 W., Sec. 10, lots 1, 2, and 4;
- Tract H;
- Tracts K and L, those portions described as (protracted) Secs. 8 and 9;
- U.S. Survey No. 4450-C.
- T. 3 N., R. 10 W., Sec. 34.
- T. 4 N., R. 10 W., Sec. 1;
- Tract A, those portions described as (protracted) Secs. 25, 26, 27, 34, 35, and 36.
- T. 5 N., R. 10 W., Sec. 26, that portion excluded from Interim Conveyance Nos. 587 and 588 as material site right-of-way F-025521;
- Secs. 27 thru 30;
- Secs. 31 and 32, those portions excluded from Interim Conveyance Nos. 587 and 588 as material site right-of-way F-025524;
- Sec. 33, that portion excluded from Interim Conveyance Nos. 587 and 588 as material site right-of-way F-025522;
- Sec. 35, that portion excluded from Interim Conveyance Nos. 587 and 588 as material site right-of-way F-025521.
- Tps. 8 and 10 N., R. 10 W., T. 22 N., R. 10 W., unsurveyed, Secs. 3 thru 9 and Secs. 17, 18, and 19.
- T. 23 N., R. 10 W., unsurveyed, Secs. 1 thru 23 and Secs. 27 thru 34.
- T. 24 N., R. 10 W., unsurveyed, Secs. 1 thru 10, Secs. 15 thru 22, and Secs. 26 thru 35.
- T. 25 N., R. 10 W., unsurveyed.
- T. 26 N., R. 10 W., Secs. 1 thru 12, Secs. 25 thru 29, and Secs. 31 thru 36, unsurveyed.
- T. 27 N., R. 10 W., unsurveyed.
- T. 28 N., R. 10 W., unsurveyed, Secs. 19 thru 36.
- T. 10 N., R. 11 W., Secs. 1 and 2, Secs. 4 thru 8, Secs. 11, 12, and 13, Secs. 17 thru 20, and Secs. 29, 30, and 36.
- T. 17 N., R. 11 W., unsurveyed, Secs. 6, 7, 18, and 19 and Secs. 29 thru 32.
- T. 18 N., R. 11 W., unsurveyed, Secs. 6, 7, 18, 19, 30, and 31.
- T. 19 N., R. 11 W., unsurveyed, Sec. 31.
- T. 21 N., R. 11 W., unsurveyed, Secs. 4 thru 9, Secs. 17 thru 20, and Secs. 29 and 30.
- T. 22 N., R. 11 W., unsurveyed, Secs. 1 thru 34.
- Tps. 23, 24, and 25 N., R. 11 W., unsurveyed.
- T. 26 N., R. 11 W., Secs. 1 thru 12, Secs. 14 thru 18, and Secs. 20, 21, 34, 35, and 36, unsurveyed.
- T. 5 N., R. 12 W., U.S. Survey No. 11811.
- T. 7 N., R. 12 W., M.S. Nos. 421 and 2404.
- T. 9 N., R. 12 W., Secs. 9 thru 17 and Secs. 21, 22, 26, 27, and 34.
- T. 11 N., R. 12 W., Secs. 1 thru 17;
- Sec. 18, excepting U.S. Survey No. 14451;
- Secs. 19 thru 36.
- T. 12 N., R. 12 W.
- T. 19 N., R. 12 W., unsurveyed, Secs. 2 thru 11, Secs. 13 thru 24, and Secs. 26 thru 36.
- T. 20 N., R. 12 W., unsurveyed, Secs. 2 thru 11, Secs. 14 thru 23, and Secs. 26 thru 35.
- Tps. 21 thru 24 N., R. 12 W., unsurveyed.
- T. 29 N., R. 13 W., Sec. 23, that portion lying outside the boundary of Gates of the Arctic National Park;
- Sec. 24;
- Secs. 25, 26, 35, and 36, those portions lying outside the boundary of Gates of the Arctic National Park.
- T. 11 N., R. 14 W., unsurveyed.
- T. 12 N., R. 14 W., unsurveyed, Sec. 1;
- Sec. 2, excepting lot 3, U.S. Survey No. 6741 and U.S. Survey No. 6866;
- Sec. 3, excepting lots 2 and 3, U.S. Survey No. 6741;
- Secs. 4 thru 8;
- Sec. 9, excepting U.S. Survey No. 6317 and lot 1, U.S. Survey No. 6741;
- Sec. 10, excepting U.S. Survey No. 6741;
- Sec. 11, excepting lot 3, U.S. Survey No. 6741 and U.S. Survey No. 6866;
- Secs. 12 thru 19;
- Sec. 20, excepting U.S. Survey No. 8383;
- Secs. 21 thru 36.
- Tps. 13 and 14 N., R. 14 W., unsurveyed.
- T. 28 N., R. 14 W., Secs. 13, 24, 25, 35, and 36, those portions lying outside the boundary of Gates of the Arctic National Park.
- T. 8 N., R. 15 W., Sec. 21, NE $\frac{1}{4}$.
- Tps. 9 thru 16 N., R. 15 W., unsurveyed.
- T. 26 N., R. 15 W., unsurveyed, Secs. 25 thru 29 and Secs. 31 and 32, those portions lying outside the boundary of Gates of the Arctic National Park;
- Secs. 33 and 34;
- Secs. 35 and 36, those portions lying outside the boundary of Gates of the Arctic National Park.

- T. 3 N., R. 16 W.,
Tract B, those portions of (protracted) sections 6, 7, 17, and 18, excluded from Tentative Approvals F-89353 issued June 11, 2012, and August 28, 2014; that portion of (protracted) sec. 19 excluded from Tentative Approvals F-026787 issued October 15, 2009, and August 28, 2014.
- T. 4 N., R. 16 W.,
Sec. 31, that portion excluded from Tentative Approval F-026919 issued December 5, 1996.
- T. 7 N., R. 16 W.,
Secs. 4, 5, 6, and 8.
- Tps. 8 thru 12 N., R. 16 W., unsurveyed.
- T. 13 N., R. 16 W., unsurveyed,
Secs. 1 thru 9;
Sec. 10, excepting lot 2, U.S. Survey No. 14273;
Secs. 11 thru 14;
Sec. 15, excepting lot 2, U.S. Survey No. 14273;
Secs. 16 thru 36.
- T. 14 N., R. 16 W., unsurveyed.
- T. 15 N., R. 16 W.,
Secs. 1 thru 4, unsurveyed;
Sec. 5, E $\frac{1}{2}$, unsurveyed;
Sec. 8, E $\frac{1}{2}$, unsurveyed;
Secs. 9 thru 17, unsurveyed;
Sec. 18 E $\frac{1}{2}$, unsurveyed;
Sec. 19, NE $\frac{1}{4}$ and S $\frac{1}{2}$, unsurveyed;
Secs. 20 thru 36, unsurveyed.
- Tps. 16, 17, and 18 N., R. 16 W., unsurveyed.
- T. 4 N., R. 17 W.,
Sec. 36, that portion excluded from Tentative Approval F-23238 issued December 28, 1982.
- T. 6 N., R. 17 W.,
Secs. 10 and 11, Secs. 14 thru 17, and Secs. 20 thru 23, those portions excluded from Tentative Approval No. F-44193, issued March 17, 1992, as Power Site Classification No. 403.
- T. 7 N., R. 17 W.,
Secs. 1 thru 19, and Sec. 22.
- Tps. 8 thru 13 N., R. 17 W., unsurveyed.
- T. 14 N., R. 17 W.,
Secs. 1 and 2, unsurveyed;
Sec. 3, E $\frac{1}{2}$ and SW $\frac{1}{4}$, unsurveyed;
Sec. 4, S $\frac{1}{2}$, unsurveyed;
Sec. 5, W $\frac{1}{2}$ and SE $\frac{1}{4}$, unsurveyed;
Secs. 6 thru 36, unsurveyed.
- T. 26 N., R. 17 W.,
Secs. 25 and 26.
- T. 6 N., R. 18 W.,
Secs. 13, 24, 25, and 36.
- Tps. 7 thru 10 N., R. 18 W., unsurveyed.
- T. 11 N., R. 18 W., unsurveyed,
Sec. 1;
Sec. 2, excepting U.S. Survey Nos. 7500 and 8605;
Secs. 3 thru 36.
- T. 12 and 13 N., R. 18 W., unsurveyed.
- T. 14 N., R. 18 W.,
Secs. 1 and 2, unsurveyed;
Sec. 3, SE $\frac{1}{4}$, unsurveyed;
Sec. 10, E $\frac{1}{2}$ and SW $\frac{1}{4}$, unsurveyed;
Secs. 11 thru 15, unsurveyed;
Sec. 16, E $\frac{1}{2}$ and SW $\frac{1}{4}$, unsurveyed;
Sec. 17, SE $\frac{1}{4}$, unsurveyed;
Sec. 19, E $\frac{1}{2}$ and SW $\frac{1}{4}$, unsurveyed;
Secs. 20 thru 36, unsurveyed.
- T. 25 N., R. 18 W.,
Secs. 5 thru 8 and Secs. 17 and 18.
- T. 1 N., R. 19 W.,
Secs. 8 and 17, those portions excluded from Tentative Approval F-43814 issued November 14, 1986, as Native Allotment application F-13680;
lot 3, U.S. Survey No. 10474, that portion within protracted sec. 33.
- T. 4 N., R. 19 W.,
Secs. 1 thru 4;
Sec. 5, excepting U.S. Survey No. 13990;
Sec. 6, excepting U.S. Survey No. 14232;
Sec. 7, excepting U.S. Survey Nos. 13990 and 14232;
Sec. 8, excepting U.S. Survey No. 13990.
Secs. 9 thru 24.
- T. 5 N., R. 19 W.,
tract B.
- T. 6 N., R. 19 W.,
Secs. 3 thru 10, Secs. 15 thru 22, and Secs. 27 thru 34.
- Tps. 7 thru 13 N., R. 19 W., unsurveyed.
- T. 14 N., R. 19 W., unsurveyed,
Sec. 16, S $\frac{1}{2}$;
Sec. 20, S $\frac{1}{2}$;
Secs. 21 and 22;
Sec. 23, S $\frac{1}{2}$;
Sec. 24, S $\frac{1}{2}$;
Secs. 25 thru 29;
Sec. 30, SE $\frac{1}{4}$;
Secs. 31 thru 36.
- T. 24 N., R. 19 W.,
Secs. 5 and 6.
- T. 29 N., R. 19 W.,
Secs. 7, 8, 9, and 16, those portions excluded from Tentative Approval F-15183 issued December 19, 1980.
- T. 2 N., R. 20 W.,
Secs. 3, 4, 9, 10, 15, and 16.
- Tps. 7 thru 13 N., R. 20 W., unsurveyed.
- T. 14 N., R. 20 W., unsurveyed,
Sec. 33, SE $\frac{1}{4}$;
Sec. 34, S $\frac{1}{2}$;
Sec. 35, S $\frac{1}{2}$;
Sec. 36, S $\frac{1}{2}$.
- T. 29 N., R. 20 W.,
Secs. 1, 2, 3, and 12, those portions excluded from Tentative Approval F-15183 issued December 19, 1980.
- T. 2 N., R. 21 W.,
Secs. 4 thru 8 and Secs. 17 and 18.
- T. 3 N., R. 21 W.,
Secs. 2, 3, 6, 7, 11, 18, 19, 30, and 31.
- T. 4 N., R. 21 W.,
Sec. 1, that portion excluded from Interim Conveyance Nos. 1038 and 1039 as Native Allotment F-02389.
- Tps. 6 thru 13 N., R. 21 W., unsurveyed.
- T. 1 N., R. 22 W.,
Secs. 1, 2, and 3, Secs. 10 thru 15, Secs. 22 thru 27, and Secs. 34, 35, and 36.
- T. 2 N., R. 22 W.,
Secs. 1 thru 4 and Secs. 9 thru 16.
- T. 3 N., R. 22 W.,
Secs. 1 thru 16, Secs. 21 thru 28, and Secs. 33 thru 36.
- T. 4 N., R. 22 W.,
Sec. 1, lot 11, that portion excluded from Interim Conveyance Nos. 1038 and 1039 as the lands formerly within Native allotment F-13546 Parcel B;
Sec. 2, that portion excluded from Interim Conveyance Nos. 1038 and 1039 as the lands formerly within Native allotment F-16641;
- U.S. Survey No. 1470, that portion excluded from Interim Conveyance Nos. 1038 and 1039 as the lands formerly
- within Native allotment F-13546 Parcel B;
lot 3, U.S. Survey No. 4104.
- T. 5 N., R. 22 W.,
Secs. 1 thru 24 and Secs. 28 thru 33;
Sec. 36, that portion excluded from Interim Conveyance Nos. 1038 and 1039 as lands formerly within Native Allotment F-16246 Parcel A.
- T. 7 N., R. 22 W., unsurveyed.
- T. 8 N., R. 22 W., unsurveyed,
Secs. 1 and 2;
Sec. 3, excepting U.S. Survey No. 6598;
Secs. 4 thru 36.
- Tps. 9 thru 13 N., R. 22 W., unsurveyed.
- T. 3 N., R. 23 W.,
Secs. 1 and 2.
- T. 5 N., R. 23 W.,
Secs. 31 thru 36.
- Tps. 6 and 7 N., R. 23 W., unsurveyed.
- T. 8 N., R. 23 W., unsurveyed,
Secs. 1 thru 12;
Secs. 13 and 14, excepting U.S. Survey No. 6494;
Secs. 15 thru 22;
Sec. 23, excepting U.S. Survey Nos. 6494, 6595, 7102, and 7472;
Sec. 24, excepting U.S. Survey Nos. 6494 and 7472;
Sec. 25;
Sec. 26, excepting U.S. Survey No. 6876;
Sec. 27, excepting U.S. Survey No. 6907;
Secs. 28 thru 33;
Sec. 34, excepting U.S. Survey No. 6907;
Secs. 35 and 36.
- Tps. 9 thru 13 N., R. 23 W., unsurveyed.
- T. 1 N., R. 24 W.,
Secs. 19 thru 36, unsurveyed.
- T. 5 N., R. 24 W.,
Secs. 1 and 2, secs. 6 and 7, secs. 11 thru 14, secs. 18 and 19, secs. 23 thru 26, secs. 29 thru 32, and Sec. 36, partly unsurveyed.
- T. 6 N., R. 24 W.,
Sec. 1, secs. 4 thru 8, secs. 11 thru 14, secs. 17, 18, and 19, secs. 23 thru 27, and secs. 30, 31, 34, 35, and 36, unsurveyed.
- Tps. 7 thru 13 N., R. 24 W., unsurveyed.
- T. 14 N., R. 24 W., unsurveyed,
Secs. 19 and 20;
Sec. 27, SW $\frac{1}{4}$;
Sec. 28, S $\frac{1}{2}$;
Secs. 29 thru 33;
Sec. 34, W $\frac{1}{2}$.
- T. 19 N., R. 24 W.,
Secs. 4 and 9, secs. 16 thru 21, and secs. 30 and 31.
- T. 21 N., R. 24 W.,
Secs. 19, 20, 21, and secs. 28 thru 33.
- T. 1 N., R. 25 W.,
Secs. 19 thru 36, unsurveyed.
- Tps. 2 and 3 N., R. 25 W., unsurveyed.
- T. 4 N., R. 25 W.,
tract A.
- Tps. 8 thru 13 N., R. 25 W., unsurveyed.
- T. 14 N., R. 25 W., unsurveyed,
Sec. 2, W $\frac{1}{2}$;
Secs. 3 thru 10;
Sec. 11, W $\frac{1}{2}$;
Secs. 13 thru 36.
- T. 15 N., R. 25 W., unsurveyed,
Secs. 4 thru 9;
Sec. 10, SW $\frac{1}{4}$;
Sec. 15, NW $\frac{1}{4}$;
Secs. 16 thru 21 and secs. 28 thru 33;
Sec. 34, SW $\frac{1}{4}$.

- T. 16 N., R. 25 W., unsurveyed,
Sec. 3, W $\frac{1}{2}$;
Secs. 4 thru 9;
Sec. 10, W $\frac{1}{2}$;
Sec. 15; W $\frac{1}{2}$;
Secs. 16, 17, and 18;
Sec. 19, excepting U.S. Survey No. 6234;
Secs. 20, 21, 22, and secs. 27 thru 33;
Sec. 34, NW $\frac{1}{4}$.
- T. 17 N., R. 25 W., unsurveyed,
Secs. 6, 7, 18, and 19;
Sec. 20, S $\frac{1}{2}$;
Sec. 21, S $\frac{1}{2}$;
Sec. 22, S $\frac{1}{2}$;
Sec. 23, S $\frac{1}{2}$;
Sec. 25, SW $\frac{1}{4}$;
Secs. 26 thru 35;
Sec. 36, W $\frac{1}{2}$.
- T. 18 N., R. 25 W.,
Secs. 1, 2, and 3, secs. 10 thru 15, secs. 22
thru 27, and secs. 34, 35, and 36.
- T. 20 N., R. 25 W.,
Secs. 2 thru 11, secs. 14 thru 22, and secs.
27 thru 33.
- T. 25 N., R. 25 W., unsurveyed.
- T. 1 N., R. 26 W.,
Secs. 19 thru 36, unsurveyed.
- T. 2 N., R. 26 W.,
Secs. 1, 2, and 3, secs. 10 thru 15, secs. 22
thru 27, and secs. 34, 35, and 36,
unsurveyed.
- T. 4 N., R. 26 W.,
Sec. 7, lots 2 and 3;
Sec. 8;
tract A, that portion described as
protracted Sec. 18, excepting U.S. Survey
Nos. 11268 and 13865.
- Tps. 8 thru 14 N., R. 26 W., unsurveyed.
- T. 15 N., R. 26 W., unsurveyed,
Sec. 1;
Sec. 2, excepting U.S. Survey No. 11613;
Secs. 11 thru 14, secs. 23 thru 26, and secs.
35 and 36.
- T. 16 N., R. 26 W., unsurveyed.
- T. 1 S., R. 1 W.,
Sec. 7, lots 63, 69, 70 and 71;
- T. 1 S., R. 2 W.,
Sec. 4, lots 5, 7, and 10,
W $\frac{1}{2}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$, and E $\frac{1}{2}$ SE $\frac{1}{4}$;
Sec. 5, lots 4, 5, 9, 11, and 13, lot 14,
excepting M.S. No. 829, lots 15, 20, and
22, lots 24 thru 29 and E $\frac{1}{2}$ SE $\frac{1}{4}$;
Sec. 8, lot 7 and lot 8, excepting M.S. No.
1947;
Sec. 9, lot 11;
Sec. 30, N $\frac{1}{2}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ and S $\frac{1}{2}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$;
M.S. No. 2104;
M.S. No. 2230, that portion excluded from
Patent No. 50-66-0014.
- T. 11 S., R. 5 W.,
Sec. 9, that portion excluded from
Tentative Approval F-44042 issued
August 18, 1992.
- T. 7 S., R. 6 W.,
Secs. 4 thru 9 and secs. 17, 18, 19, and 30,
unsurveyed.
- T. 10 S., R. 6 W.,
Sec. 18, that portion excluded from
Tentative Approval F-24581 issued
January 23, 1992.
- T. 5 S., R. 7 W.,
Secs. 18, 19, 30, and 31.
- T. 1 S., R. 8 W.,
lot 3, U.S. Survey No. 9969, that portion
excluded from Tentative Approval F-
026792 issued March 11, 1981, as
Regional Selection F-22747.
- T. 5 S., R. 8 W.,
Sec. 1, that portion excluding Public Land
Order No. 19;
Sec. 10, SW $\frac{1}{4}$;
Secs. 12 and 13;
Sec. 26, lots 1 and 2;
Sec. 35, lots 1 and 2.
- T. 6 S., R. 8 W.,
tract A, that portion within (protracted)
Sec. 15 excluded from Tentative
Approval F-024563 issued May 16,
1961.
- T. 5 S., R. 14 W.,
Secs. 21, 22, 27, and 28.
- T. 6 S., R. 14 W.
- T. 10 S., R. 15 W.
- T. 9 S., R. 18 W.
- T. 1 S., R. 19 W.,
lot 2, U.S. Survey No. 10474.
- Tps. 9 and 10 S., R. 19 W.
- T. 6 S., R. 20 W.,
Secs. 19 thru 36.
- T. 7 S., R. 20 W.,
Secs. 1 thru 11;
Sec. 12, excepting U.S. Survey No. 12134;
Secs. 13 thru 36.
- T. 8 S., R. 20 W.,
Secs. 1 thru 33;
Sec. 34, excepting U.S. Survey No. 12137;
Sec. 35;
Sec. 36, excepting U.S. Survey No. 12136.
- T. 9 S., R. 20 W.,
Secs. 1 thru 9;
Sec. 10, excepting lot 2, U.S. Survey No.
12106;
Sec. 11;
Sec. 12, excepting U.S. Survey No. 12105;
Sec. 13;
Secs. 14 and 15, excepting lot 1, U.S.
Survey No. 12106;
Secs. 16 thru 21;
Sec. 22, excepting U.S. Survey No. 12120;
Secs. 23 thru 26;
Sec. 27, excepting lots 1 and 2, U.S. Survey
No. 12113;
Secs. 28 thru 33;
Sec. 34, excepting U.S. Survey No. 8090
and lots 2 and 3, U.S. Survey No. 12113;
Secs. 35 and 36;
U.S. Survey No. 8090;
lot 1, U.S. Survey No. 12106;
U.S. Survey No. 12120.
- T. 10 S., R. 20 W.,
tract A.
- T. 6 S., R. 21 W.,
Secs. 19 thru 36.
- Tps. 7 thru 9 S., R. 21 W., unsurveyed.
- T. 1 S., R. 22 W.
- T. 6 S., R. 22 W.,
Secs. 4, 9, 16, and Secs. 20 thru 36.
- Tps. 7 thru 9 S., R. 22 W., unsurveyed.
- T. 10 S., R. 22 W., unsurveyed,
Secs. 1 and 2, those portions outside the
boundary of Denali National Preserve;
Secs. 3 thru 10;
Secs. 11, 12, and 14, those portions outside
the boundary of Denali National
Preserve;
Secs. 15 thru 21;
Secs. 22 and 27, those portions outside the
boundary of Denali National Preserve;
Secs. 28 thru 33;
Sec. 34, that portion outside the boundary
of Denali National Preserve.
- T. 1 S., R. 23 W.,
Secs. 4 thru 9, Secs. 16 thru 21, and Secs.
28 thru 33.
- T. 2 S., R. 23 W.,
Secs. 4 thru 9, Secs. 16 thru 21, and Secs.
28 thru 33.
- Tps. 3 and 4 S., R. 23 W., unsurveyed.
- T. 5 S., R. 23 W., unsurveyed,
Secs. 2 thru 10, Secs. 16 thru 21, and Secs.
29 thru 33.
- T. 6 S., R. 23 W., unsurveyed,
Secs. 4 thru 9, Secs. 16 thru 20, and Secs.
30, 31, 34, 35, and 36.
- Tps. 7 thru 10 S., R. 23 W., unsurveyed.
- Tps. 1 thru 10 S., R. 24 W., unsurveyed.
- Tps. 1 thru 10 S., R. 25 W., unsurveyed.
- T. 1 S., R. 26 W., unsurveyed.
- T. 2 S., R. 26 W., unsurveyed,
Secs. 1, 2, and 3, Secs. 10 thru 15, Secs.
22 thru 27, and Secs. 34, 35, and 36.
- T. 3 S., R. 26 W., unsurveyed,
Secs. 1, 2, and 3, Secs. 10 thru 15, Secs.
22 thru 27, and Secs. 34, 35, and 36.
- T. 4 S., R. 26 W., unsurveyed,
Secs. 1, 2, and 3, Secs. 10 thru 15, Secs.
22 thru 27, and Secs. 34, 35, and 36.
- T. 5 S., R. 26 W., unsurveyed,
Secs. 1 thru 5 and Secs. 7 thru 36.
- Tps. 6 thru 10 S., R. 26 W., unsurveyed.
- T. 5 S., R. 27 W., unsurveyed,
secs. 34, 35, and 36.
- T. 6 S., R. 27 W., unsurveyed,
Secs. 1, 2, and 3, and Secs. 9 thru 16;
Sec. 17, S $\frac{1}{2}$;
Sec. 19, S $\frac{1}{2}$;
Secs. 20 thru 36.
- Tps. 7 thru 10 S., R. 27 W., unsurveyed.
- Tps. 9 and 10 S., R. 28 W., unsurveyed.
- T. 2 S., R. 2 E.,
Sec. 5, lot 18.
- T. 4 S., R. 3 E.,
Sec. 1, lot 69.
- T. 6 S., R. 4 E.,
Sec. 2, lots 42, 43, and lots 49 thru 52;
Sec. 10, lot 10.
- T. 9 S., R. 10 E.,
Sec. 33, lot 1.

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- T. 9 N., R. 4 E., unsurveyed,
Secs. 1, 2, and 3, those portions lying
outside the boundary of Koyukuk
National Wildlife Refuge.
- T. 10 N., R. 4 E., unsurveyed,
Sec. 21, Secs. 27 thru 31, and Sec. 34, those
portions lying outside the boundary of
Koyukuk National Wildlife Refuge.
- T. 9 N., R. 5 E., unsurveyed,
Sec. 6, that portion lying outside the
boundary of Koyukuk National Wildlife
Refuge.
- T. 10 N., R. 5 E., unsurveyed,
Secs. 1, 2, 11, 14, 21, 22, 23, 28, 29, 31,
and 32, those portions lying outside the
boundary of Koyukuk National Wildlife
Refuge.
- T. 10 N., R. 6 E., unsurveyed.
- T. 11 N., R. 6 E., unsurveyed,
Secs. 1 thru 7;
Sec. 8, excepting U.S. Survey No. 12316;
Secs. 9 thru 36.
- T. 12 N., R. 6 E., unsurveyed.
Secs. 25 thru 36.
- Tps. 9, 10, and 11 N., R. 7 E., unsurveyed.
- T. 12 N., R. 7 E., unsurveyed,
Secs. 25 thru 36.
- Tps. 9, 10, and 11 N., R. 8 E., unsurveyed.
- T. 12 N., R. 8 E., unsurveyed,
Secs. 25 thru 36.

- Tps. 9 and 10 N., Rs. 9 and 10 E., unsurveyed.
- Tps. 9, 10, and 11 N., R. 11 E., unsurveyed.
- T. 12 N., R. 11 E., unsurveyed, Secs. 1, 12, and 13, Secs. 24 thru 27, and Secs. 34, 35, and 36.
- Tps. 9 thru 12 N., R. 12 E., unsurveyed.
- T. 33 N., R. 12 E., unsurveyed, Secs. 1, 12, 13, 24, 25, and 36.
- T. 34 N., R. 12 E., unsurveyed, Secs. 12, 13, 24, 25, and 36.
- T. 9 N., R. 13 E., unsurveyed, Secs. 6, 7, 18, and 19; Secs. 20, 21, 22, and 29, those portions lying outside the boundary of Koyukuk National Wildlife Refuge;
- Sec. 30;
- Secs. 31 and 32, those portions lying outside the boundary of Koyukuk National Wildlife Refuge.
- T. 10 N., R. 13 E., unsurveyed, Secs. 6, 7, 18, 19, 30, and 31.
- T. 11 N., R. 13 E., unsurveyed, Secs. 1 thru 24 and Secs. 30 and 31.
- T. 30 N., R. 13 E., unsurveyed, Secs. 1 and 2, those portions lying outside the boundary of Gates of the Arctic National Park;
- Sec. 3, that portion lying outside the boundary of Gates of the Arctic National Park and Noatak National Preserve;
- Secs. 11 and 12, those portions lying outside the boundary of Gates of the Arctic National Park.
- T. 31 N., R. 13 E., unsurveyed, Secs. 1, 2, and 3;
- Secs. 6, that portion lying outside the boundary of the National Petroleum Reserve and Noatak National Preserve;
- Sec. 7, that portion lying outside the boundary of the National Petroleum Reserve;
- Sec. 12;
- Sec. 17, SW $\frac{1}{4}$;
- Sec. 18 that portion lying outside the boundary of the National Petroleum Reserve;
- Sec. 19, that portion lying outside the boundary of Noatak National Preserve and the National Petroleum Reserve;
- Sec. 20, that portion lying outside the boundary of Noatak National Preserve;
- Secs. 21, 22, and 26;
- Secs. 27, 28, 29, and 34, those portions lying outside the boundary of Noatak National Preserve;
- Secs. 35 and 36.
- T. 32 N., R. 13 E., unsurveyed, Secs. 1 thru 5;
- Secs. 6 and 7, those portions lying outside the boundary of the National Petroleum Reserve;
- Secs. 8 thru 17;
- Secs. 18 and 19, those portions lying outside the boundary of the National Petroleum Reserve;
- Secs. 20 thru 29;
- Sec. 30, that portion lying outside the boundary of the National Petroleum Reserve;
- Sec. 32, that portion lying outside the boundary of Noatak National Preserve;
- Secs. 33 thru 36.
- Tps. 33 and 34 N., R. 13 E., unsurveyed.
- T. 9 N., R. 14 E., unsurveyed, Secs. 1 thru 4 and Secs. 10 thru 13, those portions excluded from Interim Conveyance No. 2273.
- T. 30 N., R. 14 E., unsurveyed, Secs. 2, 3, 6, 7, and 8, Secs. 14 thru 21, those portions lying outside the boundary of Gates of the Arctic National Park;
- Sec. 22;
- Sec. 23 and Secs. 26 thru 30, those portions lying outside the boundary of Gates of the Arctic National Park.
- T. 31 N., R. 14 E., unsurveyed, Sec. 2, W $\frac{1}{2}$ NW $\frac{1}{4}$ and W $\frac{1}{2}$ SW $\frac{1}{4}$;
- Secs. 3 thru 10;
- Sec. 11, W $\frac{1}{2}$ NW $\frac{1}{4}$ and W $\frac{1}{2}$ SW $\frac{1}{4}$;
- Sec. 14, W $\frac{1}{2}$ NW $\frac{1}{4}$ and W $\frac{1}{2}$ SW $\frac{1}{4}$;
- Secs. 15 thru 18 and Secs. 21 and 22;
- Sec. 23, W $\frac{1}{2}$ NW $\frac{1}{4}$ and W $\frac{1}{2}$ SW $\frac{1}{4}$;
- Sec. 26, W $\frac{1}{2}$ NW $\frac{1}{4}$ and W $\frac{1}{2}$ SW $\frac{1}{4}$;
- Secs. 27, 28, 33, and 34;
- Sec. 35, W $\frac{1}{2}$ NW $\frac{1}{4}$ and W $\frac{1}{2}$ SW $\frac{1}{4}$.
- T. 32 N., R. 14 E., unsurveyed, Sec. 2, W $\frac{1}{2}$ NW $\frac{1}{4}$ and W $\frac{1}{2}$ SW $\frac{1}{4}$;
- Secs. 3 thru 10;
- Sec. 11, W $\frac{1}{2}$ NW $\frac{1}{4}$ and W $\frac{1}{2}$ SW $\frac{1}{4}$;
- Sec. 14, W $\frac{1}{2}$ NW $\frac{1}{4}$ and W $\frac{1}{2}$ SW $\frac{1}{4}$;
- Secs. 15 thru 22;
- Sec. 23, W $\frac{1}{2}$ NW $\frac{1}{4}$ and W $\frac{1}{2}$ SW $\frac{1}{4}$;
- Sec. 26, W $\frac{1}{2}$ NW $\frac{1}{4}$ and W $\frac{1}{2}$ SW $\frac{1}{4}$;
- Secs. 27 thru 34;
- Sec. 35, W $\frac{1}{2}$ NW $\frac{1}{4}$ and W $\frac{1}{2}$ SW $\frac{1}{4}$.
- T. 33 N., R. 14 E., unsurveyed, Secs. 4 thru 9, Secs. 16 thru 21, and Secs. 28 thru 33.
- T. 34 N., R. 14 E., unsurveyed, Secs. 7, 8, and 9, Secs. 16 thru 21, and Secs. 28 thru 33.
- T. 7 N., R. 15 E., Secs. 1 thru 4 and Secs. 10 thru 15, unsurveyed.
- T. 8 N., R. 15 E., unsurveyed, Secs. 13 and 14, Secs. 22 thru 30, and Secs. 32 thru 36.
- T. 9 N., R. 15 E., unsurveyed, Sec. 7, that portion excluded from Tentative Approvals F-88709 issued January 22, 1997, and March 23, 2009; M.S. No. 2149.
- T. 10 N., R. 15 E., unsurveyed, Secs. 1, 2, and 3 and Secs. 10 thru 15.
- T. 7 N., R. 16 E., unsurveyed, Secs. 2 thru 9 and Secs. 17 and 18.
- T. 8 N., R. 16 E., unsurveyed, Sec. 1, excepting U.S. Survey No. 11473;
- Secs. 2 thru 6 and Secs. 9, 10, and 11;
- Sec. 12, excepting U.S. Survey No. 11473;
- Secs. 13, 14, 15, 18, 19, 20, 23, 24, and 25, and Secs. 28 thru 34.
- T. 9 N., R. 16 E., unsurveyed, Secs. 1 thru 34;
- Secs. 35 and 36, excepting U.S. Survey No. 13976.
- T. 10 N., R. 16 E., unsurveyed, Secs. 1 thru 15;
- Sec. 16, excepting U.S. Survey No. 6381;
- Secs. 17 thru 36.
- T. 11 N., R. 16 E., unsurveyed, Secs. 1 thru 20;
- Sec. 21, excepting U.S. Survey No. 6156;
- Secs. 22 thru 36.
- Tps. 12 and 13 N., R. 16 E., unsurveyed.
- T. 7 N., R. 17 E., unsurveyed, Secs. 1 thru 5 and Secs. 8 thru 17.
- Tps. 8 thru 13 N., R. 17 E., unsurveyed.
- T. 1 N., 18 E., unsurveyed, Secs. 1, 11, and 12, those portions lying outside the boundary of Koyukuk National Wildlife Refuge;
- Sec. 13;
- Secs. 14, 15, 21, and 22, those portions lying outside the boundary of Koyukuk National Wildlife Refuge;
- Secs. 23 thru 27;
- Secs. 28, 29, 32, and 33, those portions lying outside the boundary of Koyukuk National Wildlife Refuge;
- Secs. 34, 35, and 36.
- T. 7 N., R. 18 E., unsurveyed, Secs. 1 thru 24.
- Tps. 8 thru 13 N., R. 18 E., unsurveyed.
- T. 1 N., R. 19 E., unsurveyed, Secs. 1 thru 5;
- Sec. 6, that portion lying outside the boundary of Koyukuk National Wildlife Refuge.
- Secs. 7 thru 36.
- T. 2 N., R. 19 E., unsurveyed, Secs. 25, 26, 31, and 32, those portions lying outside the boundary of Koyukuk National Wildlife Refuge.
- Sec. 33, S $\frac{1}{2}$;
- Sec. 34, S $\frac{1}{2}$;
- Sec. 35, that portion lying outside the boundary of Koyukuk National Wildlife Refuge;
- Sec. 36.
- T. 7 N., R. 19 E., unsurveyed, Secs. 1 thru 25;
- Secs. 26 and 35, those portions lying outside the boundary of Koyukuk National Wildlife Refuge;
- Sec. 36.
- Tps. 8 thru 13 N., R. 19 E., unsurveyed.
- T. 1 N., R. 20 E., unsurveyed, Secs. 1 and 2;
- Sec. 3, that portion lying outside the boundary of Koyukuk National Wildlife Refuge;
- Secs. 4 thru 36.
- T. 2 N., R. 20 E., unsurveyed, Secs. 24, 25, 26, 29, and 30, those portions lying outside the boundary of Koyukuk National Wildlife Refuge;
- Sec. 31;
- Secs. 32 thru 35, those portions lying outside the boundary of Koyukuk National Wildlife Refuge;
- Sec. 36.
- T. 7 N., R. 20 E.
- T. 9 N., R. 20 E.
- T. 11 N., R. 20 E., unsurveyed, Secs. 1 thru 28;
- Sec. 29, excepting U.S. Survey No. 13006;
- Secs. 30 thru 36.
- Tps. 12 and 13 N., R. 20 E., unsurveyed.
- T. 2 N., R. 21 E., unsurveyed, Secs. 19, 23, and 24, those portions lying outside the boundary of Koyukuk National Wildlife Refuge;
- Sec. 25;
- Secs. 26 thru 30, those portions lying outside the boundary of Koyukuk National Wildlife Refuge;
- Secs. 31 and 32;
- Secs. 33 and 34, those portions lying outside the boundary of Koyukuk National Wildlife Refuge;
- Secs. 35 and 36.
- T. 6 N., R. 21 E., Secs. 5, 6, 7, 18, and 36.
- T. 8 N., R. 21 E.,

- Secs. 5 thru 11 and Secs. 13 thru 36.
Tps. 10 thru 13 N., R. 21 E., partly unsurveyed.
- T. 2 N., R. 22 E., unsurveyed,
Sec. 1;
Secs. 2, 3, 9 and 10, those portions lying outside the boundary of Koyukuk National Wildlife Refuge;
Secs. 11 thru 15;
Secs. 16 thru 19, those portions lying outside the boundary of Koyukuk National Wildlife Refuge;
Secs. 20 thru 36.
- T. 3 N., R. 22 E., unsurveyed,
Secs. 25, 35, and 36, those portions lying outside the boundary of Koyukuk National Wildlife Refuge.
- T. 7 N., R. 22 E.,
Secs. 1 and 2, Secs. 12 thru 15, Secs. 22 thru 27, and Secs. 32 thru 36.
- T. 9 N., R. 22 E.,
Secs. 3 thru 9, Sec. 13, Secs. 16 thru 20, Secs. 23 thru 26, Secs. 29 thru 32, and Secs. 35 and 36.
- Tps. 11, 12, and 13 N., R. 22 E., unsurveyed.
- T. 2 N., R. 23 E.,
Secs. 1 thru 18, unsurveyed;
tract B.
- T. 3 N., R. 23 E., unsurveyed,
Secs. 1, 10, 11 and 12, those portions lying outside the boundary of Koyukuk National Wildlife Refuge;
Secs. 13, 14, and 15;
Secs. 16, 17, 19, and 20, those portions lying outside the boundary of Koyukuk National Wildlife Refuge;
Secs. 21 thru 29;
Sec. 30, that portion lying outside the boundary of Koyukuk National Wildlife Refuge;
Secs. 31 thru 36.
- Tps. 6 and 8 N., R. 23 E.
- T. 10 N., R. 23 E.,
Secs. 2 thru 8, Secs. 13, 14, and 15, Secs. 21 thru 28, and Secs. 33 thru 36.
- T. 11 N., R. 23 E., unsurveyed,
Secs. 1 thru 35;
Sec. 36, excepting U.S. Survey No. 6720.
- Tps. 12 and 13 N., R. 23 E., unsurveyed.
- T. 2 N., R. 24 E.,
tracts B, C, F, and H.
- T. 3 N., R. 24 E., unsurveyed,
Sec. 1 thru 5;
Sec. 6, that portion lying outside the boundary of Koyukuk National Wildlife Refuge;
Secs. 7 thru 36.
- T. 4 N., R. 24 E., unsurveyed,
Sec. 1;
Secs. 2 and 11, those portions lying outside the boundary of Koyukuk National Wildlife Refuge;
Secs. 12 and 13;
Secs. 14, 15, and 22, those portions lying outside the boundary of Koyukuk National Wildlife Refuge;
Secs. 23 thru 26;
Secs. 27, 28, 29, 31, and 32, those portions lying outside the boundary of Koyukuk National Wildlife Refuge;
Secs. 33 thru 36.
- T. 5 N., R. 24 E., unsurveyed,
Secs. 1 thru 4;
Sec. 9, NE $\frac{1}{4}$;
Sec. 10 thru 15, Secs. 22 thru 27, and Secs. 34, 35, and 36.
- T. 7 N., R. 24 E.,
Secs. 1 thru 12;
Sec. 13, excepting Public Land Order Nos. 3942 and 6706;
Secs. 14, 15, and 16, excepting Public Land Order No. 6706;
Secs. 17 thru 20;
Sec. 21, excepting Public Land Order No. 6706;
Sec. 22, excepting Public Land Order Nos. 5164 and 6706;
Sec. 24, excepting Public Land Order Nos. 1910, 3942, 5164, and 6706;
Sec. 25, excepting Public Land Order Nos. 5164 and 6706;
Sec. 27, excepting Public Land Order No. 6706;
Secs. 28 thru 33;
Sec. 34, excepting Public Land Order Nos. 5164 and 6706;
Secs. 35 and 36, excepting Public Land Order No. 6706.
- T. 9 N., R. 24 E., unsurveyed.
- T. 10 N., R. 24 E.,
Secs. 1 thru 36, partly unsurveyed;
lot 1, U.S. Survey No. 14355.
- T. 11 N., R. 24 E., partly unsurveyed,
Sec. 1 thru 36;
lots 2 and 3, U.S. Survey No. 14355.
- T. 12 N., R. 24 E., unsurveyed.
- T. 13 N., R. 24 E., unsurveyed,
Secs. 1 thru 12;
Sec. 13, excepting lot 1, U.S. Survey No. 14357;
Sec. 14, excepting lots 1 and 2, U.S. Survey No. 14357;
Secs. 15 thru 36;
lots 1 and 2, U.S. Survey No. 14357.
- T. 2 N., R. 25 E.,
tract A.
- T. 3 N., R. 25 E.,
Secs. 1 thru 18, unsurveyed;
tract B.
- Tps. 4, 5, and 6 N., R. 25 E., unsurveyed.
- T. 7 N., R. 25 E., unsurveyed,
Secs. 1, 2, 6, 7, and 8;
Sec. 9, excepting U.S. Survey No. 9349;
Secs. 11 thru 14, Sec. 16, and Secs. 22 thru 27;
Sec. 28, excepting lots 1 and 2, U.S. Survey No. 9347;
Sec. 29, excepting lots 2, 3, and 4, U.S. Survey No. 9347;
Sec. 31, excepting lots 5 and 6, U.S. Survey No. 9347;
Sec. 32, excepting lot 5, U.S. Survey No. 9347;
Secs. 33 thru 36.
- T. 8 N., R. 25 E.,
Secs. 1 thru 4, Secs. 9 thru 15, Secs. 22 thru 27, and Secs. 35 and 36, partly unsurveyed;
tracts B and C.
- Tps. 9 and 10 N., R. 25 E., unsurveyed.
- T. 11 N., R. 25 E., unsurveyed,
Secs. 1 and 2, excepting U.S. Survey No. 11623;
Secs. 3 thru 8;
Sec. 9, excepting U.S. Survey No. 11621;
Sec. 10;
Secs. 11 and 12, excepting U.S. Survey No. 11623;
Secs. 13 thru 36.
- T. 12 N., R. 25 E., partly unsurveyed.
- T. 15 N., R. 25 E.,
tract C, that portion excluded from Tentative Approval F–F–23452 issued April 7, 1982, as Regional selection F–22490.
- T. 16 N., R. 25 E.,
tract B, and tracts E thru J.
- T. 17 N., R. 25 E., unsurveyed.
- T. 2 N., R. 26 E.,
tract A.
- T. 3 N., R. 26 E.,
Secs. 1 thru 18, unsurveyed.
- Tps. 4 thru 10, R. 26 E., unsurveyed.
- T. 11 N., R. 26 E., partly unsurveyed.
- T. 12 N., R. 26 E., unsurveyed,
Secs. 1 thru 12;
Sec. 13, excepting lot 6, U.S. Survey No. 11626 and U.S. Survey No. 14356;
Sec. 14, excepting lots 3, 4, and 5, U.S. Survey No. 11626;
Sec. 15, excepting lot 2, U.S. Survey No. 11626;
Secs. 16 thru 21;
Sec. 22, excepting lots 1 and 2, U.S. Survey No. 11626 and U.S. Survey No. 14165;
Sec. 23, excepting lot 4, U.S. Survey No. 11626;
Secs. 24 and 25;
Secs. 26 and 27, excepting lot 1, U.S. Survey No. 11626;
Secs. 28 thru 31;
Sec. 32, excepting U.S. Survey No. 11622;
Secs. 33 thru 36;
U.S. Survey No. 14356.
- T. 2 N., R. 27 E., unsurveyed.
- T. 3 N., R. 27 E.,
tract A.
- Tps. 4 thru 8 N., R. 27 E., unsurveyed.
- T. 9 N., R. 27 E., unsurveyed,
Secs. 1 thru 8;
Secs. 9 and 10, excepting U.S. Survey No. 11618;
Secs. 11 thru 24;
Sec. 25, excepting U.S. Survey No. 11613;
Sec. 26;
Secs. 27 and 28, excepting U.S. Survey No. 11617;
Secs. 29 thru 36.
- T. 10 N., R. 27 E., unsurveyed.
- T. 11 N., R. 27 E., unsurveyed,
Secs. 1 thru 22;
Sec. 23, excepting lot 1, U.S. Survey No. 11634;
Secs. 24 and 25, excepting lot 2, U.S. Survey No. 11634;
Sec. 26, excepting lots 1 and 2, U.S. Survey No. 11634;
Secs. 27 thru 36.
- T. 12 N., R. 27 E.,
Secs. 5 thru 8, Secs. 22 and 23, and Secs. 26 thru 35.
- T. 15 N., R. 27 E.,
tract A, that portion excluded from Tentative Approval F–79790 issued August 14, 1984, as Regional selection F–22455.
- T. 2 N., R. 28 E., unsurveyed.
- T. 3 N., R. 28 E.,
tract A, those portions described as (protracted) Secs. 27, 33, and 34;
tracts B and D.
- Tps. 4 thru 8 N., R. 28 E., unsurveyed.
- T. 12 S., R. 1 W.,
Secs. 1 and 2, Secs. 11 thru 14, Secs. 18, 19, 20, 23, 24, and 25, Secs. 29 thru 32, and Sec. 36.
- T. 14 S., R. 1 W.,
Secs. 6 and 7;
Sec. 8, lot 3.

- T. 17 S., R. 1 W.,
Secs. 1 thru 9 and Secs. 16, 17, and 18.
- T. 17 S., R. 2 W.,
Secs. 22 thru 27 and Secs. 34, 35, and 36.
- T. 12 S., R. 1 E.,
Secs. 1 thru 23 and Secs. 27 thru 33.
- T. 14 S., R. 1 E.,
Secs. 1 and 2, Secs. 11 thru 14, and Secs. 23, 24, 25, and 36.
- T. 9 S., R. 2 E.,
Secs. 25 and 26, and Secs. 33 thru 36.
- T. 15 S., R. 2 E.,
T. 17 S., R. 2 E.,
Secs. 19 thru 24, those portions lying outside the boundary of Innoko National Wildlife Refuge;
- T. 8 S., R. 3 E.,
Secs. 16 thru 21 and Secs. 28 thru 33.
- T. 14 S., R. 3 E.
- T. 7 S., R. 4 E.,
Secs. 1 thru 35.
- T. 9 S., R. 4 E.,
Lot 1, U.S. Survey No. 7384.
- T. 6 S., R. 5 E.
- T. 13 S., R. 6 E., unsurveyed,
Secs. 13, 22, and 23, those portions lying outside the boundary of Innoko National Wildlife Refuge;
Secs. 24 thru 28 and Secs. 32 thru 36.
- T. 6 S., R. 7 E.,
Secs. 9 thru 16, secs 21 thru 28, and Secs. 33 thru 36.
- T. 8 S., R. 7 E.,
Sec. 1, lot 1;
Sec. 2, lot 1.
- T. 12 S., R. 7 E., unsurveyed,
Secs. 13, 14, 15 and 21, those portions lying outside the boundary of Innoko National Wildlife Refuge;
Secs. 22 thru 28;
Sec. 31, that portion lying outside the boundary of Innoko National Wildlife Refuge;
Secs. 32 thru 36.
- T. 13 S., R. 7 E., unsurveyed.
- T. 11 S., R. 8 E., unsurveyed,
Sec. 23, that portion lying outside the boundary of Innoko National Wildlife Refuge;
Secs. 24 and 25;
Secs. 26 and 35, those portions lying outside the boundary of Innoko National Wildlife Refuge;
Sec. 36.
- T. 12 S., R. 8 E., unsurveyed,
Secs. 1, 2, and 3 and Secs. 9 thru 16;
Secs. 17 and 18, those portions lying outside the boundary of Innoko National Wildlife Refuge;
Secs. 19 thru 36.
- T. 13 S., R. 8 E., unsurveyed.
- T. 10 S., R. 9 E.,
Sec. 1, Secs. 11 thru 14, Secs. 23 thru 26, and Secs. 35 and 36.
- Tps. 12 and 13 S., R. 9 E., unsurveyed.
- T. 11 S., R. 10 E.
- T. 12 S., R. 10 E., unsurveyed,
Secs. 1, 2, and 3;
Sec. 4, excepting U.S. Survey No. 9606;
Secs. 5 thru 21;
Sec. 22, excepting Public Land Order No. 1740;
Secs. 23, 24, and 25;
Secs. 26 and 27, excepting Public Land Order No. 1740;
Secs. 28 thru 34;
- Sec. 35, excepting Public Land Order No. 1740;
Sec. 36.
- T. 13 S., R. 10 E., unsurveyed.
- T. 8 S., R. 11 E.,
Secs. 1 thru 6 and Secs. 9 thru 12.
- T. 10 S., R. 11 E.,
Secs. 22 thru 27, and Secs. 34, 35, and 36.
- Tps. 6, 7, and 8 S., Rs. 12 and 13 E., partly unsurveyed.
- T. 3 S., R. 14 E., unsurveyed,
Secs. 1, 2, 10, and 11, those portions lying outside the boundary of Koyukuk National Wildlife Refuge;
Secs. 12 thru 15, Secs. 22 thru 27, and Secs. 34, 35, and 36.
- T. 4 S., R. 14 E., unsurveyed,
Secs. 1, 2 and 3, Secs. 10 thru 15, Secs. 22 thru 27, and Secs. 34, 35, and 36.
- Tps. 5 thru 8 S., R. 14 E., unsurveyed.
- T. 2 S., R. 15 E., unsurveyed,
Secs. 25 thru 28, and Secs. 32 and 33, those portions lying outside the boundary of Koyukuk National Wildlife Refuge;
Secs. 34, 35, and 36.
- T. 3 S., R. 15 E., unsurveyed,
Secs. 1 thru 4;
Secs. 5 and 6, those portions lying outside the boundary of Koyukuk National Wildlife Refuge;
Secs. 7 thru 36.
- Tps. 4, 5, and 6 S., R. 15 E., unsurveyed.
- T. 2 S., R. 16 E., unsurveyed,
Secs. 22, 23, and 24, those portions lying outside the boundary of Koyukuk National Wildlife Refuge;
Secs. 25 and 26;
Secs. 27, 28, 30, 31, 32, and 33, those portions lying outside the boundary of Koyukuk National Wildlife Refuge;
Secs. 34, 35, and 36.
- Tps. 3 thru 6 S., R. 16 E., unsurveyed.
- T. 1 S., 17 E., unsurveyed,
Secs. 13, 24, 25, and 36, those portions lying outside the boundary of Koyukuk National Wildlife Refuge.
- T. 2 S., R. 17 E., unsurveyed,
Sec. 1;
Secs. 2, 3, 9, and 10, those portions lying outside the boundary of Koyukuk National Wildlife Refuge;
Secs. 11 thru 15;
Secs. 16, 17, 19, and 20, those portions lying outside the boundary of Koyukuk National Wildlife Refuge;
Secs. 21 thru 36.
- Tps. 3, 4, and 5 S., R. 17 E., unsurveyed.
- T. 6 S., R. 17 E.,
tract A.
- T. 10 S., R. 17 E.,
Secs. 1, 2, 7, 8, 12, and 13, Secs. 17 thru 20, Secs. 24 and 25, Secs. 29 thru 32, and Sec. 36.
- T. 12 S., R. 17 E., unsurveyed,
Secs. 28, 29, 31, 32, and 33, those portions excluded as mining claims from Tentative Approval F-15084 issued May 21, 1982.
- T. 13 S., R. 17 E., unsurveyed,
Secs. 3, 4, 5, 8, 9, and 17, those portions excluded as mining claims from Tentative Approval F-15090 issued April 24, 1981.
- T. 14 S., R. 17 E., unsurveyed,
- Secs. 4, 5, and 8, those portions excluded as mining claims from Tentative Approval F-15090 issued April 24, 1981.
- T. 16 S., R. 17 E.,
Tract A, those portions excluded as mining claims from Tentative Approvals F-15090 issued March 31, 1983, and December 12, 2007, excluding M.S. Nos. 1647, 1648, and 2520;
M.S. Nos. 1647, 1648, and 2520.
- T. 1 S., R. 18 E., unsurveyed,
Secs. 1, 2, and 3;
Secs. 4 thru 8, those portions lying outside the boundary of Koyukuk National Wildlife Refuge;
Secs. 9 thru 17;
Sec. 18, that portion lying outside the boundary of Koyukuk National Wildlife Refuge;
Secs. 19 thru 36.
- Tps. 2 and 3 S., R. 18 E., unsurveyed.
- T. 4 S., R. 18 E.,
tract A, tracts E thru H, and tracts J, K, and L.
- T. 5 S., R. 18 E.,
tracts A, D, and F.
- T. 6 S., R. 18 E.,
tract A.
- T. 13 S., R. 18 E., unsurveyed,
Secs. 3, 9, 10, and 16, those portions excluded as mining claims from Tentative Approval F-15090 issued April 24, 1981.
- Tps. 1, 2, and 3 S., R. 19 E., unsurveyed.
- T. 4 S., R. 19 E.,
Tracts B thru E, tracts G and J, and tracts M thru W.
- T. 5 S., R. 19 E.,
Tract A.
- T. 6 S., R. 19 E.,
Secs. 5 thru 8, secs. 17 thru 20, and secs. 29 and 30, unsurveyed.
- Tps. 15 and 16 S., R. 19 E., unsurveyed.
- T. 4 S., R. 20 E.,
tract A, that portion within (protracted)
Secs. 23 and 24, excluded from Tentative Approval F-15207 issued June 16, 1976, as F-035073.
- T. 6 S., R. 20 E.,
Sec. 19 and Secs. 27 thru 30;
tract A;
lot 3, U.S. Survey No. 9591.
- Tps. 15 and 16 S., R. 20 E., unsurveyed.
- T. 5 S., R. 21 E.
- T. 6 S., R. 21 E.,
U.S. Survey Nos. 2033 and 14353.
- T. 5 S., R. 22 E.,
tract A.
- T. 6 S., R. 22 E.,
U.S. Survey No. 14352.
- Tps. 13, 14, and 15 S., R. 22 E., unsurveyed.
- T. 16 S., R. 22 E., unsurveyed,
Secs. 1 thru 24 and Secs. 26 thru 34.
- T. 17 S., R. 22 E., unsurveyed,
Secs. 5 and 6.
- T. 18 S., R. 22 E., unsurveyed,
Secs. 1, 2, and 3, Secs. 9 thru 16, and Secs. 19 thru 36.
- Tps. 19, 20, and 21 S., R. 22 E., unsurveyed.
- T. 22 S., R. 22 E., unsurveyed,
Secs. 1 thru 10.
- T. 6 S., R. 23 E.,
U.S. Survey No. 14351.
- T. 13 S., R. 23 E., unsurveyed,
Secs. 7 and 8, Secs. 16 thru 21, and Secs. 28 thru 33.

- T. 14 S., R. 23 E., unsurveyed,
Secs. 3 thru 10 and Secs. 15 thru 36.
- T. 15 S., R. 23 E., unsurveyed.
- T. 16 S., R. 23 E., unsurveyed,
Secs. 1 thru 11 and Secs. 16 thru 19.
- T. 17 S., R. 23 E., unsurveyed,
Sec. 13 and Secs. 23 thru 36.
- Tps. 18 thru 22 S., R. 23 E., partially
unsurveyed.
- T. 14 S., R. 24 E., unsurveyed,
Secs. 19 thru 36.
- T. 15 S., R. 24 E., unsurveyed,
Secs. 1 thru 23 and Secs. 27 thru 33.
- T. 16 S., R. 24 E., unsurveyed,
Secs. 24 thru 27, and Secs. 33 thru 36.
- T. 17 S., R. 24 E. unsurveyed,
Secs. 1 thru 4 and Secs. 7 thru 36.
- Tps. 18, 19, and 20 S., R. 24 E., unsurveyed.
- Tps. 21 and 22 S., R. 24 E., partially
unsurveyed.
- T. 14 S., R. 25 E., unsurveyed,
Sec. 36.
- T. 15 S., R. 25 E., unsurveyed,
Secs. 1, 12, and 13, Secs. 23 thru 27, and
Secs. 34, 35, and 36.
- T. 16 S., R. 25 E., unsurveyed,
Secs. 1 thru 4, Secs. 8 thru 17, and Secs.
19 thru 36.
- Tps. 17 thru 22 S., R. 25 E., unsurveyed.
- T. 13 S., R. 26 E., unsurveyed,
Secs. 25 and 36.
- T. 14 S., R. 26 E., unsurveyed,
Secs. 1, 2, and 3 and Secs. 9 thru 36.
- Tps. 15 thru 21 S., R. 26 E., unsurveyed.
- T. 12 S., R. 27 E., unsurveyed,
Secs. 31 thru 36.
- T. 13 S., R. 27 E., unsurveyed,
Secs. 1 thru 4, Secs. 9 thru 16, and Secs.
19 thru 36.
- Tps. 14 thru 19 S., R. 27 E., unsurveyed.
- T. 3 S., R. 28 E.,
Tract B, that portion within (protracted)
Secs. 4, 5, 8, 9, 16, 17, 20, 21, and 28.
- T. 13 S., R. 28 E., unsurveyed,
Secs. 4 thru 36.
- Tps. 14 thru 19 S., R. 28 E., unsurveyed.
- T. 13 S., R. 29 E., unsurveyed,
Secs. 7 thru 36.
- Tps. 14 thru 17 S., R. 29 E., unsurveyed.
- T. 18 S., R. 29 E., unsurveyed,
Secs. 1 thru 21, and Secs. 28 thru 33.
- T. 19 S., R. 29 E., unsurveyed.
- T. 13 S., R. 30 E., unsurveyed,
Secs. 7, 18, 19, 30, and 31.
- Tps. 14, 15 and 16 S., R. 30 E., unsurveyed.
- T. 17 S., R. 30 E., unsurveyed,
Secs. 4 thru 9 and Secs. 16 thru 18.
- Umiat Meridian, Alaska
- T. 2 N., R. 2 E.,
Sec. 36, lot 1.
- T. 4 N., R. 2 E.,
Sec. 13, lots 1 and 2;
Sec. 24, lots 1 and 2.
- T. 2 N., R. 3 E.,
Sec. 4;
Sec. 5, lot 1;
Sec. 8, lots 1 thru 3;
Secs. 9 and 16;
Sec. 17, lots 1 thru 4, surveyed;
Sec. 31, lot 3.
- T. 3 N., R. 3 E.,
Sec. 4, lots 1 and 2;
Sec. 5, lots 1 thru 4;
Sec. 6, lot 1;
Sec. 8, lots 1 thru 6;
Sec. 9, lots 1 and 2;
- Sec. 16, lot 1;
Sec. 17, lots 1 thru 4;
Sec. 20, lots 1 and 2;
Sec. 21, lots 1 and 2;
Sec. 28, lots 1 and 2;
Sec. 29, lots 1 and 2;
Sec. 32, lots 1 thru 3;
Sec. 33.
- T. 4 N., R. 3 E.,
Sec. 6, lots 1 thru 4;
Sec. 7, lots 1 thru 5;
Sec. 18, lots 1 thru 4;
Sec. 19, lots 1 thru 4;
Sec. 20, lots 1 thru 3;
Sec. 29, lots 1 thru 3;
Sec. 30, lots 1 thru 3;
Sec. 31, lots 1 thru 3;
Sec. 32, lots 1 thru 4;
Sec. 33, lots 1 and 2.
- T. 1 N., R. 19 E.,
Secs. 12 thru 14 and Secs. 23 thru 26.
- T. 1 N., R. 20 E.,
Secs. 7 thru 22.
- T. 1 S., R. 1 W.,
Sec. 10, lot 2;
Sec. 15, lot 2.
- T. 9 S., R. 1 W.,
Secs. 7, 8, and 9, and Secs. 13 thru 27.
- T. 10 S., R. 1 W.,
- T. 9 S., R. 2 W.,
Secs. 1, 2, and 3, and Secs. 10 thru 15.
- T. 10 S., R. 2 W.,
- T. 8 S., R. 3 W.,
Secs. 28 thru 33.
- T. 9 S., R. 3 W.,
Secs. 4, 5, and 6.
- T. 8 S., R. 4 W.,
Secs. 16 thru 36.
- T. 8 S., R. 5 W.,
Secs. 7, 8, and 9, Secs. 16 thru 21, and
Secs. 25 thru 30.
- T. 7 S., R. 6 W.,
Secs. 1, 12, and 13, Secs. 24 thru 28, and
Secs. 33 thru 36.
- T. 8 S., R. 6 W.,
Secs. 10 thru 15.
- T. 7 S., R. 8 W.,
Secs. 1 thru 18.
- T. 10 S., R. 9 W.,
Secs. 1 thru 18.
- T. 10 S., R. 10 W.,
Secs. 1 thru 18.
- T. 8 S., R. 12 W.,
Secs. 7, 8, and 9, and Secs. 16 thru 21.
- T. 6 S., R. 13 W.,
Secs. 25 and 36.
- T. 7 S., R. 13 W.,
Secs. 1 thru 28, and Secs. 33 thru 36.
- T. 8 S., R. 13 W.,
Secs. 1 thru 4, Secs. 9 thru 16, and Secs.
21 thru 24.
- T. 5 S., R. 15 W.,
Sec. 3, lot 1;
Sec. 4, lot 1;
Sec. 5, lot 1;
Sec. 6, lot 1;
Sec. 7, lots 1 and 2;
Sec. 9, lot 1;
Sec. 10, lot 1;
Sec. 16, lots 1 and 2;
Sec. 17, lot 1;
Sec. 18, lots 1, 2, and 3;
Sec. 19, lots 1 and 2;
Sec. 21, lots 1 and 2;
Sec. 28, lots 1, 2, and 3;
Sec. 29, lots 1 and 2;
- Sec. 30 lots 1 and 2.
- T. 5 S., R. 16 W.,
Sec. 12, lot 1;
Sec. 13, lots 1 and 2;
Sec. 24, lots 1 and 2;
Sec. 25, lots 1 and 2;
Sec. 27, lot 1;
Sec. 28, lots 1 and 2;
Sec. 33, lots 1, 2, and 3;
Sec. 34, lots 1 and 2;
Sec. 35, lots 1 and 2;
Sec. 36, lots 1 and 2.
- T. 6 S., R. 16 W.,
Secs. 18 thru 21 and Secs. 28 thru 33.
- T. 7 S., R. 16 W.,
Tract A, that portion within (protracted)
Secs. 4, 5, 8, 9, 16, 17, 20, and 21.
- T. 11 S., R. 16 W.,
Tracts A and B.
- T. 6 S., R. 17 W.,
Sec. 2, lots 1 thru 7;
Sec. 3, lots 1 thru 4;
Sec. 4, lots 1 thru 5;
Sec. 5, lots 1, 2, and 3;
Sec. 8, lots 1 thru 5;
Sec. 9, lots 1 thru 4;
Sec. 10, lots 1 and 2;
Sec. 11, lots 1 and 2;
Sec. 12, lots 1 and 2;
Secs. 13 thru 16;
Sec. 17, lots 1 thru 5;
Sec. 20, that portion lying outside the
boundary of the National Petroleum
Reserve;
Secs. 21 thru 27, and Secs. 34, 35, and 36.
- T. 11 S., R. 17 W.,
Tract A, that portion within (protracted)
Secs. 31 thru 36.
- T. 12 S., R. 17 W.,
Tract A, that portion within (protracted)
Secs. 1 thru 6;
Secs. 11 thru 14.
- T. 11 S., R. 18 W.,
Tract A, that portion within (protracted)
Sec. 36.
- T. 12 S., R. 18 W.,
Tract A, that portion within (protracted)
Sec. 1.
- T. 9 S., R. 1 E.,
Secs. 16 thru 21 and Secs. 28, 29, and 30.
- T. 10 S., Rs. 1 and 2 E.
- T. 9 S., R. 3 E.,
Secs. 25 thru 36.
- T. 10 S., R. 3 E.,
Secs. 25 thru 36.
- T. 9 S., R. 4 E.,
Secs. 25 thru 36.
- T. 10 S., R. 4 E.
- T. 12 S., R. 4 E.,
Sec. 8.
- T. 3 S., R. 5 E.
- T. 4 S., R. 5 E.,
Secs. 4 thru 9, Secs. 16 thru 21, and Secs.
28 thru 33.
- T. 5 S., R. 5 E.,
Secs. 1 thru 6, Secs. 10 thru 15, Secs. 22
thru 27, and Secs. 34, 35 and 36.
- T. 6 S., R. 5 E.,
Secs. 1, 2, and 3, Secs. 10 thru 15, Secs 22
thru 27, and Secs 34, 35 and 36.
- T. 10 S., R. 5 E. unsurveyed.
- T. 6 S., R. 6 E.,
Secs. 19 thru 36.
- T. 10 S., R. 6 E., unsurveyed.
- T. 9 S., R. 7 E.,
Secs. 7 thru 24.
- T. 10 S., R. 7 E.

T. 12 S., R. 7 E.,
Secs. 11 thru 14, Secs. 21 thru 28, and
Secs. 33 thru 36.

T. 13 S., R. 7 E.,
Secs. 1 thru 4 and Secs. 9 thru 13.

T. 9 S., R. 8 E.,
Secs. 7 thru 24.

T. 10 S., R. 8 E.

T. 11 S., R. 8 E.,
Secs. 11 thru 36.

T. 12 S., R. 8 E.

T. 2 S., R. 9 E.,
Secs. 1 thru 24.

T. 10 S., R. 9 E.

T. 11 S., R. 9 E.,
Secs. 7 thru 21 and Secs. 28 thru 33.
Secs. 28 thru 33.

T. 10 S., R. 10 E.,
Secs. 1 thru 6, Secs. 10 thru 15, and Secs.
22 thru 36.

T. 11 S., R. 10 E.,
Secs. 19, 20, and 21 and Secs. 28 thru 33.

T. 14 S., R. 10 E., unsurveyed,
Secs. 12, 13, 23, and 24, those portions
lying outside the boundary of Gates of the
Arctic National Preserve;
Sec. 25
Secs. 26, 34, and 35, those portions lying
outside the boundary of Gates of the
Arctic National Preserve;
Sec. 36.

T. 15 S., R. 10 E., unsurveyed,
Secs. 1 and 2;
Secs. 3, 8, 9, and 10, those portions lying
outside the boundary of Gates of the
Arctic National Preserve;
Secs. 11 thru 15;
Secs. 16, 17, and 20, those portions lying
outside the boundary of Gates of the
Arctic National Preserve;
Secs. 21 thru 28;
Secs. 29 and 30, those portions lying
outside the boundary of Gates of the
Arctic National Preserve;
Sec. 31, that portion lying outside the
boundary of Gates of the Arctic National
Park and Gates of the Arctic National
Preserve;
Secs. 32 thru 36.

Tps. 9 and 10 S., R. 14 E., unsurveyed.

T. 14 S., R. 14 E., unsurveyed,
Sec. 36, that portion lying outside the
boundary of Arctic National Wildlife
Refuge.

T. 14 S., R. 15 E.,
Secs. 13, 21, 28, 29, 31, 32, and 33, those
portions lying outside the boundary of
Arctic National Wildlife Refuge,
unsurveyed.

T. 14 S., R. 16 E., unsurveyed,
Secs. 3, 4, 5, 7, and 8, those portions lying
outside the boundary of Arctic National
Wildlife Refuge;
Sec. 9;
Secs. 10 thru 14, those portions lying
outside the boundary of Arctic National
Wildlife Refuge;
Secs. 15 and 16;
Secs. 17 and 18, those portions lying
outside the boundary of Arctic National
Wildlife Refuge;
Secs. 19 thru 23;
Sec. 24, that portion lying outside the
boundary of Arctic National Wildlife
Refuge;
Secs. 25 thru 36.

T. 15 S., R. 16 E., unsurveyed.

T. 14 S., R. 17 E.,
Secs. 9 and 10, and Secs. 14 thru 18, those
portions lying outside the boundary of
Arctic National Wildlife Refuge,
unsurveyed;
Sec. 22, unsurveyed;
Secs. 23 and 26, those portions lying
outside the boundary of Arctic National
Wildlife Refuge, unsurveyed;
Sec. 27, unsurveyed;
Secs. 34 and 35, those portions lying
outside the boundary of Arctic National
Wildlife Refuge, unsurveyed.

T. 1 S., R. 18 E.,
Secs. 1, 2, and 3 and Secs. 10 thru 36.

T. 2 S., R. 18 E.,
Secs. 1 thru 12 and Secs. 15, 16 and 18.

T. 1 S., R. 19 E.,
Secs. 1 thru 12, Secs. 15 thru 22, and Secs.
29 thru 32.

The areas described aggregate
approximately 11,163,252 acres.

2. At 8 a.m. Alaska time on December
23, 2024, the lands described in
Paragraph 1 shall be open to allotment
selection under the Allotment Program,
subject to valid existing rights. All
allotment applications that are free from
substantive errors and received at or
prior to 8 a.m. Alaska time on December
23, 2024 shall be considered as
simultaneously received at 8 a.m.
Alaska time. Those received thereafter
shall be considered received in
accordance with 43 CFR 2569.411.

3. No lands are opened by this order
for any purpose other than allotment
selection and possible conveyance
under the Allotment Program.

(Authority: 43 U.S.C. 1714)

Deb Haaland,

Secretary of the Interior.

[FR Doc. 2024-27253 Filed 11-20-24; 8:45 am]

BILLING CODE 4331-10-P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

**[BLM AK FRN MO4500183284; F-14880-A;
F-14880-E; F-14880-L; F-14880-O; F-
14880-X; F-14880-C2; AKAK106698197]**

Alaska Native Claims Selection

AGENCY: Bureau of Land Management,
Interior.

ACTION: Notice of decision approving
lands for conveyance.

SUMMARY: The Bureau of Land
Management (BLM) hereby provides
constructive notice that it will issue an
appealable decision approving
conveyance of the surface estate in
certain lands to Kikiktagruk Inupiat
Corporation for the Native village of
Kotzebue, pursuant to the Alaska Native
Claims Settlement Act of 1971

(ANCSA). The subsurface estate in the
same lands will be conveyed to NANA
Regional Corporation, Inc., when the
surface estate is conveyed to
Kikiktagruk Inupiat Corporation.

DATES: Any party claiming a property
interest in the lands affected by the
decision may appeal the decision in
accordance with the requirements of 43
CFR part 4 within the time limits set out
in the **SUPPLEMENTARY INFORMATION**
section.

ADDRESSES: You may obtain a copy of
the decision from the Bureau of Land
Management, Alaska State Office, 222
West Seventh Avenue, #13, Anchorage,
AK 99513-7504.

FOR FURTHER INFORMATION CONTACT:
Cameron Means, BLM Alaska State
Office, 907-271-3152, or cmeans@blm.gov. Individuals in the United
States who are deaf, deafblind, hard of
hearing, or have a speech disability may
dial 711 (TTY, TDD, or TeleBraille) to
access telecommunications relay
services. Individuals outside the United
States should use the relay services
offered within their country to make
international calls to the point of
contact in the United States.

SUPPLEMENTARY INFORMATION: As
required by 43 CFR 2650.7(d), notice is
hereby given that the BLM will issue an
appealable decision to Kikiktagruk
Inupiat Corporation. The decision
approves conveyance of the surface
estate in certain lands pursuant to
ANCSA (43 U.S.C. 1601, *et seq.*). As
provided by ANCSA, the subsurface
estate in the same lands will be
conveyed to NANA Regional
Corporation, Inc., when the surface
estate is conveyed to Kikiktagruk
Inupiat Corporation. The lands are
located in the vicinity of Kotzebue,
Alaska, and are described as:

A portion of lot 6, U.S. Survey No.
10947, Alaska.

Kateel River Meridian, Alaska

T. 15 N., R. 16 W.,

Secs. 7, 17, 18, 20, 21, 28, and 29.

T. 19 N., T. 16 W.,

Secs. 9 and 27.

T. 15 N., R. 18 W.,

Sec. 1.

T. 17 N., R. 18 W.,

Sec. 14.

Containing approximately 3,030 acres.
The decision addresses public access
easements, if any, to be reserved to the
United States pursuant to sec. 17(b) of
ANCSA (43 U.S.C. 1616(b)), in the lands
described above.

The BLM will also publish notice of
the decision once a week for four
consecutive weeks in "The Arctic
Sunder" newspaper.

Any party claiming a property interest
in the lands affected by the decision

may appeal the decision in accordance with the requirements of 43 CFR part 4 within the following time limits:

1. Unknown parties, parties unable to be located after reasonable efforts have been expended to locate, parties who fail or refuse to sign their return receipt, and parties who receive a copy of the decision by regular mail which is not certified, return receipt requested, shall have until December 23, 2024 to file an appeal.

2. Parties receiving service of the decision by certified mail shall have 30 days from the date of receipt to file an appeal.

Parties who do not file an appeal in accordance with the requirements of 43 CFR part 4 shall be deemed to have waived their rights. Notices of appeal transmitted by facsimile will not be accepted as timely filed.

Cameron G. Means,

Land Law Examiner, Adjudication Section.

[FR Doc. 2024-27255 Filed 11-20-24; 8:45 am]

BILLING CODE 4331-10-P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[BLM_NV_FRN_4500183156]

Notice of Availability of the Record of Decision for the Robertson Mine Project, Lander County, Nevada

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of availability.

SUMMARY: The Bureau of Land Management (BLM) announces the availability of the Record of Decision (ROD) for the Final Environmental Impact Statement (EIS) for the Robertson Mine Project located in Lander County, Nevada. The ROD constitutes the decision of the BLM.

DATES: The District Manager signed the ROD on November 15, 2024.

ADDRESSES: The ROD is available online at <https://eplanning.blm.gov/eplanning-ui/project/2023088/510>.

FOR FURTHER INFORMATION CONTACT: Jeff Kirkwood, Project Manager, telephone: (775) 635-4164; address: 50 Bastian Road, Battle Mountain, Nevada 89820; email: BLM_NV_BMDO_Robertson@blm.gov. Individuals in the United States who are deaf, deafblind, hard of hearing, or have a speech disability may dial 711 (TTY, TDD, or TeleBraille) to access telecommunications relay services for contacting Mr. Kirkwood. Individuals outside the United States should use the relay services offered within their country to make

international calls to the point-of-contact in the United States.

SUPPLEMENTARY INFORMATION: The ROD incorporates BLM's selection of the Partial Backfill Alternative (Preferred Alternative/Selected Alternative). The BLM's decision is based on the analyses contained in the Final EIS, and after careful consideration of input received from the public and cooperating agencies.

The BLM will authorize the plan of operations (Plan) for the Robertson Mine Project in the ROD, in accordance with the BLM Use and Occupancy and Surface Management Regulations at 43 CFR subparts 3715 and 3809. The BLM has determined that implementation of this ROD, with the identified mitigation measures and the Applicant-committed Environmental Protection Measures (ACEPMs), will not cause unnecessary or undue degradation of the public lands and is consistent with applicable legal requirements.

In accordance with 40 CFR 1505.2(c), the mitigation measures and ACEPMs required as part of the Plan represent practicable means to avoid or minimize environmental harm resulting from implementing the BLM's Selected Alternative. All mitigation measures within the BLM's authority will be implemented and enforced.

The operator is responsible for obtaining any necessary local, state, and Federal permits, licenses, or reviews. Other agencies are responsible for issuing and enforcing their own decisions and applicable authorizations for the Project.

(Authority: 40 CFR 1506.6)

Jon D. Sherve,

Battle Mountain District Manager.

[FR Doc. 2024-27305 Filed 11-20-24; 8:45 am]

BILLING CODE 4331-21-P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[BLM_CO_FRN_MO4500179563]

Notice of Intent To Establish Recreation Fees in the Uncompahgre Field Office, Colorado

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of intent.

SUMMARY: Pursuant to the Federal Lands Recreation Enhancement Act (FLREA), the Bureau of Land Management (BLM), Uncompahgre Field Office (UFO) intends to establish fee areas and to collect recreation fees at five existing campgrounds, three proposed

campgrounds, and eight day-use recreation sites located within the UFO administrative boundaries in Delta, Gunnison, Mesa, Montrose, Ouray, and San Miguel Counties, Colorado.

DATES: New fees will take effect on May 21, 2025, unless the BLM publishes a **Federal Register** Notice to the contrary.

ADDRESSES: Documents concerning this fee proposal may be reviewed at the Uncompahgre Field Office, 2465 South Townsend Ave., Montrose, CO 81401; phone: (970) 240-5310; and online at: <https://www.blm.gov/programs/recreation/permits-and-fees/business-plans>.

FOR FURTHER INFORMATION CONTACT:

Caroline Kilbane, Outdoor Recreation Planner, at the Uncompahgre Field Office, telephone: 970-240-5310, email: ckilbane@blm.gov. Individuals in the United States who are deaf, deafblind, hard of hearing, or have a speech disability may dial 711 (TTY, TDD, or TeleBraille) to access telecommunications relay services for contacting the BLM. Individuals outside the United States should use the relay services offered within their country to make international calls to the point-of-contact in the United States.

SUPPLEMENTARY INFORMATION: Consistent with FLREA, the intent of recreation fees is to help protect natural resources, provide for public health and safety, and facilitate access to public lands and related waters, and not to maximize fee revenue. Fees are a way of ensuring that those who actively use recreation opportunities make a greater, but reasonable, contribution toward protecting and enhancing those opportunities than those who do not utilize recreational opportunities.

FLREA directs the Secretary of the Interior to publish a 6-month advance notice in the **Federal Register** whenever new recreation fee areas are established. In accordance with BLM policy, the Business Plan for the UFO explains the fee collection process and how fees will be used at these sites.

The BLM intends to assess an expanded amenity fee of \$12 per night per site at five developed campgrounds (Lower Beaver, Caddis Flats, Fall Creek, Ledges Cottonwood, and Ledges Rockhouse) and at three proposed campgrounds (Electric Hills Rim, Nucla, and Paradox), and to assess a standard amenity fee of \$4 per vehicle per day at eight day-use recreation sites located within the UFO administrative boundaries in Delta, Gunnison, Mesa, Montrose, Ouray, and San Miguel Counties, Colorado. A vehicle is defined as legal transportation used to access the site (e.g., car, truck, motorcycle, van, or

other wheeled conveyance). In addition, the BLM plans to offer a site-specific Standard Amenity Pass/Annual Day-Use Pass for all day-use sites in the UFO of \$20 per year. The campgrounds will provide the expanded amenities, and the day-use sites will provide the standard amenities, necessary for the establishment and collection of fees prior to fee collection. The fees will assist the BLM in meeting recreation and visitor service goals within the UFO and promote consistency in management for recreational visitors and interested publics. Any areas where dispersed/undeveloped camping is permitted would continue to be available throughout the UFO without a reservation or fee.

To stay current with rising management and maintenance costs, the BLM will utilize the Western U.S. Consumer Price Index (CPI) to determine future fee adjustments. The Western U.S. CPI is published online monthly and annually in January at: <https://www.bls.gov/cpi/regional-resources.htm>. Every January after fee implementation begins, the BLM would use the yearly CPI average to determine consistent fees for the campgrounds and day use sites. When the CPI increase or decrease equates to a \$2 incremental change for campsite fees or \$1 incremental change for per vehicle day use fees, then the fees would be adjusted accordingly. This measure would result in a sustainable and consistent funding source that would increase assurances for users that the program could continue to provide regular maintenance and necessary capital improvements into the future.

If the UFO decides to make reservation services or other types of e-commerce options available in the future, an expanded amenity fee for reservation services would be charged in addition to any other standard or expanded amenity fees in accordance with 16 U.S.C. 6802(g)(2)(G). The expanded amenity fee is subject to contracting requirements and will be adjusted with contract changes or with future updates to the business plan.

People holding an America the Beautiful Pass—The National Parks and Federal Recreational Lands Senior Pass or Access Pass, or a Golden Age or Golden Access Passport, would be entitled to a 50 percent fee reduction on all expanded amenity fees. A public comment period on the draft business plan, announced by news release, ran from August 12, 2024, to September 16, 2024. In accordance with FLREA guidelines, the BLM presented the draft business plan to the Southwest Resource Advisory Council (RAC) at its

September and December 2022 meetings, which was followed by robust discussion. The RAC will review the final draft business plan and public comments received and make a recommendation at its next meeting.

(Authority: 16 U.S.C. 6803(b) and 43 CFR part 2933)

Douglas J. Vilsack,

BLM Colorado State Director.

[FR Doc. 2024–27271 Filed 11–20–24; 8:45 am]

BILLING CODE 4331–16–P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[BLM AK FRN MO4500183370; AA–10747, AA–10768, AA–10770, AA–10771, AA–10772, AA–10773, AA–10791, AA–10973, AA–10983, AA–10986, AA–11057, AA–11065, AA–12548, AA–12578, AA–12579, AA–12587, AA–12620, AA–41488]

Alaska Native Claims Selection

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of decision approving lands for conveyance.

SUMMARY: The Bureau of Land Management (BLM) hereby provides constructive notice that it will issue an appealable decision approving conveyance of the surface and subsurface estates in certain lands to Chugach Alaska Corporation, an Alaska Native regional corporation, pursuant to the Alaska Native Claims Settlement Act of 1971 (ANCSA), as amended.

DATES: Any party claiming a property interest in the lands affected by the decision may appeal the decision in accordance with the requirements of 43 CFR part 4 within the time limits set out in the **SUPPLEMENTARY INFORMATION** section.

ADDRESSES: You may obtain a copy of the decision from the Bureau of Land Management, Alaska State Office, 222 West Seventh Avenue, #13, Anchorage, AK 99513–7504.

FOR FURTHER INFORMATION CONTACT: Dina L. Torres, BLM Alaska State Office, 907–271–5699 or dtorres@blm.gov. Individuals in the United States who are deaf, deafblind, hard of hearing, or have a speech disability may dial 711 (TTY, TDD, or TeleBraille) to access telecommunications relay services. Individuals outside the United States should use the relay services offered within their country to make international calls to the point of contact in the United States.

SUPPLEMENTARY INFORMATION: As required by 43 CFR 2650.7(d), notice is

hereby given that the BLM will issue an appealable decision to Chugach Alaska Corporation. The decision approves conveyance of the surface and subsurface estates in certain lands pursuant to ANCSA (43 U.S.C. 1601, *et seq.*), as amended. The lands are located in the Prince William Sound, within the following townships: T. 4 N., R. 10 E., Seward Meridian (SM); T. 17 S., R. 8 W., Copper River Meridian (CRM), T. 17 S., R. 7 W., CRM; T. 18 S., R. 7 W., CRM; T. 18 S., R. 8 W., CRM; T. 8 N., R. 8 E., SM; T. 1 S., R. 13 E., SM; T. 1 N., R. 13 E., SM; T. 9 N., R. 6 E., SM; T. 22 S., R. 6 E., CRM; T. 4 S., R. 12 E., SM; T. 5 N., R. 6 E., SM; T. 5 N., R. 10 E., SM; T. 3 N., R. 10 E., SM; T. 11 N., R. 9 E., SM; T. 11 N., R. 8 E., SM, and aggregate 349.34 acres. The decision addresses public access easements, if any, to be reserved to the United States pursuant to sec. 17(b) of ANCSA (43 U.S.C. 1616(b)), in the lands approved for conveyance.

The BLM will also publish notice of the decision once a week for four consecutive weeks in the “Cordova Times” newspaper.

Any party claiming a property interest in the lands affected by the decision may appeal the decision in accordance with the requirements of 43 CFR part 4 within the following time limits:

1. Unknown parties, parties unable to be located after reasonable efforts have been expended to locate, parties who fail or refuse to sign their return receipt, and parties who receive a copy of the decision by regular mail which is not certified, return receipt requested, shall have until December 23, 2024 to file an appeal.

2. Parties receiving service of the decision by certified mail shall have 30 days from the date of receipt to file an appeal.

Parties who do not file an appeal in accordance with the requirements of 43 CFR part 4 shall be deemed to have waived their rights. Notices of appeal transmitted by facsimile will not be accepted as timely filed.

Dina L. Torres,

Management and Program Analyst, Division of Lands and Cadastral.

[FR Doc. 2024–27256 Filed 11–20–24; 8:45 am]

BILLING CODE 4331–16–P

DEPARTMENT OF THE INTERIOR**Bureau of Land Management****[BLM_OR_FRN_MO4500181464]****Notice of Segregation of Public Land for the Expedition Solar Project, Deschutes County, Oregon****AGENCY:** Bureau of Land Management, Department of Interior.**ACTION:** Notice.

SUMMARY: Through this notice the Bureau of Land Management (BLM) is segregating 4,037 acres of public lands included in the right-of-way application for the Expedition Solar Project from appropriation under the public land laws, including the mining laws, but not the mineral leasing or material sales laws, for a period of two years from the date of publication of this notice, subject to valid existing rights. This segregation is to allow for the orderly administration of the public lands to facilitate consideration of development of renewable energy resources.

DATES: The segregation for the lands identified in this notice is effective on the date of this **Federal Register** notice publication.

FOR FURTHER INFORMATION CONTACT: For further information and/or to have your name added to the mailing list, send requests to: Faith Simitz, Realty Specialist, Prineville District Office, (541) 416-6783, fsimitz@blm.gov, or 3050 NE 3rd Street, Prineville, OR 97754. Individuals in the United States who are deaf, deafblind, hard of hearing, or have a speech disability may dial 711 (TTY, TDD, or TeleBraille) to access telecommunications relay services. Individuals outside the United States should use the relay services offered within their country to make international calls to the point-of-contact in the United States.

SUPPLEMENTARY INFORMATION: Regulations found at 43 CFR 2091.3-1(e) and 2804.25(f) allow the BLM to temporarily segregate public lands within a right-of-way application area for solar energy development from the operation of the public land laws, including the mining laws, by publication of a **Federal Register** notice. The BLM uses this temporary segregation authority to preserve its ability to approve, approve with modifications, or deny proposed rights-of-way, and to facilitate the orderly administration of the public lands. This temporary segregation is subject to valid existing rights, including valid existing rights in mining claims located before this segregation notice. Licenses,

permits, cooperative agreements, or discretionary land use authorizations of a temporary nature that would not impact lands identified in this notice may be allowed with the approval of an authorized officer of the BLM during the segregation period. The lands segregated under this notice are legally described as follows:

Expedition Solar Project*Willamette Meridian, Oregon*

- T. 16 S., R. 13 E.
 Sec. 5, S $\frac{1}{2}$ SW $\frac{1}{4}$ and SW $\frac{1}{4}$ SE $\frac{1}{4}$;
 Sec. 6, SE $\frac{1}{4}$ SE $\frac{1}{4}$;
 Sec. 7, E $\frac{1}{2}$ NE $\frac{1}{4}$ and E $\frac{1}{2}$ SE $\frac{1}{4}$;
 Sec. 8, W $\frac{1}{2}$ NE $\frac{1}{4}$, W $\frac{1}{2}$, and W $\frac{1}{2}$ SE $\frac{1}{4}$;
 Sec. 17, W $\frac{1}{2}$ NE $\frac{1}{4}$, W $\frac{1}{2}$, and W $\frac{1}{2}$ SE $\frac{1}{4}$;
 Sec. 18, NE $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NE $\frac{1}{4}$, and SE $\frac{1}{4}$;
 Sec. 19, E $\frac{1}{2}$ and SE $\frac{1}{4}$ SW $\frac{1}{4}$;
 Sec. 20;
 Sec. 21, W $\frac{1}{2}$ NE $\frac{1}{4}$, W $\frac{1}{2}$, and W $\frac{1}{2}$ SE $\frac{1}{4}$;
 Sec. 28, W $\frac{1}{2}$ NE $\frac{1}{4}$, W $\frac{1}{2}$, and W $\frac{1}{2}$ SE $\frac{1}{4}$;
 Sec. 29;
 Sec. 30, N $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$, and E $\frac{1}{2}$ SE $\frac{1}{4}$;
 Sec. 31, E $\frac{1}{2}$ NE $\frac{1}{4}$;
 Sec. 32, N $\frac{1}{2}$;
 Sec. 33, W $\frac{1}{2}$ NE $\frac{1}{4}$ and NW $\frac{1}{4}$.

TOGETHER WITH access along Morrill Road, located within the following:

Willamette Meridian, Oregon

- T. 16 S., R. 12 E.
 Sec. 25, S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$, and N $\frac{1}{2}$ SE $\frac{1}{4}$.
 T. 16 S., R. 13 E.
 Sec. 30, S $\frac{1}{2}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$, and N $\frac{1}{2}$ SE $\frac{1}{4}$.

The area described contains approximately 4,037 acres.

As provided in the regulations, the segregation of lands in this notice will not exceed two years from the date of publication unless extended for an additional two years through publication of a new notice in the **Federal Register**. The segregation period will terminate and the land will automatically reopen to appropriation under the public land laws, including the mining laws, at the earliest of the following dates: upon issuance of a decision by the authorized officer granting, granting with modifications, or denying the application for a right-of-way; without further administrative action at the end of the segregation provided for in the **Federal Register** notice initiating the segregation; or upon publication of a **Federal Register** notice terminating the segregation.

Upon termination of the segregation of these lands, all lands subject to this segregation would automatically reopen to appropriation under the public land laws, including the mining laws.

Authority: 43 CFR 2091.3-1(e) and 43 CFR 2804.25(f).

Amanda S. Roberts,*District Manager—Prineville District Office.*

[FR Doc. 2024-27320 Filed 11-20-24; 8:45 am]

BILLING CODE 4331-24-P**DEPARTMENT OF THE INTERIOR****Bureau of Land Management****[BLM_AK_FRN_MO4540000120]****Filing of Plats of Survey: Alaska****AGENCY:** Bureau of Land Management, Interior.**ACTION:** Notice of official filing.

SUMMARY: The plats of survey of lands described in this notice are scheduled to be officially filed in the Bureau of Land Management (BLM), Alaska State Office, Anchorage, Alaska. The surveys, which were executed at the request of the Bureau of Indian Affairs (BIA), and the BLM, are necessary for the management of these lands.

DATES: The BLM must receive protests by December 23, 2024.

ADDRESSES: You may buy a copy of the plats from the BLM Alaska Public Information Center, 222 W. 7th Avenue, Mailstop 13, Anchorage, AK 99513. Please use this address when filing written protests. You may also view the plats at the BLM Alaska Public Information Center, Fitzgerald Federal Building, 222 W. 7th Avenue, Anchorage, Alaska, at no cost.

FOR FURTHER INFORMATION CONTACT: Thomas B. O'Toole, Chief, Branch of Cadastral Survey, Alaska State Office, Bureau of Land Management, 222 W. 7th Avenue, Anchorage, AK 99513; 907-271-4231; totoole@blm.gov. People who use a telecommunications device for the deaf may call the Federal Relay Service (FRS) at 1-800-877-8339 to contact the BLM during normal business hours. The FRS is available 24 hours a day, 7 days a week, to leave a message or question with the above individual. You will receive a reply during normal business hours.

SUPPLEMENTARY INFORMATION: The lands surveyed are:

Copper River Meridian, Alaska

U.S. Survey No. 10677, accepted August 22, 2024, situated in T. 4 N., R. 2 W.

U.S. Survey No. 14615, accepted October 4, 2024, situated in T. 1 N., R. 3 W.

T. 2 S., R. 1 E., accepted October 4, 2024.

T. 3 S., R. 1 E., accepted August 8, 2024.

T. 6 S., R. 1 E., accepted October 2, 2024.

T. 7 S., R. 1 E., accepted October 2, 2024.

T. 8 S., R. 1 E., accepted October 2, 2024.

T. 4 S., R. 2 E., accepted October 2, 2024.

T. 7 S., R. 2 E., accepted October 2, 2024.
 T. 8 S., R. 2 E., accepted October 2, 2024.
 T. 6 S., R. 3 E., accepted November 14, 2024.
 T. 3 S., R. 4 E., accepted August 8, 2024.
 T. 6 S., R. 5 E., accepted October 2, 2024.
 T. 3 S., R. 1 W., accepted October 4, 2024.
 T. 4 S., R. 1 W., accepted October 4, 2024.
 T. 6 S., R. 1 W., accepted October 2, 2024.
 T. 7 S., R. 1 W., accepted October 2, 2024.
 T. 4 S., R. 2 W., accepted October 2, 2024.
 T. 7 S., R. 2 W., accepted October 2, 2024.
 T. 6 S., R. 3 W., accepted October 2, 2024.
 T. 7 S., R. 3 W., accepted August 8, 2024.
 T. 1 N., R. 4 W., accepted October 4, 2024.
 T. 4 S., R. 4 W., accepted November 14, 2024.
 T. 5 S., R. 4 W., accepted November 14, 2024.
 T. 6 S., R. 4 W., accepted November 14, 2024.
 T. 7 S., R. 4 W., accepted August 8, 2024.
 T. 2 S., R. 5 W., accepted August 8, 2024.
 T. 5 S., R. 5 W., accepted November 14, 2024.
 T. 6 S., R. 5 W., accepted October 2, 2024.
 T. 7 S., R. 5 W., accepted October 2, 2024.

Fairbanks Meridian, Alaska

U.S. Survey No. 8012, accepted November 13, 2024, situated in T. 2 S., R. 33 E.

Kateel River Meridian, Alaska

T. 17 S., R. 1 E., accepted September 9, 2024.
 T. 17 S., R. 2 E., accepted September 9, 2024.
 T. 7 N., R. 25 E., accepted September 9, 2024.
 T. 16 S., R. 2 W., accepted September 9, 2024.
 T. 14 S., R. 3 W., accepted September 9, 2024.
 T. 15 S., R. 3 W., accepted September 9, 2024.
 T. 16 S., R. 3 W., accepted September 9, 2024.
 T. 15 S., R. 4 W., accepted September 9, 2024.
 T. 20 N., R. 17 W., accepted August 1, 2024.

Seward Meridian, Alaska

T. 11 S., R. 72 W., accepted August 15, 2024.

A person or party who wishes to protest one or more plats of survey identified above must file a written notice of protest with the State Director for the BLM in Alaska. The protest may be filed by mailing to BLM State Director, Alaska State Office, Bureau of Land Management, 222 W. 7th Avenue, Anchorage, AK 99513 or by delivering it in person to BLM Alaska Public Information Center, Fitzgerald Federal Building, 222 W. 7th Avenue, Anchorage, Alaska. The notice of protest must identify the plat(s) of survey that the person or party wishes to protest. You must file the notice of protest before the scheduled date of official filing for the plat(s) of survey being protested. The BLM will not consider any notice of protest filed after the scheduled date of official filing. A notice of protest is considered filed on the date it is received by the State Director for the BLM in Alaska during regular business hours; if received after regular business hours, a notice of protest will be considered filed the next business day. A written statement of reasons in support of a protest, if not

filed with the notice of protest, must be filed with the State Director for the BLM in Alaska within 30 calendar days after the notice of protest is filed.

If a notice of protest against a plat of survey is received prior to the scheduled date of official filing, the official filing of the plat of survey identified in the notice of protest will be stayed pending consideration of the protest. A plat of survey will not be officially filed until the dismissal or resolution of all protests of the plat.

Before including your address, phone number, email address, or other personally identifiable information in a notice of protest or statement of reasons, you should be aware that the documents you submit, including your personally identifiable information, may be made publicly available in their entirety at any time. While you can ask the BLM to withhold your personally identifiable information from public review, we cannot guarantee that we will be able to do so.

Authority: 43 U.S.C. ch. 3.

Thomas O'Toole,

Chief Cadastral Surveyor, Alaska.

[FR Doc. 2024-27187 Filed 11-20-24; 8:45 am]

BILLING CODE 4331-10-P

DEPARTMENT OF THE INTERIOR

National Park Service

[NPS-NCR-WHWO-WHWOA1-38722; PPNCWHWOA1; PPMSPD1Z.YM0000]

Committee for the Preservation of the White House; Notice of Public Meeting

AGENCY: National Park Service, Interior.

ACTION: Meeting notice.

SUMMARY: In accordance with the Federal Advisory Committee Act of 1972, as amended, the National Park Service (NPS) is hereby giving notice that the Committee for the Preservation of the White House (Committee) will meet as indicated below.

DATES: The meeting will take place on Monday, December 16, 2024. The meeting will begin at 11 a.m. until 1 p.m. (Eastern).

ADDRESSES: The meeting will be held at the White House, 1600 Pennsylvania Avenue NW, Washington, DC 20500. The meeting will be open to the public, but subject to security clearance requirements.

FOR FURTHER INFORMATION CONTACT:

Comments may be provided to: John Stanwich, Executive Secretary, Committee for the Preservation of the White House, 1849 C Street NW, Room #1426, Washington, DC 20240, by

telephone (202) 219-0322, or by email ncr_who_superintendent@nps.gov. Individuals in the United States who are deaf, deafblind, hard of hearing, or have a speech disability may dial 711 (TTY, TDD, or TeleBraille) to access telecommunications relay services. Individuals outside the United States should use the relay services offered within their country to make international calls to the point-of-contact in the United States.

SUPPLEMENTARY INFORMATION: The Committee was established in accordance with Executive Order No. 11145, 3 CFR 184 (1964-1965), as amended. The Committee reports to the President of the United States and advises the Director of the NPS with respect to the discharge of responsibilities for the preservation and interpretation of the museum aspects of the White House pursuant to the Act of September 22, 1961 (Pub L. 87-286, 75 Stat. 586). The meeting is open to the public, but subject to security clearance requirements. Detailed minutes of the meeting will be available for public inspection within 90 days of the meeting.

Purpose of the Meeting: The agenda will include discussion of policy changes and review of potential acquisition items. If you plan to attend this meeting, you must register by close of business on Tuesday, December 10, 2024. Please contact the Executive Secretary (see **FOR FURTHER INFORMATION CONTACT**) to register. Space is limited and requests will be accommodated in the order they are received. The meeting will be open to the public, but subject to security clearance requirements. The Executive Secretary will contact you directly with the security clearance requirements. Inquiries may be made by calling the Executive Secretary between 9:00 a.m. and 4:00 p.m. weekdays at (202) 219-0322.

Written comments may be sent to the Executive Secretary, Committee for the Preservation of the White House (see **FOR FURTHER INFORMATION CONTACT**).

All written comments received will be provided to the Committee.

Meeting Accessibility/Special Accommodations: Please make requests in advance for sign language interpreter services, assistive listening devices, language translation services or other reasonable accommodations at least seven (7) business days prior to the meeting to give the Department of the Interior sufficient time to process your request. All reasonable accommodation requests are managed on a case-by-case basis.

Public Disclosure of Comments: Before including your address, phone

number, email address, or other personal identifying information in your written comments, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Authority: 5 U.S.C. Ch. 10.

Alma Rippes,

Chief, Office of Policy.

[FR Doc. 2024–27251 Filed 11–20–24; 8:45 am]

BILLING CODE 4312–52–P

INTERNATIONAL TRADE COMMISSION

[Investigation No. 337–TA–1424]

Certain Flash-Spun Nonwoven Materials and Products Containing Same; Notice of Institution of Investigation

AGENCY: U.S. International Trade Commission

ACTION: Notice.

SUMMARY: Notice is hereby given that a complaint was filed with the U.S. International Trade Commission on October 9, 2024, under section 337 of the Tariff Act of 1930, as amended, on behalf of DuPont de Nemours, Inc. of Wilmington, Delaware; DuPont Safety & Construction, Inc. of Wilmington, Delaware; and DuPont Specialty Products USA, LLC of Wilmington, Delaware. Supplements to the complaint were filed on October 29, 2024. The complaint, as supplemented, alleges violations of section 337 based upon the importation into the United States, the sale for importation, and the sale within the United States after importation of certain flash-spun nonwoven materials and products containing same by reason of misappropriation of trade secrets and wrongful use and exploitation of stolen confidential and proprietary information, the threat or effect of which is to destroy or substantially injure an industry in the United States. The complaint further alleges violations of section 337 based upon the importation into the United States, the sale for importation, and the sale within the United States after importation of certain flash-spun nonwoven materials and products containing same by reason of the infringement of U.S. Trademark Registration No. 817,194 (“the ‘194 mark”), U.S. Trademark Registration No. 818,688 (“the ‘688 mark”), U.S.

Trademark Registration No. 818,737 (“the ‘737 mark”), and U.S. Trademark Registration No. 7,370,316 (“the ‘316 mark”). The complaint also alleges that an industry in the United States exists as required by the applicable Federal Statute. The complainants request that the Commission institute an investigation and, after the investigation, issue a general exclusion order, or in the alternative a limited exclusion order, and cease and desist orders.

ADDRESSES: The complaint, except for any confidential information contained therein, may be viewed on the Commission’s electronic docket (EDIS) at <https://edis.usitc.gov>. For help accessing EDIS, please email EDIS3Help@usitc.gov. Hearing impaired individuals are advised that information on this matter can be obtained by contacting the Commission’s TDD terminal on (202) 205–1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at (202) 205–2000. General information concerning the Commission may also be obtained by accessing its internet server at <https://www.usitc.gov>.

FOR FURTHER INFORMATION CONTACT: Pathenia M. Proctor, The Office of Unfair Import Investigations, U.S. International Trade Commission, telephone (202) 205–2560.

SUPPLEMENTARY INFORMATION:

Authority: The authority for institution of this investigation is contained in section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. 1337, and in section 210.10 of the Commission’s Rules of Practice and Procedure, 19 CFR 210.10 (2024).

Scope of Investigation: Having considered the complaint, the U.S. International Trade Commission, on November 15, 2024, *ordered that—*

(1) Pursuant to subsection (b) of section 337 of the Tariff Act of 1930, as amended, an investigation be instituted to determine:

(a) whether there is a violation of subsection (a)(1)(A) of section 337 in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain products identified in paragraph (2) by reason of misappropriation of trade secrets and wrongful use and exploitation of stolen confidential and proprietary information, the threat or effect of which is to destroy or substantially injure an industry in the United States; and

(b) whether there is a violation of subsection (a)(1)(C) of section 337 in the

importation into the United States, the sale for importation, or the sale within the United States after importation of certain products identified in paragraph (2) by reason of infringement of the ‘194 mark, the ‘688 mark, the ‘737 mark, and ‘316 mark, and whether an industry in the United States exists as required by subsection (a)(2) of section 337;

(2) Pursuant to section 210.10(b)(1) of the Commission’s Rules of Practice and Procedure, 19 CFR 210.10(b)(1), the plain language description of the accused products or category of accused products, which defines the scope of the investigation, is “flash-spun nonwoven materials sold in both paper-like hard structure or cloth-like soft structure”;

(3) For the purpose of the investigation so instituted, the following are hereby named as parties upon which this notice of investigation shall be served:

(a) The complainant are:

DuPont de Nemours, Inc., 974 Centre Road, Chestnut Run Plaza, Wilmington, DE 19805

DuPont Safety & Construction, Inc., 974 Centre Road, Wilmington, Delaware 19805

DuPont Specialty Products USA, LLC, 974 Centre Road, Chestnut Run Plaza, Wilmington, DE 19805

(b) The respondents are the following entities alleged to be in violation of section 337, and are the parties upon which the complaint is to be served:

Xiamen Dangs New-Materials Co., Ltd., AKA Dawnsens New Materials Co., Ltd., Dangsheng Industrial Park, No. 227–1 Fulian West 2nd Road, Dongfu Street, Haicang District, Xiamen, Fujian, 361000 China

Beijing Dangsheng Technology Co., Ltd., B0204, Floor 2, Building 12, 16, No. 37 Courtyard, Chaoqian Road, Science & Technology Park, Changping District, Beijing, Beijing, 102200 China

Xiamen Dangsheng Technology Co., Ltd., Room 489, No. 1, Shishan Road, Dongfu Sub-District, Haicang District, Xiamen, Fujian, 361000 China

Kingwills New Material Technology Co., Ltd., Room 514, No. 42, Guangzhou Road, Development Zone, Nantong, Jiangsu, 226300 China

Zhejiang Qingyun New Material Co., Ltd., South Side of Yuan Factory, (Building No. 3, Pinghu Fei Da Garments Co., Ltd.), Jvfu Village, Huanggu Town, Dushangang Town, Pinghu, Jiaxing, Zhejiang, 314000 China

Jiangsu Qingyun New Materials Co., Ltd., AKA Jiangsu Kingwills New Materials Co., Ltd., No. 166 Jianghai Road, Nantong Economic &

Technological Development Area,
Chongchuan District, Nantong,
Jiangsu, 226000 China

Shanghai Qingyun New Material
Technology Co., Ltd., Room 452,
Building 18, No. 235, Sanlin Road,
Pudong New District, Shanghai,
Shanghai, 200125 China

Kingwills International Ltd., Unit 2 of
Lg 1, Mirror Tower, 61 Mody Rd.,
Tsim Sha Tsui, Kowloon, Hong Kong,
20002 China

Harbourpoint Innovations Inc., 434
Fayetteville Street, Suite 2330,
Raleigh, NC 27601

Impak Corporation, 13700 S Broadway,
Los Angeles, California 90061

Shenzhen Zhengming Science and
Technology Co., Ltd., 1001, Building
3, Taidong Science Park, No. 19,
Longxing Road, Dayawan West
District, Huizhou, Guangdong, 516081
China

Weifang Konzer Safety Protective
Equipment Co., Ltd., Intersection of
Wei'an Road and Nanyuan Road,
Xingan Sub-District, Anqiu,
Shandong, China

Jiangsu Tubo New Material Co., Ltd.,
No. 335, Xiangxieli Boulevard, Lvdi
International, Jiayuan, Huaqiao Town,
Kunshan, Jiangsu, 215300 China

Emedia Group, Inc., 615 Worley Rd.,
Greenville, SC 29609

endur-tec, LLC, 900 Hiawatha Drive,
Anderson, SC 29621

Hangzhou Several Sets of Electronic
Commerce Co., Ltd., Room 562, Xixi
Golden Block, Wuchang Street,
Yuhang, Hangzhou, 311121 China

Hangzhou Qiao Shell Digital
Technology Co., Ltd., Room 301,
Floor 3, Building 3, No. 31 Xianxing
Road, Xianlin Street, Yuhang,
Hangzhou, 311121 China

Zhenping County Weihe Commerce and
Trade Co., Ltd., East No. 180, 100
Meters South of the Intersection of
North Station Road and Provincial
Highway 331, Jiasong Town,
Zhenping, Nanyang, 474272 China

(c) The Office of Unfair Import
Investigations, U.S. International Trade
Commission, 500 E Street SW, Suite
401, Washington, DC 20436; and

(4) For the investigation so instituted,
the Chief Administrative Law Judge,
U.S. International Trade Commission,
shall designate the presiding
Administrative Law Judge.

Responses to the complaint and the
notice of investigation must be
submitted by the named respondents in
accordance with section 210.13 of the
Commission's Rules of Practice and
Procedure, 19 CFR 210.13. Pursuant to
19 CFR 201.16(e) and 210.13(a), as
amended in 85 FR 15798 (March 19,
2020), such responses will be

considered by the Commission if
received not later than 20 days after the
date of service by the complainant of the
complaint and the notice of
investigation. Extensions of time for
submitting responses to the complaint
and the notice of investigation will not
be granted unless good cause therefor is
shown.

Failure of a respondent to file a timely
response to each allegation in the
complaint and in this notice may be
deemed to constitute a waiver of the
right to appear and contest the
allegations of the complaint and this
notice, and to authorize the
administrative law judge and the
Commission, without further notice to
the respondent, to find the facts to be as
alleged in the complaint and this notice
and to enter an initial determination
and a final determination containing
such findings, and may result in the
issuance of an exclusion order or a cease
and desist order or both directed against
the respondent.

By order of the Commission.

Issued: November 15, 2024.

Sharon Bellamy,

*Supervisory Hearings and Information
Officer.*

[FR Doc. 2024–27250 Filed 11–20–24; 8:45 am]

BILLING CODE 7020–02–P

DEPARTMENT OF JUSTICE

[OMB Number 1125–0006]

Agency Information Collection Activities; Proposed eCollection eComments Requested; Title: Notice of Entry of Appearance as Attorney or Representative Before the Immigration Court (EOIR–28)

AGENCY: Executive Office for
Immigration Review, Department of
Justice.

ACTION: 30-Day notice.

SUMMARY: The Department of Justice
(DOJ), Executive Office for Immigration
Review (EOIR), will be submitting the
following 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.

DATES: Comments are encouraged and
will be accepted for 30 days until
December 23, 2024.

FOR FURTHER INFORMATION CONTACT: The
proposed information collection was
previously published in the **Federal
Register** on September 18, 2024, 89 FR
76510, Pages 76510–76511 allowing a
60-day comment period. If you have

comments especially on the estimated
public burden or associated response
time, suggestions, or need a copy of the
proposed information collection
instrument with instructions or
additional information, please contact:
Laetitia Mukala-Nirere, Attorney
Advisor, Office of the General Counsel,
Executive Office for Immigration
Review, 5107 Leesburg Pike, Suite 2600,
Falls Church, VA 22041, telephone:
(703) 305–0470, EOIR.PRA.Comments@usdoj.gov or Kabina.L.Mukala-Nirere@usdoj.gov.

SUPPLEMENTARY INFORMATION: Written
comments and suggestions from the
public and affected agencies concerning
the proposed collection of information
are encouraged. Your comments should
address one or more of the following
four points:

- Evaluate whether the proposed
collection of information is necessary
for the proper performance of the
functions of the agency, including
whether the information will have
practical utility;
- Evaluate the accuracy of the agency's
estimate of the burden of the
proposed collection of information,
including the validity of the
methodology and assumptions used;
- Enhance the quality, utility, and
clarity of the information to be
collected; and/or
- Minimize the burden of the collection
of information on those who are to
respond, including through the use of
appropriate automated, electronic,
mechanical, or other technological
collection techniques or other forms
of information technology, e.g.,
permitting electronic submission of
responses.

Written comments and
recommendations for this information
collection should be submitted within
30 days of the publication of this notice
on the following website
www.reginfo.gov/public/do/PRAMain.
Find this particular information
collection by selecting “Currently under
30-day Review—Open for Public
Comments” or by using the search
function and entering either the title of
the information collection or the OMB
Control Number 1125–0006. This
information collection request may be
viewed at www.reginfo.gov. Follow the
instructions to view Department of
Justice, information collections
currently under review by OMB.

DOJ seeks PRA authorization for this
information collection for three (3)
years. OMB authorization for an ICR
cannot be for more than three (3) years
without renewal. The DOJ notes that
information collection requirements

submitted to the OMB for existing ICRs receive a month-to-month extension while they undergo review.

Overview of This Information Collection

1. *Type of Information Collection:* Renewal, with change, of a currently approved collection. EOIR is making several non-substantive changes to the current Form EOIR-28, including moving the word “alien” on the first page to the subsequent sentence; moving the “Law Firm/Organization” field to the line below the “Name” field, and moving the “Address” field below “Law Firm/Organization”; correcting EOIR website address, and updating the toll number and website address to obtain automated case information. EOIR is also making several minor but substantive changes to the current Form EOIR-28, to include clarifying the information required of reputable individuals; adding language explaining the types of appearances before the Immigration Court and corresponding obligations; and modifying the paragraph explaining what constitutes an appearance on behalf of a respondent.

2. *Title of the Form/Collection:* Notice of Entry of Appearance as Attorney or Representative Before the Immigration Court.

3. *Agency form number, if any, and the applicable component of the Department of Justice sponsoring the collection:* The form number is EOIR-28; the sponsoring component is Executive Office for Immigration Review, United States Department of Justice.

4. *Affected public who will be asked or required to respond, as well as a brief abstract:* Primary: Attorneys and qualified representatives notifying the Immigration Court that they are representing a respondent in immigration proceedings. Other: None. Abstract: This information collection is necessary to allow an attorney or representative to notify the Immigration Court that he or she is representing a respondent before the Immigration Court.

5. *Obligation to Respond:* The information requested on this form is authorized by 8 U.S.C. 1229(a), 1362 and 8 CFR 1003.17 to enter an appearance to represent a party before the Immigration Court. This is a mandatory collection of information because EOIR requires it to enter an appearance. Failure to provide the requested information will result in an inability to represent a party or receive notice of actions in a proceeding.

6. *Total Estimated Number of Respondents:* It is estimated that 1,536,921 respondents will complete the form annually.

7. *Estimated Time per Respondent:* It is estimated that it will take an average of 6 minutes per response.

8. *Frequency:* It is estimated that respondents will complete the form annually.

9. *Total Estimated Annual Time Burden:* The estimated public burden associated with this collection is 153,692 hours. It is estimated that respondents will take 6 minutes to complete the form.

10. *Total Estimated Annual Other Costs Burden:* The estimated annual cost burden associated with this collection is \$10,770,735.

If additional information is required, contact: Darwin Arceo, Department Clearance Officer, Policy and Planning Staff, Justice Management Division, United States Department of Justice, Two Constitution Square, 145 N Street NE, 4W-218 Washington, DC 20530.

Dated: November 18, 2024.

Darwin Arceo,

Department Clearance Officer for PRA, U.S. Department of Justice.

[FR Doc. 2024-27318 Filed 11-20-24; 8:45 am]

BILLING CODE 4410-30-P

DEPARTMENT OF JUSTICE

Notice of Lodging of Proposed First Material Modification of Consent Decree Under the Clean Water Act

On November 15, 2024, the Department of Justice lodged a proposed first material modification to the Consent Decree with the United States District Court for the Western District of Washington in the lawsuit entitled *United States and State of Washington v. King County*, Civil Action No. 2:13-cv-00677-JCC.

The proposed modification revises provisions in a Consent Decree between the parties that was entered by the Court on July 3, 2013. The proposed modification would revise certain sewer control measures, design criteria, deadlines, and adaptive management procedures in the Consent Decree to address changed circumstances since the Decree was first entered, and would update and clarify a number of related provisions.

The publication of this notice opens a period for public comment on the modification. Comments should be addressed to the Assistant Attorney General, Environment and Natural Resources Division, and should refer to *United States and State of Washington*

v. King County, D.J. Ref. No. 90-5-1-1-10030. All comments must be submitted no later than thirty (30) days after the publication date of this notice. Comments may be submitted either by email or by mail:

To submit comments:	Send them to:
By email	pubcomment-ees.enrd@usdoj.gov
By mail	Assistant Attorney General, U.S. DOJ—ENRD, P.O. Box 7611, Washington, DC 20044-7611.

Any comments submitted in writing may be filed by the United States in whole or in part on the public court docket without notice to the commenter.

During the public comment period, the modification may be examined and downloaded at this Justice Department website: <https://www.justice.gov/enrd/consent-decrees>. If you require assistance accessing the modification, you may request assistance by email or by mail to the addresses provided above for submitting comments.

Kathryn C. Macdonald,

Assistant Section Chief, Environmental Enforcement Section, Environment and Natural Resources Division.

[FR Doc. 2024-27168 Filed 11-20-24; 8:45 am]

BILLING CODE 4410-15-P

DEPARTMENT OF JUSTICE

Notice of Lodging of Proposed First Material Modification of Consent Decree Under the Clean Water Act

On November 15, 2024, the Department of Justice lodged a proposed first material modification to the Consent Decree with the United States District Court for the Western District of Washington in the lawsuit entitled *United States and State of Washington v. City of Seattle*, Civil Action No. 2:13-cv-00678-JCC.

The proposed modification revises provisions in a Consent Decree between the parties that was entered by the Court on July 3, 2013. The proposed modification would revise certain sewer control measures, design criteria, deadlines, and adaptive management procedures in the Consent Decree to address changed circumstances since the Decree was first entered, and would update and clarify a number of related provisions.

The publication of this notice opens a period for public comment on the modification. Comments should be addressed to the Assistant Attorney General, Environment and Natural

Resources Division, and should refer to *United States and State of Washington v. City of Seattle*, D.J. Ref. No. 90–5–1–1–10066. All comments must be submitted no later than thirty (30) days after the publication date of this notice. Comments may be submitted either by email or by mail:

<i>To submit comments:</i>	<i>Send them to:</i>
By email	<i>pubcomment-ees.enrd@usdoj.gov.</i>
By mail	Assistant Attorney General, U.S. DOJ–ENRD, P.O. Box 7611, Washington, DC 20044–7611.

Any comments submitted in writing may be filed by the United States in whole or in part on the public court docket without notice to the commenter. During the public comment period, the modification may be examined and downloaded at this Justice Department website: <https://www.justice.gov/enrd/consent-decrees>. If you require assistance accessing the modification, you may request assistance by email or by mail to the addresses provided above for submitting comments.

Kathryn C. Macdonald,
Assistant Section Chief, Environmental Enforcement Section, Environment and Natural Resources Division.
[FR Doc. 2024–27172 Filed 11–20–24; 8:45 am]
BILLING CODE 4410–15–P

DEPARTMENT OF LABOR

Employee Benefits Security Administration
[Exemption Application No. L–12066]
Proposed Exemption from Certain Prohibited Transaction Restrictions Involving Meta Platforms, Inc. Located in Menlo Park, CA
AGENCY: Employee Benefits Security Administration, Labor.
ACTION: Notice of proposed exemption.

SUMMARY: This document provides notice of the pendency before the Department of Labor (the Department) of a proposed individual exemption from certain of the prohibited transaction restrictions of the Employee Retirement Income Security Act of 1974 (ERISA or the Act). If the proposed exemption is granted, the Meta Platforms Inc. Health and Welfare Benefit Plan (the Plan) would enter into an insurance contract with Prudential Life Insurance Company of America (Prudential). The contract would cover the Plan’s group

term life insurance benefits, accidental death and dismemberment benefits, and survivor income benefits (the Covered Insurance). Prudential would then reinsure the Covered Insurance by entering into a reinsurance contract with Ekahi Insurance Company, LLC (Ekahi), an insurance company that is owned by Meta Platforms, Inc. (Meta). Importantly, at all times and in all events, Prudential would remain fully and completely responsible to the Plan with respect to the Covered Insurance, regardless of whether Ekahi met its obligations to Prudential.
DATES: *Applicability date:* If granted, this proposed exemption will be in effect for the period beginning on the date of publication in the **Federal Register**.
Comments due: Written comments and requests for a public hearing on the proposed exemption should be submitted to the Department by January 21, 2025.
ADDRESSES: All written comments and requests for a hearing should be sent to the Employee Benefits Security Administration (EBSA), Office of Exemption Determinations, Attention: Application No. L–12066, via email to EOED@dol.gov or online through <https://www.regulations.gov>. Any such comments or requests should be sent by the end of the scheduled comment period. The application for exemption and the comments received will be available for public inspection in the Public Disclosure Room of the Employee Benefits Security Administration, U.S. Department of Labor, Room N–1515, 200 Constitution Avenue NW, Washington, DC 20210 ((202) 693–8673). See **SUPPLEMENTARY INFORMATION** below for additional information regarding comments.
FOR FURTHER INFORMATION CONTACT: Nicholas Schroth of the Department at (202) 693–8571. (This is not a toll-free number.)
SUPPLEMENTARY INFORMATION:
Comments
1. Persons are encouraged to submit all comments electronically and not to follow with paper copies. Comments should state the nature of the person’s interest in the proposed exemption and the manner in which the person would be adversely affected by the exemption, if granted. Any person who may be adversely affected by an exemption can request that the Department holds a hearing on the exemption. A request for a hearing must state: (1) the name, address, telephone number, and email address of the person making the request; (2) the nature of the person’s

interest in the exemption and the manner in which the person would be adversely affected by the exemption; and (3) a statement of the issues to be addressed and a general description of the evidence to be presented at the hearing. The Department will grant a request for a hearing made in accordance with the requirements above where a hearing is necessary to fully explore material factual issues identified by the person requesting the hearing. A notice of such hearing shall be published by the Department in the **Federal Register**. The Department may decline to hold a hearing if: (1) the request for the hearing does not meet the requirements above; (2) the only issues identified for exploration at the hearing are matters of law; or (3) the factual issues identified can be fully explored through the submission of evidence in written (including electronic) form.
2. **WARNING:** All comments received will be included in the public record without change and may be made available online at <https://www.regulations.gov>, including any personal information provided, unless the comment includes information claimed to be confidential or other information whose disclosure is restricted by statute. If you submit a comment, EBSA recommends that you include your name and other contact information in the body of your comment, but **DO NOT** submit information that you consider to be confidential, or otherwise protected (such as a Social Security number or an unlisted phone number) or confidential business information that you do not want publicly disclosed. However, if EBSA cannot read your comment due to technical difficulties and cannot contact you for clarification, EBSA might not be able to consider your comment. Additionally, the <https://www.regulations.gov> website is an “anonymous access” system, which means EBSA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email directly to EBSA without going through <https://www.regulations.gov>, your email address will be automatically captured and included as part of the comment that is placed in the public record and made available on the internet.
Background
The Department is considering granting an exemption under the authority of section 408(a) of the Employee Retirement Income Security Act of 1974, as amended (ERISA), and in accordance with the procedures set

forth in 29 CFR part 2570, subpart B (75 FR 66637, 66644, October 27, 2011).¹ As described in more detail below, the proposed exemption would allow the Meta Platforms Inc. Health and Welfare Benefit Plan (the Plan), which is sponsored by Meta Platforms, Inc. (Meta) to enter into an insurance contract with Prudential Life Insurance Company of America, an unrelated A-rated insurance company (hereafter referred to as Prudential or the Fronting Insurer). Contemporaneously, the Fronting Insurer would enter into a reinsurance contract (collectively, the Reinsurance Arrangement), with Ekahi Insurance Company, LLC (Ekahi), a captive insurer that is owned by Meta.

Under the Reinsurance Arrangement, Ekahi would reinsure the Plan's risks related to providing group term life insurance benefits, accidental death and dismemberment (AD&D) benefits, and survivor income benefits. Importantly, the Fronting Insurer (or any successor fronting insurer) would remain fully responsible for these risks in the event that Ekahi does not fulfill its contractual obligations to the Fronting Insurer.

Meta Platforms, Inc. (Meta), through its ownership of Ekahi, is expected to receive a benefit from the Reinsurance Arrangement. To ensure that most of the financial benefits from the arrangement are passed through to the Plan and its participants and beneficiaries, this proposed exemption would require Meta to fund certain new Plan benefit enhancements. Specifically, the financial benefit that Ekahi or a related party (including Meta) receives directly or indirectly from the Reinsurance Arrangement must be less than the value of the enhanced financial benefits to the Plan and its participants and beneficiaries. Accordingly, for every dollar of financial benefits that the Reinsurance Arrangement is expected to generate, the Plan, its participants and beneficiaries must receive at least 51 cents on the dollar and, Ekahi and related parties may not receive more than 49 cents. Furthermore, Ekahi and related parties may not offset the enhanced financial benefits, directly or indirectly, by reducing other plan benefits or other compensation to the Plan's participants or beneficiaries.

This proposed exemption also would require Meta to delegate fiduciary oversight of the Reinsurance Arrangement to a qualified fiduciary that is independent of Meta and its

affiliates (the Independent Fiduciary). The Independent Fiduciary would be required to approve the Reinsurance Arrangement in advance, ensure that the Reinsurance Arrangement is in the interest and protective of the Plan and its participants and beneficiaries at all times, submit annual and five-year "look-back" reports to the Department, and ensure that all of exemption's conditions are met.²

Summary of Facts and Representations³

The Parties

1. *Meta.* Meta is a multinational technology company headquartered in Menlo Park, California.

2. *The Plan.* The Plan is sponsored by Meta and provides health, dental, vision, temporary disability insurance for accidents and sickness, prepaid legal services, long-term disability, death benefits, basic employee term life coverage, basic AD&D coverage, employee survivor benefits life coverage, supplemental employee term coverage, dependent term life insurance (spouse or domestic partner), and dependent term life insurance (children). As of December 31, 2020, the Plan covered more than 45,714 participants.

3. *Prudential Life Insurance Company of America.* The Plan's benefits are insured by Prudential Life Insurance Company of America, which received an "A+" financial strength rating from A. M. Best Company (A. M. Best) as of December 15, 2022. Prudential is unrelated to Meta and, per the conditions of the exemption, must remain so throughout the duration of the Reinsurance Arrangement.

4. *Honu.* Honu Insurance Company, LLC (Honu) was organized on December 1, 2020, as a wholly-owned subsidiary of Meta. On December 22, 2020, the State of Hawaii Department of

Commerce and Consumer Affairs' Insurance Division Hawaii (hereafter referred to as Hawaii) issued Honu a certificate of authority to transact business as a pure captive insurance company. Under Hawaii state law, a pure captive insurance company is a captive insurance company that only insures or reinsures risks of its parent and affiliated entities or of a controlled unaffiliated business.⁴ On May 10, 2022, Hawaii approved Honu's conversion from a pure captive insurance company to a sponsor captive insurance company and allowed the establishment of a protected cell, called Ekahi Insurance Company, LLC, to operate as a cell company sponsored by Honu.⁵ In turn, Hawaii state law generally provides that a sponsor captive insurance company is a captive insurance company if: (1) its minimum required capital and surplus is provided by one or more sponsors; (2) it is formed or licensed under Hawaii state law; (3) it insures the risks only of its participants through separate participant contracts; and (4) it may fund its liability to each participant through one or more protected cells.⁶

5. *Ekahi.* Ekahi Insurance Company, LLC (Ekahi) is a wholly-owned subsidiary of Meta. Presently, Ekahi reinsures employee benefits for Meta's international benefit plans, and Meta intends to expand its global benefits program by using Ekahi as its reinsurer for its domestic benefits as well. The Applicant states that, as a protected cell of a captive insurance company, Ekahi is a separate juridical entity (e.g., a corporation or an LLC) formed under the captive insurance company laws of a state and has no responsibility for the liabilities of other cells that may be formed within such captive insurance company. The juridical entity formed as a cell has all of the characteristics of any such entity, e.g., in the case of a corporate cell it has articles of incorporation.

The Reinsurance Arrangement

6. Meta intends to utilize Ekahi to reinsure the following Plan benefits: basic employee term life coverage, basic accidental death and dismemberment coverage, employee survivor benefits coverage, supplemental employee term coverage, dependent term life insurance (spouse or domestic partner), dependent term life insurance (children)

² The Department notes that the Independent Fiduciary's annual written report is essential to the Department's tentative finding that the exemption will be in the interest and protective of the Plan and its participants and beneficiaries. The Independent Fiduciary must clearly, prudently and loyally determine whether Meta and its affiliates have complied with each term and condition of the exemption and include its finding in the report. The relief provided in the exemption is conditioned upon the independent fiduciary's compliance with this requirement.

³ The Department notes that availability of the exemption is subject to the express condition that the material facts and representations contained in application L-12066 are true and complete, and accurately describe all material terms of the transactions covered by the exemption. If there is any material change in a transaction covered by the exemption, or in a material fact or representation described in the application, the exemption will cease to apply as of the date of such change.

⁴ Hawaii state law 19 section 431:19-101.

⁵ The Applicant represents that the use of an incorporated protected cell to conduct reinsurance operations as described herein has no effect on the parties' adherence to the conditions for exemptive relief.

⁶ Hawaii state law 19 section 431:19-101.

¹ This proposed exemption does not provide relief from the requirements of, or specific sections of, any law not noted above. Accordingly, the Applicant is responsible for ensuring compliance with any other laws applicable to the transactions described herein.

(hereinafter collectively referred to as the Reinsured Benefits).

7. The Reinsurance Arrangement would be structured as follows: (a) the Plan would enter into an insurance arrangement with Prudential to insure the Plan's risks; and (b) Prudential would enter into a reinsurance agreement with Ekahi in reliance on Honu's license, whereby Ekahi would reinsure 100 percent of the Plan's risks relating to the Reinsured Benefits.

8. In general terms, the Plan would make premium payments to Prudential, and Prudential would make corresponding payments to Ekahi in an amount less than the premiums it is paid by the Plan. The amount that Prudential retains from the Plan's premium payment is a negotiated fee, while the amounts Prudential pays to Ekahi is Ekahi's premium for reinsuring the Plan's risks. The reinsurance agreement between Prudential and Ekahi would be "indemnity only," which means that Prudential would maintain the responsibility to pay benefit claims to participants and beneficiaries in the event Ekahi does not satisfy any of its contractual obligations to Prudential under the Reinsurance Arrangement for any reason.

9. In this Reinsurance Arrangement, Prudential is known as the "Fronting Insurer," and Ekahi is known as the "Captive Insurer." Administration of the claims under the Plan will be performed directly by Prudential as the direct insurer of the Plan, and Prudential will remain directly liable to the participants for administration and payment of claims under the Plan. Prudential would pay all claims under its insurance contract with the Plan and seek reimbursement for its proportionate share of claims payments from Ekahi under the Reinsurance Arrangement. Ekahi would be bound by Prudential's claims handling decisions under the Plan and not have direct contact with participants, make direct payments to participants, or have responsibility for the benefit determinations. Under the terms of the Reinsurance Arrangement, Ekahi's reinsurance obligations to Prudential would be secured with collateral (*i.e.* a letter of credit or funds in a trust account), but Prudential would assume ultimate financial liability for payment of the Plan's benefit claims in the event Ekahi is unable to satisfy its obligations to Prudential.

Benefit to Meta

10. The Applicant states that Ekahi (and Meta indirectly) expects to receive a \$5,775,000 total benefit in the first

year of the Reinsurance Arrangement.⁷ The Department is basing the issuance of this proposed exemption based on the premise that this \$5,775,000 amount would reflect the entire direct and indirect benefit (including non-net income direct or indirect benefits) that is expected to be generated from the Reinsurance Arrangement. The total benefit may increase or decrease from year to year, and will reflect a number of factors, including the amount of claims incurred, reserves set aside for claims, expenses, taxes, etc. but the total net benefit would not include expenses for the enhanced benefits or other payments required to be made by Meta to or on behalf of participants under the exemption.

This proposed exemption would require the qualified independent fiduciary to review the Reinsurance Arrangement, and to confirm and quantify all the benefits generated from the Reinsurance Arrangement, such as a benefit from a further diversification of Ekahi's risks or tax benefit from the reinsurance of corporate risks through a captive reinsurance company. Under the terms of the exemption, for every dollar of net financial benefits that the Reinsurance Arrangement is expected to generate, the Plan and its participants and beneficiaries must receive at least 51 cents on the dollar and, Ekahi and related parties must not receive more than 49 cents.

Department's Note: The Department developed this proposed exemption based on the Applicant's representation that Meta, and all related parties directly and indirectly related to Meta are not expected to receive any benefit from the Reinsurance Arrangement other than the benefit described herein (which must be offset in the manner discussed below), which must be verified annually by an Independent Fiduciary. If Meta or a related party directly or indirectly receive any other benefit from the captive reinsurance arrangement, the benefit must be quantified by the Independent Fiduciary and included in the Primary Benefit Test described below.⁸ Consistent with

⁷ Meta represents, based on information from Milliman and Willis Towers Watson, that Ekahi's projected net premiums in the first year from the Reinsurance Arrangement will be \$33.5 million from the Fronting Insurer and \$0 in investment income. Meta further represents that Ekahi's projected expenses from the Reinsurance Arrangement in the first year will be \$22.3 million in claims incurred, \$3.8 million in underwriting expenses, \$200,000 in general and administrative expenses, and \$1.5 million in taxes. Resulting in a first-year projected benefit of approximately \$5.7 million to Ekahi.

⁸ This includes any benefit to Meta or a related party arising from a further diversification of

this condition, the proposed exemption would expressly prohibit Meta (or a related entity) from, among other things: (1) using any participant-related data or information that is generated by (or derived from) the Reinsurance Arrangement in any manner that benefits Meta or a related entity; or (2) transferring any portion of Ekahi's reserves that is attributable to Plan participants' portion of the Reinsured Benefits premiums to Meta or to a related entity.

Benefit to the Plan

11. Under the proposed exemption, Meta would be required to satisfy the "Primary Benefit Test" as a condition for exemptive relief. In other words, for every dollar of net financial benefits that the Reinsurance Arrangement is expected to generate for Meta and its related parties, the Plan, its participants and beneficiaries must receive at least 51 cents on the dollar, and Meta and related parties may not receive more than 49 cents. As described above, in the initial year of this proposed transaction, Ekahi is estimated to realize a benefit (after taxes) increase of \$5,775,000. At the same time, according to the Applicant, Meta would provide an immediate and objectively determined estimated benefit in the form of enhanced benefits to Plan participants in the amount of \$3,854,000.⁹ In other words, 66.7% of the \$5,775,000 benefit received by Meta will be passed on to Plan participants in the form of benefit enhancements worth \$3,854,000. As discussed in further detail below, Meta must pay all costs associated with providing the benefit enhancements. The cost for providing the benefit enhancements cannot be factored into the Primary Benefit Test.

Department's Note: Both the benefit and the cost to Meta from the Reinsurance Arrangement are based on projections. Therefore, the exemption would require the Independent Fiduciary to look back over successive five-year periods to determine whether the Primary Benefit Test has been met based on actual results. If the Independent Fiduciary finds that the

Ekahi's risks in connection with the addition of the Plan's employee benefit insurable risks to Ekahi's other insurable risks, or arising from an additional tax benefit, for example, due to a change in circumstances or law permitting a deduction for Meta's reinsurance of its own corporate risks through Ekahi.

⁹ The Department retains the right to propose a revocation or amendment to the exemption if it is unable to confirm the reliability of the underlying financial data supporting the Independent Fiduciary's "look-back" findings. The Department notes that its failure to revoke an exemption is not an endorsement or conclusion that the conditions of the exemption are met.

Primary Benefit Test has not been met during a prior five-year period, Meta must immediately implement a prospective reduction to the participants' portion of the Plan premiums in an amount that is sufficient to make up for the shortfall. The reduction in participants' premiums should be allocated equally across all Plan participant contributions toward premiums for Plan benefits, regardless of whether the respective benefits were reinsured by Ekahi. The amount of the prospective reduction would be required to include an additional payment of interest on the shortfall, at the Code's federal underpayment rate set forth in Code section 6621(b). Further, Meta would be prohibited from reducing any benefits provided to Plan participants and beneficiaries in connection with its implementation of the captive reinsurance arrangement. Finally, if the Plan's total annual participant premiums for all Plan benefits are insufficient to make up the shortfall, Meta would be required to make up the remaining shortfall by increasing the value of enhanced benefits to all participants in a monetary value equal to the remaining shortfall. These additional enhanced benefits would be valued by an actuary and approved in writing by the Independent Fiduciary.

Description of Plan Benefit Enhancements

12. In order to satisfy the Primary Benefit Test, Meta would be required to fund the following Plan benefit enhancements (Benefit Enhancements):

a. *Removal of Age Reduction Clause Enhancement.* The Applicant represents that currently basic life insurance, optional employee term life coverage, optional dependents term life coverage, and AD&D benefits have an age reduction schedule that reduces a participant or beneficiary's benefit based on the age of the participant. Under this schedule, the amount of the participant or beneficiary's life insurance coverage is reduced from 100% to 65% when the participant reaches the age of 65 and is further reduced from 65% to 50% when the participant reaches the age of 70.

The proposed exemption would require the removal of the age reduction clause for the Plan's basic life insurance benefits, optional life insurance coverages and AD&D benefits at no additional cost. Under the Removal of age reduction clause enhancement, the insured would no longer incur reductions to the policy's insurance amount when they reach the ages of 65 and 70.

b. *Enhanced Basic Life Insurance Benefit.* The Plan's current basic employee term life insurance benefit contains an accelerated benefit option for qualified terminal illnesses. This option allows the payout to the participant of 90% of the amount of life insurance coverage on the participant's life up to \$500,000 before the insured's death.¹⁰ If the participant is also enrolled in supplemental employee term coverage and the accelerated payment from the basic life insurance did not amount to at least \$500,000, 90% of the amount of the supplemental employee term coverage would be accelerated until both the basic life insurance and the supplemental life insurance accumulated to \$500,000.¹¹ Under this proposed exemption, the Enhanced Basic Life Insurance Benefit would increase the accelerated insurance payout from 90% to 100% of the total amount of coverage up to \$1,000,000. If the participant is also enrolled in supplemental employee term coverage and the accelerated payment from the basic life insurance did not amount to at least \$1,000,000, 100% of the supplemental employee term coverage would be accelerated until both the basic life insurance and the supplemental life insurance accumulated to \$1,000,000.

c. *Enhanced Basic Life Insurance Benefit Portability.* Currently, the Plan also does not have a portability option for its basic life insurance benefit. Under the proposed exemption, the Plan would provide an enhanced benefit to basic life insurance that adds a portability option to participants. This portability option would allow participants to retain coverage without regard to their medical conditions when they leave Meta's employment. Terminated participants would be required to pay premiums for coverage, and the premium rates may be higher for coverage than the employer's current premium rate.¹²

d. *The Enhanced Accidental Death & Dismemberment Benefit Portability (AD&D).* The Plan offers Accidental Death & Dismemberment benefits to

participants. Currently, this benefit ends when a participant's employment with Meta ends. If the exemption is granted, Meta will provide a portability enhancement that allows participants to retain coverage without regard to their medical conditions after their employment with Meta ends. Terminated participants would be required to pay premiums for coverage, and the premium rates may be higher for coverage than the employer's current premium rate.¹³

e. *The Enhanced AD&D Benefit Waiver of Premium.* Currently, AD&D coverage does not include a waiver of premium option which grants a waiver of AD&D premiums for death benefits until the age of 65 for qualifying disabled participants that no longer work for Meta. If the exemption is granted, the Plan benefit would be enhanced by allowing former employee participants a cessation of premium payments and a continuation of death benefit coverage for one year, which may be renewed on an annual basis up to age 65 if the disabled individual is determined to continue to be Totally Disabled (as defined in the Plan).

f. *The Enhanced AD&D Benefit Bereavement Counseling.* Currently, the Plan's AD&D benefits do not include bereavement and trauma counselling. If the exemption is granted, the Plan would pay 100% of the cost for 52 sessions of bereavement and trauma counselling relating to AD&D claims up to \$150 per session that are held within a year of the loss.

g. *The Enhanced AD&D Benefit Tuition Payments.* Currently, the Plan's AD&D benefits do not include benefits related to paying a dependent child's tuition upon the death of the participant. If the exemption is granted, the Plan would pay an annual amount equal to the lesser of (1) the actual annual amount of the dependent child's tuition (exclusive of room and board); (2) 10% of the participant's AD&D death benefit,¹⁴ or (3) \$25,000. This benefit would be payable annually for up to 4 consecutive years, but not beyond the date the child reaches age 26.

h. *The Enhanced AD&D Benefit Childcare Payments.* Currently, the Plan's AD&D benefits do not include benefits related to paying for the childcare expenses of a deceased participant. If the exemption is granted, the Plan would pay childcare expenses for qualifying dependent children of a

¹⁰ Under the Plan, the participant's basic life insurance benefit is equal to 300% of their annual earnings (as defined in the Plan) up to a maximum of \$2,000,000.

¹¹ Under the Plan, a participant may enroll in supplemental life insurance coverage in an amount equal to 100% to 800% of their annual earnings (as defined in the Plan) up to a maximum of \$2,500,000.

¹² According to the Applicant, evidence of insurability is not required for an individual to become insured under the portability option. However, if the individual submits such evidence and Prudential decides the evidence is satisfactory, the individual will pay lower premium rates.

¹³ As with the above, the Applicant states that, if the individual submits acceptable evidence of insurability, the individual will pay lower premium rates.

¹⁴ The Plan's AD&D death benefit is equal to 100% of a participant's basic life insurance benefit.

qualifying deceased participant in an annual amount equal to the lesser of: (1) the actual cost charged by the relevant Child Care Center¹⁵ per year, (2) 10% of the deceased participant's AD&D death benefit, or (3) \$24,000. This benefit is payable annually for a maximum of four consecutive years, but not beyond the date the child reaches age 13. If there is no dependent child eligible for this benefit, a benefit of \$1,000 would be paid.

i. *Enhanced AD&D Benefit Funeral Reimbursement.* Currently, the Plan's AD&D benefits do not provide a funeral expense reimbursement to beneficiaries with AD&D claims. If the exemption is granted, the Plan would pay for funeral expenses in an amount equal to the lesser of: (1) the actual amount of the Funeral Expenses, (2) 10% of the amount of the deceased participant's AD&D death benefit, or (3) \$20,000.

j. *Enhanced AD&D Benefit Rehabilitation Payments.* Currently, the Plan's AD&D benefits do not include benefits relating to monthly rehabilitation payments. If the exemption is granted, the Plan would make a monthly payment equal to the lesser of (1) 5% of the amount of the participant's relevant AD&D benefit¹⁶ and (2) \$500 for rehabilitation expenses for a maximum of 12 consecutive months.

k. *Enhanced AD&D Benefit Supplemental Mortgage Payment.* Currently, the Plan's AD&D benefits provide a \$1,000 supplemental monthly mortgage payment to the spouse or domestic partner of a deceased participant for up to 12 consecutive months. The benefit is paid until the first of the following events occur: (1) the spouse or domestic partner dies; (2) the mortgage is paid in full; (3) the house subject to the mortgage is sold; or (4) the benefit has been paid for 12 consecutive months. If the exemption is granted, the Plan would increase this benefit from \$1,000 per month to \$2,000 per month.

l. *Enhanced Survivor Income Benefit.* Currently, the Plan offers a monthly survivor income benefit to an employee's spouse or domestic partner equal to 50% of the participant's monthly earnings up to a maximum of \$12,500 per month. The benefit is paid continuously until the earlier of (1) 10 years from date of the insured's death, (2) the spouse or domestic partner's

attainment of age 67, or (3) the spouse or domestic partner's death, but in any event it is to be provided for a minimum of at least 3 years. If the exemption is granted, the survivor income benefit would be increased to 60% of the employee's monthly earnings for a monthly maximum of \$15,000.

m. *Enhanced Benefits Education Program.* Currently, the Plan does not offer a benefits education program. If the exemption is granted, the Plan would provide a benefits education program offering the following benefits Life@Benefits concierge services for Plan benefits and well-being resources.

- EstateGuidance—estate planning concierge services.
- ComPsych—funeral concierge services.
- GuidanceResources—employee assistance program (EAP) services, financial information resources, legal resources, and online informational resources.
- International Medical Group Travel Assistance Services—travel support services, e.g., medical assistance, emergency medical transport, and security services.

ERISA Analysis and Request for Relief

13. The Applicant requests an exemption from ERISA sections 406(a) and 406(b) with respect to the Reinsurance Arrangement. In this regard, Meta is a party in interest with respect to the Plan pursuant to ERISA section 3(14)(C), because it is an employer whose employees are covered by the Plan. In addition, the captive reinsurer, Ekahi, is a party in interest with respect to the Plan pursuant to ERISA section 3(14)(G) because it is wholly owned by Meta.

14. ERISA section 406(a) prohibits a wide variety of transactions between plans and parties in interest. For example, ERISA section 406(a)(1)(D) prohibits a plan fiduciary from causing a plan to engage in a transaction if it knows or should know that such transaction constitutes a direct or indirect transfer to or use by or for the benefit of a party in interest, of the assets of the plan. The Reinsurance Arrangement would violate ERISA section 406(a)(1)(D), because the Fronting Insurer's payment of premiums to the Captive would constitute the indirect transfer of Plan assets to Ekahi, a party in interest with respect to the Plan.

15. ERISA section 406(b)(1) prohibits a fiduciary from dealing with plan assets in its own interest or for its own account, and ERISA section 406(b)(3) prohibits a fiduciary from receiving any consideration for the fiduciary's

personal account from any party dealing with the plan in connection with a transaction involving the plan. The Reinsurance Arrangement would violate ERISA sections 406(b)(1) and 406(b)(3), because the plan fiduciary would cause Plan premiums to be paid to Prudential with knowledge that Ekahi, an entity owned 100% by Meta, would ultimately receive compensation as a result.¹⁷

16. Therefore, subject to the parties' adherence to the conditions described herein, the Department is proposing an exemption from ERISA sections 406(a)(1)(D) and 406(b)(1) and (3) for (a) the reinsurance of risks; and (b) the receipt of premiums, by Ekahi, in connection with insurance contracts sold by Prudential (or any successor fronting insurer) to the Plan in order to provide basic life insurance benefits, AD&D benefits, and survivor income benefits to Plan participants and beneficiaries.

The Independent Fiduciary

17. Kathleen Ely, FSA, MAAA, a Consulting Actuary with Milliman of Windsor, Connecticut will serve as the Plan's qualified independent fiduciary (the Independent Fiduciary or Milliman) with respect to the Reinsurance Arrangement. Ms. Ely represents that she and Milliman are independent of all parties associated with the Reinsurance Arrangement, including Meta, Ekahi, and the Plan. In this regard, Ms. Ely represents that she and Milliman do not have: (a) an interest in any party involved in the Reinsurance Arrangement; (b) an ownership interest in Meta, Ekahi, or Prudential (nor are they directly or indirectly, controlled by, or under common control with them); and (c) any economic stake or financial interest that

¹⁷ The Department notes that, pursuant to section 406(b) of ERISA "a fiduciary may not use the authority, control, or responsibility which makes such person a fiduciary to cause a plan to pay an additional fee to such fiduciary (or to a person in which such fiduciary has an interest which may affect the exercise of such fiduciary's best judgment as a fiduciary) to provide a service. Nor may a fiduciary use such authority, control, or responsibility to cause a plan to enter into a transaction involving plan assets whereby such fiduciary (or a person in which such fiduciary has an interest which may affect the exercise of such fiduciary's best judgment as a fiduciary) will receive consideration from a third party in connection with such transaction. A person in which a fiduciary has an interest which may affect the exercise of such fiduciary's best judgment as a fiduciary includes, for example, a person who is a party in interest by reason of a relationship to such fiduciary described in section 3(14)(E), (F), (G), (H), or (I)." DOL Regulation 29 CFR 2550.408b-2. Ekahi, a party in interest by reason of a relationship to Meta described in section 3(14)(G) of ERISA, is an entity in which Meta has an interest that may affect the exercise of Meta's best judgment as a fiduciary of the Plan.

¹⁵ As defined in the Plan's policy.

¹⁶ An individual's AD&D benefit under the Plan is equal to a percentage of a participant's basic life insurance benefit that depends on the particular loss or injury. For example, in the event of a participant's loss of sight in one eye, they would receive 50% of their basic life insurance benefit.

is contingent upon the implementation of the Reinsurance Arrangement.

18. Milliman represents that its only financial interest related to the Reinsurance Arrangement is in the express fees paid for their work as an Independent Fiduciary. Ms. Ely represents that Milliman's gross income received from Meta, Honu, Ekahi, Prudential, and the Plan is less than 0.1 percent of Milliman's gross annual income from all sources.¹⁸ As a condition of the exemption, neither Ms. Ely nor Milliman may enter into any agreement or instrument that violates ERISA section 410 or section 2509.75–4 of the Department's regulations.¹⁹ Furthermore, the exemption would prohibit the Independent Fiduciary from entering into any agreement, arrangement, or understanding that includes any provision that provides for the direct, or indirect, indemnification or reimbursement of the Independent Fiduciary by the Plan or other party for any failure to adhere to its contractual obligations or to state or Federal laws applicable to the Independent Fiduciary's work; or waives any rights, claims, or remedies of the Plan under ERISA, state, or Federal law against the Independent Fiduciary with respect to the transaction(s) that are the subject of the exemption. Any successor Independent Fiduciary appointed to represent the interests of the Plan with respect to the subject transaction must also comply with the independence requirements specified herein, and no time may elapse between the resignation or termination of the former Independent Fiduciary and the appointment of the successor Independent Fiduciary.

19. The conditions for the exemption require the Independent Fiduciary to evaluate, monitor, and confirm whether or not the terms and conditions of the exemption have been satisfied. As required by the conditions for the exemption, Milliman represents that it has, among other things, in full accordance with its prudence and loyalty obligations under ERISA sections 404(a)(1)(A) and (B), reviewed a draft of Meta's application for an exemption that was submitted to the

Department and conducted extensive diligence reviews to determine that the conditions of the proposed exemption would be met. Milliman concluded that, based on its review of all relevant documents and evidence, all of the exemption's terms and conditions can reasonably be expected to be met consistent with the terms of this proposed exemption.

Department's Note. If the Department grants an exemption, Milliman's findings would not be current as of the exemption's effective date. Therefore, as a condition of the exemption, Milliman must engage in another analysis of the proposed transactions in full accordance with ERISA Section 404(a)(1)(A) and (B). As part of this analysis, Milliman must review the terms of the exemption and verify that it has concluded, based on its review of all of the relevant documents and evidence, that all of the exemption's terms and conditions have been met (or, due to timing requirements, can reasonably be expected to be met consistent with the time requirements set forth in this proposed exemption)). Milliman must document the basis for its conclusions in a written report submitted to the Department's Office of Exemption Determinations at least 30 days before the Plan engages in the reinsurance arrangement. The report must include copies of all documents and evidence Milliman relied on when conducting its review.

20. For the duration of the Reinsurance Arrangement, the Independent Fiduciary must: (a) monitor, enforce and ensure compliance with all conditions of the exemption, including all conditions and obligations imposed on any party dealing with the Plan, throughout the period during which Ekahi's assets are directly or indirectly used in connection with a transaction covered by the exemption; (b) report any instance of non-compliance immediately to the Department's Office of Exemption Determinations; (c) monitor the transactions covered by the exemption on a continuing basis, to ensure the transactions remain in the interest of the Plan; (d) determine that the Reinsurance Transaction is in no way detrimental to the Plan and its participants and beneficiaries; and (e) take all appropriate actions to safeguard the interests of the Plan and its participants and beneficiaries. Milliman must also review all contracts and agreements (and any renewal of such contracts) relevant to the captive reinsurance arrangement and exemption.

21. Additionally, Milliman must file annual certified reports with the Department, under penalty of perjury,

confirming that all of the terms and conditions of the exemption have been met (including that Meta has not reduced or offset any participant benefits in relation to its implementation and maintenance of the Reinsurance Arrangement) and explaining the bases for that conclusion.

22. In order to verify that Meta has adhered to the conditions for relief, Milliman must have access to all relevant documents and evidence. In the Department's view this may include (but is not limited to) the captive insurance company's financial statements, filings with regulators, reports and opinions of actuaries, reports describing utilization of insurance coverages, and any other items showing premiums, claims, reserves, and other relevant materials which in Milliman's opinion is necessary to validate Meta's adherence to the conditions for relief. Milliman must use this information to determine ongoing savings and any other benefits to the Applicants that result from the reinsurance transaction. In addition, Milliman must: (1) review all contracts (and any renewal of such contracts) of the reinsurance of risks and the receipt of premiums therefrom by Ekahi and determine that the requirements of the exemption continue to be satisfied; (2) quantify (in dollars) all benefits that Meta and its related parties receive from the proposed captive reinsurance arrangement; and (3) ensure that the Plan's participants receive an additional benefit, at Meta's expense, of an amount, and in the manner, required under the terms of the exemption.

23. *Independent Fiduciary Analysis.* Ms. Ely (the Independent Fiduciary), provided the Department with two independent fiduciary reports, dated November 17, 2021, and June 21, 2023, and two letters, dated September 15, 2022, and December 9, 2022 (collectively, the Milliman Reports). The Milliman Reports state that Ms. Ely reviewed the following documents: (a) a draft application to the Department requesting exemptive relief;²⁰ (b) group

²⁰ Considering that some of the documents reviewed by the Independent Fiduciary were draft documents and/or documents that are no longer current, this proposed exemption requires the Independent Fiduciary to re-validate its findings by: reviewing the final terms of the exemption; obtaining and reviewing all current objective, reliable, third-party documentation necessary to make the determinations required of the Independent Fiduciary under the exemption; and confirming in writing that all of the exemption terms and conditions have been met (or, due to timing requirements, can reasonably be expected to be met consistent with the terms of this proposed exemption). The Independent Fiduciary must send this written confirmation to the Department's Office

Continued

¹⁸ Under the exemption, the gross income Milliman receives from Meta, Honu, Ekahi and Prudential in a fiscal year must not exceed two percent of Milliman's gross annual income from all sources for that year.

¹⁹ ERISA section 410 provides, in part, that "except as provided in ERISA sections 405(b)(1) and 405(d), any provision in an agreement or instrument which purports to relieve a fiduciary from responsibility or liability for any responsibility, obligation, or duty under this part [meaning part 4 of title I of ERISA] shall be void as against public policy."

insurance renewal exhibits for 2021 and 2022 prepared by Prudential and a review of the 2021 renewal performed by Mercer; (c) a confirmation of the insurance coverage effective 1/1/2022 for a guaranteed period of 24 months; (d) a copy of Certificate of Authority from the State of Hawaii Insurance Division authorizing Honu to transact the business of a captive insurance company in Hawaii; (e) a copy of Meta life insurance certificates; (f) a draft of reinsurance agreement between Honu and Prudential; (g) Ekahi's projected year one financial results prepared by Willis Towers Watson (WTW); (h) 2020 audited financial statements for Honu; (i) Meta's declaration that no commissions will be paid with respect to the Reinsurance Arrangement; (j) Written confirmation from Paul McNiff of WTW that WTW will provide the actuarial review of the captive's life insurance reserves after approval of the proposed transaction; (k) draft of the reinsurance treaty between Ekahi and Prudential; (l) 2021 audited financial statements for Honu (m) confirmation from the State of Hawaii, Department of Commerce & Consumer Affairs Insurance Division that Honu's license is current and in good standing.

24. Based on her review of the foregoing documents, Ms. Ely stated that in the initial year of this proposed transaction "there [would] be an immediate and objectively determined benefit available to all participants and beneficiaries of the Plan who [would] be affected by the proposed transaction." The Milliman Reports provide preliminary estimates with regard to the costs that Meta would incur to fund the Benefit Enhancements, which are discussed below. The incremental additional cost would be built into the premiums charged by Prudential, so variations in the actual benefit amounts or the number of people who use a benefit will not impact the cost to Prudential. The cost to Meta for any Benefit Enhancement represents the corresponding incremental increase in premiums charged by Prudential. The participants would bear no portion of such incremental increase in premium.

(a) *Enhanced Basic Life Insurance.* The additional cost to Meta to provide the Enhanced Basic Life Insurance would be \$390,000 annually, representing a 3.8% increase to the projected annual premium of

\$10,300,000 for the non-enhanced benefit.

(b) *Enhanced Accidental Death and Dismemberment.* The cost to Meta to provide the enhanced AD&D would be an additional \$420,000 annually, representing an 8.3% increase to the projected annual premium of \$5,100,000 for the non-enhanced benefit.

(c) *Enhanced Survivor Income Benefit.* The cost of the Enhanced Survivor Income Benefit would be an additional cost of \$2,090,000 to Meta annually, representing a 20.5% increase to the projected annual premium of \$10,200,000 for the non-enhanced benefit.

(d) *Benefits Education Program.* To estimate the cost to Meta for the new Benefits Education Program, Ms. Ely relied on data provided by the respective vendors offering services in the program (i.e. EstateGuidance, CompPsych, International Medical Group Travel Assistance Services, and Life@Benefits and Resources). The prices represent fixed costs and do not depend on how many employees utilize the program. Further, the amount charged will be paid by Meta and not passed on to participants. The estimated annual cost to Meta for this program is \$954,000.

25. *The Primary Benefit Test:* Based on the above, Ms. Ely states that a reasonable estimate of the expected annual costs for Meta to fund the Benefit Enhancements would be \$3,854,000. This includes \$390,000 for basic life insurance benefit enhancements; \$420,000 for AD&D enhancements; \$2,090,000 for survivor income benefit enhancements; and \$954,000 for the Benefit Education Program. Given that Ekahi expects to realize an increase of \$5,775,000 from the Reinsurance Arrangement, the estimated cost to Meta to fund the Benefit Enhancements represents 66.7 percent of the projected benefit that would inure to Meta (\$3,854,000/\$5,775,000). Thus, Ms. Ely preliminarily estimated that the Primary Benefit Test would be met in the initial year of the Reinsurance Arrangement.

26. *Department's Note.* Even though Ms. Ely's prior findings suggest the conditions of the exemption would be met, those findings would not be current as of the effective date of this proposed exemption. Therefore, as the Plan's Independent Fiduciary, Ms. Ely must perform an additional review and analysis meeting the standards of prudence and loyalty in ERISA Section 404(a)(1)(A) and (B), as well as the terms of the exemption, and she must receive and review all necessary documents required to make her determinations

hereunder and based on such review, conclude that: the majority of the net benefits from the proposed Reinsurance Arrangement can reasonably be expected to inure to the Plan; and all of the exemption's other terms and conditions have been met (or, due to timing requirements, can reasonably be expected to be met consistent with the terms and conditions of the proposed exemption). This conclusion must be submitted to the Department's Office of Exemption Determinations at least 30 days before the Plan engages in the Reinsurance Arrangement. The conclusion must include copies of each document relied on by Milliman and set forth the steps Milliman took to make its confirmation.

27. The Independent Fiduciary is also required to file annual certified reports to the Department, under penalty of perjury, confirming whether all terms and conditions of the exemption have been met during the year to which the annual report relates. The Independent Fiduciary must complete each report within six months from the end of the twelve-month period to which it relates (the first twelve-month period begins on the first day of the implementation of the captive reinsurance arrangement covered by the exemption) and submit it to the Department within 60 days thereafter.

28. Further, the exemption requires the Independent Fiduciary to "look back" over successive five-year periods to determine whether the Primary Benefit Test has been met based on actual financial results and costs incurred by Meta to provide the Plan Benefit Enhancements, as opposed to the current projections. The Independent Fiduciary must provide the Department with a written report of the actual costs and benefits, along with the underlying sources for such data. The Department notes that this information would be included in the public record. The Department is proposing the exemption based on its understanding that the Independent Fiduciary would be able to quantify the necessary information based on reliable and verifiable information, including audited financials and information obtained from the unrelated Fronting Insurer. The Department retains the right to propose a revocation or amendment to the exemption if it is unable to confirm the reliability of the underlying financial data supporting the Independent Fiduciary's "look-back" report. Any failure by the Department to propose a revocation or amendment to the exemption is not an endorsement or conclusion by the Department that the

of Exemption Determinations at least 30 days before Meta engages in the Reinsurance Arrangement. The confirmation must include copies of each document relied on by the Independent Fiduciary, and a description of the steps the Independent Fiduciary took to make its confirmation.

conditions of the exemption were, in fact, met.

29. *Benefit Enhancements*

Adjustment. Before the end of any five-year period and before a “look-back” by the Independent Fiduciary, Meta may change Benefit Enhancements (e.g., by modifying existing Enhancements or adding new Enhancements) at its own expense to ensure that the Primary Benefit Test would be satisfied. The exemption requires any modification or new Benefit Enhancement to be: (a) widely available to all Plan participants on an equal basis; (b) approved, in advance, by the Independent Fiduciary, after the Independent Fiduciary has determined that each Benefit Enhancement is in the interest of the Plan’s participants and beneficiaries and widely available to them on an equal basis; and the modification otherwise meets the operative requirements of the exemption. A complete description of any new Benefit Enhancement and the Independent Fiduciary’s prior determination regarding why the new enhancement is in the interest of the Plan’s participants and beneficiaries must be included in the next annual Independent Fiduciary report submitted to the Department.

30. *Terminating the Captive Arrangement.* If Meta terminates the captive reinsurance arrangement, the Independent Fiduciary must determine whether the Primary Benefit Test was met during the period of time between (1) the end of the last five-year period for which a Primary Benefit Test “look-back” determination was made by the Independent Fiduciary and (2) the termination date of the captive reinsurance arrangement (the Final Term). The Final Term may consist of an entire five-year period or the Final Term may be less than the five-year period if no Primary Benefit Test “look-back” determination has yet been made, depending on when Meta terminates the arrangement. If, based on the Independent Fiduciary’s “look-back,” the Primary Benefit Test was not met during the Final Term, Meta must reduce the participants’ portion of the Plan’s premiums in the following year by an amount at least equal to the amount by which the Final Term Primary Benefit Test was not met (the Shortfall). The premium reduction must benefit all plan participants equally, be fully implemented during the course of the year following the last year of the Final Term, and be verified by the Independent Fiduciary. The relief in the exemption will terminate at the end of the Final Term, as long as all Plan participants receive a pro-rata reduction in their portion of Plan premiums for all

Plan benefits. No exemptive relief will be available with respect to any covered transaction that occurs during the Final Term unless and until all participants are given premium reductions in the manner described above. The premium reduction amounts must be verified by the Independent Fiduciary and reported to the Department as part of the Independent Fiduciary’s annual report.

31. As described above, if the Plan’s total annual participant premium obligation for all Plan benefits is zero or cannot be reduced any more by Meta, Meta shall then make up the remaining Shortfall by increasing the value of Enhanced Benefits to all participants in an amount equal to the remaining Shortfall. These additional Enhanced Benefits must be valued by an actuary and approved in writing by the Independent Fiduciary as part of the Independent Fiduciary’s final written report.

32. If the Shortfall is not corrected pursuant to the terms of this exemption, then exemptive relief will lapse as of the first day of the five-year period to which the Shortfall relates.

33. *Department’s Note.*

Notwithstanding a determination by the Independent Fiduciary that a Benefit Enhancement meets the terms of the exemption, the Department may propose to revoke or amend the exemption to the extent that, among other things, the Department determines that a Benefit Enhancement is not sufficiently protective or in the interest of the Plan and its participants and beneficiaries. Any failure by the Department to propose to modify or revoke the exemption is not an endorsement or conclusion by the Department that the conditions of the exemption were, in fact, met.

Additional Representation and Conditions for Relief

34. Meta represents that Ekahi, as a cell company, is a party in interest with respect to the Plan based on its affiliation with Meta described in ERISA section 3(14)(G). Ekahi must comply with State licensure and insurance regulations to sell insurance or conduct reinsurance operations in at least one State; must obtain permission from Hawaii to transact the business of a captive insurance company in Hawaii; must pass a financial examination by the Insurance Division of Hawaii within five years of any reinsurance transaction covered by the exemption; must have undergone a financial examination by an independent certified public accountant for the taxable year immediately prior to the reinsurance arrangement covered by the exemption,

and must continue to undergo these examinations annually throughout the duration of the captive insurance arrangement. Finally, Ekahi’s reinsurance operations must be licensed by a State whose law requires an independent firm to conduct an actuarial review of Ekahi’s reserves and require Ekahi to report its reserves to the appropriate state authority on an annual basis.

35. The exemption, if granted, requires that: (a) neither the Plan nor any Plan participant would pay any commissions with respect to the direct insurance agreement between Meta and Prudential and the reinsurance agreement between Prudential and Ekahi; (b) the formulae used by Prudential, or any successor insurer, to calculate premiums would be similar to the formulae used by other insurers providing comparable coverage under similar programs that are not captive reinsured; (c) the Plan will only contract with insurers with a financial strength rating of “A” or better from A. M. Best; (d) the Plan would pay no more than adequate consideration with respect to insurance that is part of the captive reinsurance arrangement covered by the proposed exemption and (e) the Reinsurance Arrangement between the insurer and Ekahi will be indemnity reinsurance only (i.e., the Fronting Insurer will not be relieved of any liability to the Plan should the reinsurer be unable or unwilling for any reason to cover any liability arising from the reinsurance arrangement).

36. The exemption, if granted, would expressly prohibit Meta (or a related entity) from using any participant-related data or information that is generated by (or derived from) the proposed captive reinsurance arrangement in any manner that benefits Meta (or a related entity). Meta could not reduce or offset any benefits provided to Plan participants and beneficiaries in connection with its implementation of the proposed captive reinsurance arrangement. Further, all expenses associated with the exemption and the exemption application, including any payment to the Independent Fiduciary, must be paid by Meta and not the Plan.

37. If the exemption is granted, Meta must update the Plan’s Summary Plan Description (SPD) within 90 days of publishing the exemption and conspicuously disclose in the SPD the nature of the exemption and an explanation of why the underlying transaction is prohibited by ERISA Section 406. Meta shall distribute the revised SPD to all participants and beneficiaries within six months of the

publishing of the granted exemption. Similarly, if the reinsurance arrangement is terminated, Meta must update the SPD accordingly and distribute the revised SPD within six months of the termination.

38. The exemption, if granted, expressly requires Meta and its affiliates to maintain all records necessary to demonstrate compliance with all of the conditions of the exemption for a period of six years from the date of any prohibited transaction for which the exemption provides relief and to produce such records within 30 days in the event that the Department makes a request.

The Department's Findings

39. The Department has the authority under ERISA section 408(a) of ERISA to grant exemptions from the prohibition transaction provisions of ERISA section 406 if the Department finds that the transaction is in the interest and protective of the rights of the affected plan and its participants and beneficiaries and is administratively feasible.²¹ The Department's findings required under ERISA section 408(a) are discussed below.

40. *The Proposed Exemption is "Protective of the Plan."* The Department has tentatively determined that the proposed exemption is protective of the rights of Plan participants and beneficiaries. In addition to the requirements described above, no commissions would be paid by the Plan with respect to the sale of any third-party insurance contract and/or any reinsurance contract, and Meta will only contract with insurers with a financial strength rating of "A" or better from A.M. Best Company or an equivalent rating from another rating company.

41. Under the terms of this proposed exemption, the Independent Fiduciary must review the Reinsurance Arrangement, determine and confirm the total benefit derived by Meta and related parties from the Reinsurance Arrangement, and validate that (a) for every dollar of net financial benefits that the Reinsurance Arrangement generated, the Plan, its participants and beneficiaries received at least 51 cents on the dollar, and Ekahi and related parties did not receive more than 49 cents; (b) the Reinsurance Arrangement created real and substantial additional

benefits for the Plan and its participants; and (c) the Reinsurance Arrangement did not result in an offset or reduction in participants' other benefits and was otherwise consistent with ERISA.

42. Ms. Ely has confirmed that: (i) she has the requisite knowledge regarding the Reinsurance Arrangement and ERISA to fulfill her duties under ERISA section 404 as a prudent and independent plan fiduciary; (ii) she will monitor the Reinsurance Arrangement throughout the duration of the exemption; and (iii) the Reinsurance Arrangement is consistent with ERISA, including the prudence and loyalty provisions of ERISA section 404.

43. The proposed exemption would require the independent fiduciary, Ms. Ely, to file annual certified reports to the Department, under penalty of perjury, confirming whether all terms and conditions of the exemption have been met. She must complete each report within six months from the end of the 12-month period to which it relates (the first twelve-month period begins on the first day of the implementation of the captive reinsurance arrangement covered by the exemption) and submit it to the Department within 60 days thereafter.

44. *The Proposed Exemption is "In the Interest of the Plan."* The Department has tentatively determined that the proposed exemption would be in the interest of the Plan and its participants and beneficiaries. Among other things, the proposed exemption requires that for every dollar of net financial benefits that the Reinsurance Arrangement is expected to generate, the Plan, its participants and beneficiaries must receive at least 51 cents on the dollar, and Ekahi and related parties must not receive more than 49 cents.

45. *The Proposed Exemption is "Administratively Feasible."* The Department has tentatively determined that the proposed exemption would be administratively feasible, because the proposed reinsurance arrangement is subject to robust annual reviews by the Independent Fiduciary, Ms. Ely, or a subsequent qualified independent fiduciary, that must be submitted to the Department's Office of Exemption Determinations. The exemption also requires Meta and its subsidiaries to maintain all records necessary to demonstrate the conditions have been satisfied and provide these documents to the Department within 30 days of the Department's request.

Summary

46. Based on the conditions that are included in this proposed exemption,

the Department has tentatively determined that the relief sought by the Applicant would satisfy the statutory requirements for an individual exemption under ERISA section 408(a).

Notice to Interested Persons

Persons who may be interested in the publication of this notice in the **Federal Register** include Plan participants and beneficiaries. The Applicant will provide notification to such interested persons via U.S. Postal Service first class mail and/or in accordance with the Department's Regulations governing electronic disclosures in 29 CFR 2520.104b-1(c) within twenty-eight (28) calendar days after the publication date of the Notice in the **Federal Register**. Such mailing will contain a copy of the Notice as it appears in the **Federal Register** on the date of publication and a copy of the Supplemental Statement required, by 29 CFR 2570.43(a)(2), which will advise interested persons of their right to comment on the proposed exemption and request a hearing. The Department must receive all written comments and requests for a hearing no later than fifty-eight (58) days after the date the Notice is published in the **Federal Register**. All comments will be made available to the public.

Warning: If you submit a comment, EBSA recommends that you include your name and other contact information in the body of your comment, but DO NOT submit information that you consider to be confidential, or otherwise protected (such as Social Security number or an unlisted phone number) or confidential business information that you do not want publicly disclosed. All comments may be posted on the internet and can be retrieved by most internet search engines.

General Information

The attention of interested persons is directed to the following:

(1) The fact that a transaction is the subject of an exemption under ERISA section 408(a) does not relieve a fiduciary or other party in interest from certain other provisions of ERISA, including any prohibited transaction provisions to which the exemption does not apply and the general fiduciary responsibility provisions of ERISA section 404, which, among other things, require a fiduciary to discharge his duties respecting the plan solely in the interest of the participants and beneficiaries of the plan and in a prudent fashion in accordance with ERISA section 404(a)(1)(B);

(2) Before an exemption may be granted under ERISA section 408(a), the

²¹ Specifically, ERISA section 408(a) provides that the Department may not grant an exemption unless it finds that the exemption is administratively feasible, in the interests of the plan and its participants and beneficiaries, and protective of the rights of the plan participants and beneficiaries.

Department must find that the exemption is administratively feasible, in the interests of the plan and of its participants and beneficiaries, and protective of the rights of participants and beneficiaries of the plan;

(3) The proposed exemption, if granted, will be supplemental to, and not in derogation of, any other provisions of ERISA, including statutory or administrative exemptions and transitional rules. Furthermore, the fact that a transaction is subject to an administrative or statutory exemption is not dispositive of whether the transaction is in fact a prohibited transaction; and

(4) The proposed exemption, if granted, will be subject to the express condition that the material facts and representations contained in the application are true and complete, and that the application accurately describes all material terms of the transaction which is the subject of the exemption.

Proposed Exemption

The Department is considering granting this proposed exemption under the authority of ERISA section 408(a), and in accordance with the procedures set forth in 29 CFR part 2570, subpart B (75 FR 66637, 66644, October 27, 2011)).

Section I. Definitions

(a) An “affiliate” of Meta, Honu, or Ekahi includes: (1) Any person or entity who controls Meta, Honu, or Ekahi or is controlled by or under common control with Meta, Honu, or Ekahi; (2) Any officer, director, employee, relative, or partner with respect to Meta, Honu, or Ekahi; and (3) Any corporation or partnership of which the person in (2) of this paragraph is an officer, director, partner, or employee.

(b) “Benefit Enhancements” means the following Plan benefit enhancements, unless adjusted consistent with the terms of the exemption:

(1) *Removal of Age Reduction Clause Enhancement.* At no additional cost to the Plan’s participants and beneficiaries, the Plan’s age reduction clause applicable to the Plan’s basic life insurance benefits, optional life insurance coverages and accidental death and dismemberment (AD&D) benefits will be removed. Under this enhancement, the insured will no longer incur a reduction in the amount of coverage from 100% to 65% at the age of 65; and no longer incur a reduction in the amount of coverage from 65% to 50% at the age of 70.

(2) *Enhanced Basic Life Insurance Benefit.* The Enhanced Basic Life

Insurance Benefit would increase the accelerated insurance payout for qualified terminal illnesses from 90% to 100% of the policy’s coverage amount (up to \$1,000,000) before the insured’s death. Additionally, the participant or beneficiary would receive an increased payout if the accelerated payment is less than \$1,000,000 and he or she is also enrolled in supplemental life insurance.

(3) *Enhanced Basic Life Insurance Benefit Portability.* The enhancement would add a portability option for its basic life insurance benefit which allows participants to obtain another Basic Life Insurance Benefit upon termination of coverage under the Plan. This benefit will be provided without regard to participants’ medical condition, although they may be required to pay higher rates for the insurance.

(4) *The Enhanced Accidental Death & Dismemberment Benefits (AD&D Benefits).* (i) The first Enhanced AD&D Benefit would add a portability enhancement to the Plan that will allow participants to pay for a new AD&D policy after their employment with Meta ends. The insurance would be issued without regard to participants’ medical conditions but may be offered at higher rates.

(ii) The second Enhanced AD&D Benefit would add a new waiver of premium enhancement allowing qualified disabled former employees a waiver of premiums and a continuation of death benefit coverage for their AD&D coverage while such benefit is extended as a result of their total disability (as defined in the Plan).

(iii) The third Enhanced AD&D Benefit provides for bereavement and trauma counseling sessions after a participant experiences a qualifying loss. The benefit would pay 100% of the cost up to \$150 per session for 52 counseling sessions that are held within a year of the loss.

(iv) The fourth Enhanced AD&D Benefit would pay a qualifying dependent’s tuition upon the death of a participant. This enhancement will require the Plan to pay an annual amount equal to the lesser of (1) the actual annual amount of the dependent child’s tuition (exclusive of room and board); (2) 10% of the participant’s AD&D death benefit; or (3) \$25,000. This benefit is payable annually for up to 4 consecutive years, but not beyond the date the child reaches age 26.

(v) The fifth Enhanced AD&D Benefit would add the benefit of paying for the childcare expenses of a deceased participant. If the exemption is granted, the Plan will pay an annual amount equal to the lesser of: (1) the actual cost

charged by the relevant Child Care Center per year; (2) 10% of the deceased participant’s AD&D death benefit; or (3) \$24,000. The benefit is payable annually for a maximum of consecutive years, but not beyond the date the child reaches age 13. If there is no dependent child eligible for this benefit, a benefit of \$1,000 would be paid.

(vi) The sixth Enhanced AD&D Benefit will pay for qualifying deceased persons’ funeral expenses in an amount equal to the lesser of: (1) the amount of the Funeral Expenses, (2) 10% of the amount of the deceased participant’s AD&D death benefit, or (3) \$20,000.

(vii) The seventh Enhanced AD&D Benefit would add monthly rehabilitation payments. The Plan would make a monthly payment equal to the lesser of (1) five percent of the amount of the participant’s relevant AD&D benefit and (2) \$500 for rehabilitation expenses for a maximum of 12 consecutive months.

(viii) The eighth Enhanced AD&D Benefit will pay a \$2,000 per month supplemental monthly mortgage payment to the spouse or domestic partners of a deceased participant’s mortgage until the first of the following occurs: (1) the spouse or domestic partner dies; (2) the mortgage is paid in full; (3) the house subject to the mortgage is sold; or (4) the benefit has been paid for 12 consecutive months.

(5) *Enhanced Survivor Income Benefit.* The monthly survivor income benefit offered to an employee’s spouse or domestic partner will be increased to 60% of the employee’s monthly earnings up to a monthly maximum of \$15,000, from the current 50% of monthly earnings up to a maximum of \$12,500 per month.

(6) *Benefits Education Program.* The Plan will offer a new Benefits Education Program that will include the following components:

- Life@Benefits service through PartnerComm, Inc.
- EstateGuidance Program.
- ComPsych Final Arrangements Service
- GuidanceResources Program.
- International Medical Group Travel Assistance Services (IMG Travel).

(c) The term “control” means the power to exercise a controlling influence over the management or policies of a person other than an individual.

(d) “Ekahi” means Ekahi Insurance Company, LLC, a wholly-owned subsidiary of Meta certified by the State of Hawaii to operate as a captive insurance cell company sponsored by Honu.

(e) “Fronting Insurer” means Prudential or the successor third-party insurance company that insures certain of the Plan’s risks, and then enters into a reinsurance agreement with Ekahi for such risks.

(f) “Honu” means Honu Insurance Company, LLC, a wholly-owned subsidiary of Meta certified by the State of Hawaii to transact business as a sponsor captive insurance company.

(g) “Independent Fiduciary” means Ms. Ely of Milliman or a successor Independent Fiduciary that is appointed to represent the interests of the Plan with respect to the subject transaction, provided that such person:

(1) Is not Meta or an affiliate of Meta, Honu or Ekahi and does not hold an ownership interest in Meta, Honu, Ekahi or their affiliates;

(2) Was not a fiduciary with respect to the Plan before its appointment to serve as the Independent Fiduciary;

(3) Has acknowledged in writing that:

(i) It is a fiduciary and has agreed not to participate in any decision with respect to any transaction in which it has an interest that might affect its best judgment as a fiduciary; and

(ii) Has appropriate technical training or experience to perform the services contemplated by the exemption;

(4) For purposes of this definition, no organization or individual may serve as Independent Fiduciary for any fiscal year if the gross income received by such organization or individual from Meta, Honu, or Ekahi, or their affiliates for that fiscal year exceeds two percent of such organization’s or individual’s gross income from all sources for the prior fiscal year. This provision also applies to a partnership or corporation of which such organization or individual is an officer, director, or 10 percent or more partner or shareholder and includes as gross income amounts received as compensation for services provided as an independent fiduciary under any prohibited transaction exemption granted by the Department;

(5) No organization or individual that is an Independent Fiduciary and no partnership or corporation of which such organization or individual is an officer, director or ten percent or more partner or shareholder may acquire any property from, sell any property to, or borrow any funds from Meta, Honu, or Ekahi, or their affiliates while the individual serves as an Independent Fiduciary. This prohibition must continue for a period of six months after either (1) the party ceases to be an Independent Fiduciary or (2) the Independent Fiduciary negotiates on behalf of the Plan during the period that

such organization or the individual serves as an Independent Fiduciary; and

(6) In the event a successor Independent Fiduciary is appointed to represent the interests of the Plan with respect to the subject transaction, no time should elapse between the resignation or termination of the former Independent Fiduciary and the appointment of the successor Independent Fiduciary.

(h) “Meta” means Meta Platforms, Inc.

(i) “Plan” means the Meta Platforms Inc. Health and Welfare Benefit Plan.

(j) “Prudential” means the Prudential Life Insurance Company of America.

Section II. Covered Transactions

The exemption would provide relief from the prohibited transactions provisions of ERISA sections 406(a)(1)(D), and 406(b)(1) and (b)(3), with respect to: (1) the reinsurance of risks; and (2) the receipt of premiums, by Ekahi, in connection with insurance contracts sold by Prudential (or any successor Fronting Insurer) to provide basic life insurance benefits, AD&D benefits, and survivor income benefits to Plan participants and beneficiaries. In order to receive such relief, the conditions in Section III must be met in conformance with the definitions set forth in Section I.

Section III. Conditions

(a) Meta must improve the Plan with Benefit Enhancements that are funded solely by Meta in accordance with (1) through (5) below;

(1) For every dollar of net financial benefits that the Reinsurance Arrangement is expected to generate, the Plan, its participants and beneficiaries must receive at least 51 cents on the dollar and, Ekahi and related parties must not receive more than 49 cents, as may be adjusted under condition (p) below (the Primary Benefit Test);

(2) The Independent Fiduciary must determine whether the Primary Benefit Test has been met with respect to each successive five-year period covered by the exemption. The Independent Fiduciary must report its determinations as part of the Independent Fiduciary’s next annual report. For purposes of the initial five-year period, the Independent Fiduciary may test only the costs and benefits that inure to Meta and/or parties directly or indirectly related to Meta during years two through five of the initial five-year period;

(3)(A) If the Primary Benefit Test has not been met with respect to a five-year period, Meta must reduce the participants’ portion of the Plan’s premium in the next consecutive year

by an amount that is at least equal to the amount by which the prior five-year Primary Benefit Test was not met, plus an additional payment of interest on the shortfall, at the Code’s federal underpayment rate set forth in Code section 6621(b) (such amount, as increased by interest, is referred to as the “Shortfall”). The reduction in participants’ premiums should be allocated equally across all Plan participant contributions toward premiums for Plan benefits, regardless of whether the respective benefits were reinsured by Ekahi. The premium reduction must be fully implemented during the course of the year following the last year of the five-year period to which it relates, and be verified by the Independent Fiduciary;

(B) if the Plan’s total annual participant premiums for all Plan benefits are less than the Shortfall in the year following the aforementioned five-year period, Meta shall eliminate all annual participant contribution premiums toward all Plan benefits to cover as much of the Shortfall as possible. Meta shall then make up the remaining Shortfall by increasing the value of enhanced benefits to all participants in a monetary value equal to the remaining Shortfall. These additional enhanced benefits must be valued by an actuary and approved in writing by the Independent Fiduciary;

(4) If the captive reinsurance arrangement is terminated, the Independent Fiduciary must determine whether the Primary Benefit Test was met during the period of time between (A) the end of the last five-year period for which a Primary Benefit Test determination was made by the Independent Fiduciary, or if no Primary Benefit Test determination has yet been made, the beginning of the captive reinsurance arrangement, and (B) the termination date of the captive reinsurance arrangement (the Final Term). If the Primary Benefit Test was not met during the Final Term, Meta must address the Shortfall in accordance with Section III(a)(3)(A)–(B) above. Relief in the exemption does not extend to prohibited transactions described in the exemption that occur during the Final Term unless the requirements in Section III(a)(1) through (3) have been met with respect to such Final Term. Furthermore, the Independent Fiduciary must ensure Meta’s obligations under Section III(a)(3)(A)–(B) were properly implemented to address the Shortfall, notwithstanding that the captive reinsurance arrangement has already been terminated; and

(5) If the Shortfall is not corrected pursuant to the terms of this exemption, then this exemption's relief will lapse as of the first day of the five-year period to which the Shortfall relates.

(b) The Plan must pay no commissions with respect to its purchase of insurance contracts to provide the benefits which are reinsured under the exemption, or with respect to the reinsurance of such contracts;

(c) In each year of coverage provided by a Fronting Insurer, the formulae used by the Fronting Insurer to calculate premiums will be similar to formulae used by other insurers providing comparable life insurance coverage under similar programs. Furthermore, the premium charges calculated in accordance with the formulae will be reasonable and comparable to the premiums charged by the Fronting Insurer and its competitors with the same or a better financial strength rating providing the same coverage under comparable programs that are not captive reinsured;

(d) No amount of Ekahi's reserves that are attributable to premiums paid for Plan benefits may be transferred to Meta or a related party;

(e) Ekahi, the captive reinsurer, must:

(1) Be a party in interest with respect to the Plan based on its affiliation with Meta that is described in ERISA section 3(14)(G);

(2) Be licensed to sell insurance or conduct reinsurance operations, or be a cell corporation that is legally allowed to rely on the license of a sponsoring captive insurance company, in at least one state, as such term is defined in ERISA section 3(10);

(3) Have obtained a Certificate of Authority from the state of Hawaii authorizing Ekahi to transact the business of a captive insurance company in Hawaii or legally rely on a sponsoring captive insurance company's valid Certificate of Authority from the state of Hawaii authorizing Ekahi to transact the business of a captive insurance company in Hawaii. Such certificate must not have been revoked or suspended;

(4)(A) Undergo and pass a financial examination (within the meaning of the law of its domiciliary state, Hawaii) by the Insurance Division of Hawaii within five years of the year in which the reinsurance transaction occurred; and

(B) Have undergone, and continue to undergo, an examination by an independent certified public accountant for its last completed taxable year immediately before the taxable year of the Reinsurance Arrangement covered by the exemption; and

(5) Be licensed to conduct reinsurance transactions or legally rely on a sponsoring captive insurance company's license to conduct reinsurance transactions by a state whose law requires that an actuarial review of reserves be conducted annually by an independent firm of actuaries and reported to the appropriate regulatory authority;

(f) The Plan retained and will continue to retain an independent, qualified fiduciary or successor to such fiduciary, as defined in Section I(d), (the Independent Fiduciary) to analyze the transactions covered by the exemption, and render an opinion that the requirements of the exemption have been satisfied;

(g) The Independent Fiduciary must:

(1) In compliance with the fiduciary obligations of prudence and loyalty under ERISA Sections 404(a)(1)(A) and (B), review the terms of the exemption, engage in a prudent and loyal analysis of the covered transactions, and verify that based on its review of all relevant documents and evidence, it has concluded that all of the exemption's terms and conditions have been met (or, due to timing requirements, can reasonably be expected to be met consistent with the terms of this proposed exemption). This conclusion must be documented in a written report submitted to the Department's Office of Exemption Determinations at least 30 days before the Plan engages in a transaction covered by the exemption. The report must include copies of each document relied on by the Independent Fiduciary and discuss the bases for its conclusion;

(2) Monitor, enforce and ensure compliance with all conditions of the exemption including all conditions and obligations imposed on any party dealing with the Plan, throughout the period during which Ekahi's assets are directly or indirectly used in connection with a transaction covered by the exemption;

(3) Report any instance of non-compliance immediately to the Department's Office of Exemption Determinations;

(4) Monitor the transactions described in the exemption on a continuing basis, to ensure the transactions remain in the interest of the Plan;

(5) Take all appropriate actions to safeguard the interests of the Plan, its participants and beneficiaries;

(6) Review all contracts pertaining to the Reinsurance Arrangement, and any renewals of such contracts, to determine whether the requirements of this proposed exemption and the terms of

Benefit Enhancements continue to be satisfied;

(7) Determine that the Reinsurance Arrangement is in no way detrimental to the Plan and its participants and beneficiaries;

(8) Provide an annual report to the Department, under penalty of perjury, certifying that each term and condition of the exemption is satisfied and setting forth the bases for the certification. Each report must be completed within six months after the end of the twelve-month period to which it relates (the first twelve-month period begins on the first day of the implementation of the captive reinsurance arrangement covered by the exemption) and submitted to the Department within 60 days thereafter. The relevant report must include all of the objective data necessary to demonstrate that the Primary Benefit Test has been met; and

(9) Confirm in its annual report (and describe the steps taken to confirm) that Meta has not reduced or offset any participant benefits in relation to its implementation and maintenance of the captive reinsurance arrangement as required by paragraph (k) below;

(h) The Independent Fiduciary must not (1) enter into any agreement or instrument that violates ERISA section 410 or section 2509.75-4 of the Department's regulations, or (2) enter into any agreement, arrangement, or understanding that includes any provision that provides for the direct, or indirect, indemnification or reimbursement of the Independent Fiduciary by the Plan or other party for any failure to adhere to its contractual obligations or to state or Federal laws applicable to the Independent Fiduciary's work, or waives any rights, claims, or remedies of the Plan under ERISA, state, or Federal law against the Independent Fiduciary with respect to the transaction(s) that are the subject of the exemption;

(i) Neither Meta nor any affiliate may use participant-related data or information generated by, or derived from, the Reinsurance Arrangement in a manner that benefits Meta or any affiliated entity;

(j) All the facts and representations set forth in the Summary of Facts and Representation must be true and accurate;

(k) Meta will not offset or reduce any benefits provided to Plan participants and beneficiaries in connection with its implementation of the captive reinsurance arrangement in order to defray the costs, expenses, or obligations of complying with the exemption;

(l) The Plan will only contract with a Fronting Insurer that is unrelated to Meta or any of its affiliates, and that has a financial strength rating of “A” or better from A.M. Best. For purposes of this provision, the term “unrelated” means that the Fronting Insurer is not owned or controlled by Meta or any of its affiliates in whole or in part;

(m) The Plan pays no more than adequate consideration with respect to insurance that is part of the captive reinsurance arrangement covered by the proposed exemption;

(n) In the event a successor Independent Fiduciary is appointed to represent the interests of the Plan with respect to the subject transaction, no time shall elapse between the resignation or termination of the former Independent Fiduciary and the appointment of the successor Independent Fiduciary;

(o) All expenses associated with the exemption and the exemption application, including any payment to the Independent Fiduciary, must be paid by Meta and not the Plan;

(p) Meta may adjust the Benefit Enhancements to the Plan at any time, if such adjustment is approved in advance by the Independent Fiduciary after the Independent Fiduciary first determines that each adjusted Benefit Enhancement is in the interest of the Plan’s participants and beneficiaries and available to them on an equal basis. The cost incurred by Meta to fund the Benefit Enhancement may be used to determine whether the Primary Benefit Test has been met, but may not be considered to address a Shortfall if the Primary Benefit Test has not been met with respect to a five-year period, unless in accordance with Section III(a)(3)(A)-(B). A complete description of any new Benefit Enhancements and the Independent Fiduciary’s rationale and determinations regarding such enhancements must be included in the next Independent Fiduciary report submitted to the Department;

(q) The Reinsurance Arrangement between Ekahi and Prudential or any successor Fronting Insurer must be indemnity insurance only. The arrangement must not relieve a Fronting Insurer from any responsibility or liability to the Plan, including liability that would result if Ekahi fails to meet any of its contractual obligations to Prudential or any successor Fronting Insurer under the Reinsurance Arrangement. Further, the executed reinsurance contract between the Fronting Insurer and Ekahi will expressly state (by rider, addendum, amendment, etc.) that, in the event that Ekahi is insolvent, unable or unwilling

to pay any claims, or otherwise prevented from paying any claims, the Fronting Insurer remains solely obligated to pay any claim properly incurred by the Plan and its participants and beneficiaries;

(r) If the exemption is granted, the Plan document and Summary Plan Description (SPD) will be revised within 90 days after the final exemption is published in the **Federal Register** to include a summary of the reinsurance arrangement, an explanation why the arrangement constitutes a transaction prohibited by ERISA (including an explanation of why Ekahi is a party in interest). The revision must also state that the Plan is currently relying on an individual prohibited transaction exemption granted by the U.S. Department of Labor. The revision to the Plan and SPD must be conspicuously displayed and not contained in a footnote. The Plan Administrator must distribute the updated SPD to all Plan participants within six months of the publishing of the granted exemption.

(s) If the Reinsurance Arrangement is terminated the Plan Administrator will revise and update the SPD accordingly. The Plan Administrator will then distribute the updated SPD to all Plan participants within six months of the termination of the Reinsurance Arrangement.

(t) Meta, and its affiliates, must maintain all the records necessary to demonstrate the conditions of the exemption have been met with respect to all the prohibited transactions described in this exemption, for a period of six years from the date of any prohibited transaction for which the exemption provides relief. Meta must provide these records to the Department within 30 days from the date the Department requests these records.

Applicability Date: This exemption will be in effect for the period beginning on the date of publication in the **Federal Register**.

Signed at Washington, DC, this 15th day of November 2024.

George Christopher Cosby,

*Director, Office of Exemption Determinations,
Employee Benefits Security Administration,
U.S. Department of Labor.*

[FR Doc. 2024–27260 Filed 11–20–24; 8:45 am]

BILLING CODE 4510–29–P

DEPARTMENT OF LABOR

Agency Information Collection Activities; Submission for OMB Review; Comment Request; Definition and Requirements for a Nationally Recognized Testing Laboratory

ACTION: Notice of availability; request for comments.

SUMMARY: The Department of Labor (DOL) is submitting this Occupational Safety & Health Administration (OSHA)-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 the agency receives on or before December 23, 2024.

ADDRESSES: Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to www.reginfo.gov/public/do/PRAMain. Find this particular information collection by selecting “Currently under 30-day Review—Open for Public Comments” or by using the search function.

FOR FURTHER INFORMATION CONTACT: Nicole Bouchet by telephone at 202–693–0213, or by email at DOL_PRA_PUBLIC@dol.gov.

SUPPLEMENTARY INFORMATION: A number of standards issued by the OSHA contain requirements for equipment, products, or materials. These standards often specify that employers use only equipment, products, or material tested or approved by a Nationally Recognized Testing Laboratory. This requirement ensures that employers use safe equipment, products, or materials in complying with the standards. Accordingly, OSHA promulgated the regulation 29 CFR 1910.7, “Definition and Requirements for a Nationally Recognized Testing Laboratory.” The Regulation specifies procedures that organizations must follow to apply for, and to maintain, OSHA’s recognition to test and certify equipment, products, or material for this purpose. For additional substantive information about this ICR, see the related notice published in the **Federal Register** on August 1, 2024 (89 FR 62803).

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) 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; (3) ways to enhance the quality, utility and clarity of the information collection; and (4) ways to minimize the burden of the collection of information on those who are to respond, including the use of automated collection techniques or other forms of information technology.

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-OSHA.

Title of Collection: Definition and Requirements for a Nationally Recognized Testing Laboratory.

OMB Control Number: 1218-0147.

Affected Public: Private Sector—Businesses or other for-profits.

Total Estimated Number of Respondents: 24.

Total Estimated Number of Responses: 148.

Total Estimated Annual Time Burden: 1,588 hours.

Total Estimated Annual Other Costs Burden: \$767,736.

(Authority: 44 U.S.C. 3507(a)(1)(D))

Nicole Bouchet,

Senior Paperwork Reduction Act Analyst.

[FR Doc. 2024-27296 Filed 11-20-24; 8:45 am]

BILLING CODE 4510-26-P

DEPARTMENT OF LABOR

Agency Information Collection Activities; Submission for OMB Review; Comment Request; Statement of Recovery Forms

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 the agency receives on or before December 23, 2024.

ADDRESSES: Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to www.reginfo.gov/public/do/PRAMain. Find this 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) 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; (3) ways to enhance the quality, utility and clarity of the information collection; and (4) ways to minimize the burden of the collection of information on those who are to respond, including the use of automated collection techniques or other forms of information technology.

FOR FURTHER INFORMATION CONTACT: Nicole Bouchet by telephone at 202-693-0213, or by email at DOL_PRA_PUBLIC@dol.gov.

SUPPLEMENTARY INFORMATION: These forms are used to obtain information about amounts received as the result of final judgments in litigation, or a settlement of the litigation, brought against a third party who is liable for damages due to a Federal employee comprehensive work-related injury. For additional substantive information about this ICR, see the related notice published in the **Federal Register** on September 5, 2024 (89 FR 72430).

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: Statement of Recovery Forms.

OMB Control Number: 1240-0001.

Affected Public: Individuals or Households; Private Sector—Businesses or other for-profits.

Total Estimated Number of Respondents: 1,392.

Total Estimated Number of Responses: 1,392.

Total Estimated Annual Time Burden: 640 hours.

Total Estimated Annual Other Costs Burden: \$25.00.

(Authority: 44 U.S.C. 3507(a)(1)(D))

Nicole Bouchet,

Senior PRA Analyst.

[FR Doc. 2024-27259 Filed 11-20-24; 8:45 am]

BILLING CODE 4510-26-P

DEPARTMENT OF LABOR

Occupational Safety and Health Administration

[Docket No. OSHA-2022-0011]

Maritime Advisory Committee on Occupational Safety and Health (MACOSH); Charter Renewal

AGENCY: Occupational Safety and Health Administration (OSHA), Labor.

ACTION: Renewal of the MACOSH charter.

SUMMARY: The Acting Secretary of Labor (Secretary) has renewed the charter for MACOSH.

FOR FURTHER INFORMATION CONTACT:

For press inquiries: Mr. Frank Meilinger, Director, OSHA Office of Communications, U.S. Department of Labor; telephone: (202) 693-1999; email: meilinger.francis2@dol.gov.

For general information: Ms. Amy Wangdahl, Director, Office of Maritime and Agriculture, Directorate of Standards and Guidance, OSHA, U.S. Department of Labor; telephone: (202) 693-2066; email: wangdahl.amy@dol.gov.

SUPPLEMENTARY INFORMATION: The Acting Secretary has renewed the MACOSH charter. The charter will expire two years from its filing date.

MACOSH is established in section 7(d) of the Occupational Safety and Health Act of 1970 (OSH Act) (29 U.S.C. 651, 656) to advise, the Secretary of Labor through the Assistant Secretary of Labor for Occupational Safety and Health (Assistant Secretary) in order to inform the administration of the OSH Act with respect to the maritime industry. The Assistant Secretary may seek the advice of this Committee on activities related to priorities set by the Agency, including: worker training, education, and assistance; setting and enforcing standards; and assuring safe and healthful working conditions in the maritime industry.

MACOSH is a non-discretionary advisory committee of indefinite duration, operating in accordance with the Federal Advisory Committee Act (FACA) (5 U.S.C. 1001, *et seq.*), its implementing regulations (41 CFR part 102–3), chapter 1–900 of the Department of Labor Manual Series (March 25, 2022) and OSHA's regulations on Advisory Committees (29 CFR part 1912). Pursuant to FACA (5 U.S.C. 1013(b)(2)), the MACOSH charter must be renewed every two years.

The new MACOSH charter is available to read or download at <https://www.regulations.gov> (Docket No. OSHA–2022–0011), the federal rulemaking portal. The charter also is available on the MACOSH page on OSHA's web page at <https://www.osha.gov> and at the OSHA Docket Office, N–3653, U.S. Department of Labor, 200 Constitution Avenue NW, Washington, DC 20210; telephone (202) 693–2350. In addition, the charter is available for viewing or download at the Federal Advisory Committee Act Database at <https://www.facadatabase.gov>.

Authority and Signature

James S. Frederick, Deputy Assistant Secretary of Labor for Occupational Safety and Health, authorized the preparation of this notice under the authority granted by 29 U.S.C. 656; 5 U.S.C. 1001 *et seq.*; 29 CFR part 1912; 41 CFR 102–3; and Secretary of Labor's Order No. 8–2020 (85 FR 58393, Sept. 18, 2020).

Signed at Washington, DC, on November 14, 2024.

James S. Frederick,

Deputy Assistant Secretary of Labor for Occupational Safety and Health.

[FR Doc. 2024–27261 Filed 11–20–24; 8:45 am]

BILLING CODE 4510–26–P

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

National Endowment for the Humanities

Meeting of Humanities Panel

AGENCY: National Endowment for the Humanities; National Foundation on the Arts and the Humanities.

ACTION: Notice of meeting.

SUMMARY: The National Endowment for the Humanities (NEH) will hold seventeen meetings, by video conference, of the Humanities Panel, a federal advisory committee, during December 2024. The purpose of the meetings is for panel review, discussion, evaluation, and recommendation of applications for financial assistance under the National Foundation on the Arts and the Humanities Act of 1965.

DATES: See **SUPPLEMENTARY INFORMATION** for meeting dates. The meetings will open at 8:30 a.m. and will adjourn by 5:00 p.m. on the dates specified below.

FOR FURTHER INFORMATION CONTACT:

Elizabeth Voyatzis, Committee Management Officer, 400 7th Street SW, Room 4060, Washington, DC 20506; (202) 606–8322; evoyatzis@neh.gov.

SUPPLEMENTARY INFORMATION: Pursuant to section 10(a)(2) of the Federal Advisory Committee Act (5 U.S.C. 10), notice is hereby given of the following meetings:

1. Date: December 2, 2024

This video meeting will discuss applications on the topic of New World Archaeology, for the Archaeological and Ethnographic Field Research grant program, submitted to the Division of Research Programs.

2. Date: December 3, 2024

This video meeting will discuss applications on the topic of Old World Archaeology, for the Archaeological and Ethnographic Field Research grant program, submitted to the Division of Research Programs.

3. Date: December 3, 2024

This video meeting will discuss applications on the topics of History of Science and Technology, for the Humanities Collections and Reference Resources grant program, submitted to the Division of Preservation and Access.

4. Date: December 3, 2024

This video meeting will discuss applications on the topics of Science and Health, for Dangers and Opportunities of Technology: Perspectives from the Humanities

(Collaborative) grant program, submitted to the Office of Digital Humanities.

5. Date: December 4, 2024

This video meeting will discuss applications on the topics of Social Media, internet, and Society, for the Dangers and Opportunities of Technology: Perspectives from the Humanities (Collaborative) grant program, submitted to the Office of Digital Humanities.

6. Date: December 5, 2024

This video meeting will discuss applications on the topic of History of Technology, for the Dangers and Opportunities of Technology: Perspectives from the Humanities (Collaborative) grant program, submitted to the Office of Digital Humanities.

7. Date: December 5, 2024

This video meeting will discuss applications on the topic of African American Studies, for the Humanities Collections and Reference Resources grant program, submitted to the Division of Preservation and Access.

8. Date: December 6, 2024

This video meeting will discuss applications on the topics of History and Social Sciences, for the Dangers and Opportunities of Technology: Perspectives from the Humanities (Collaborative) grant program, submitted to the Office of Digital Humanities.

9. Date: December 6, 2024

This video meeting will discuss applications on the topics of Tech and Education, for the Dangers and Opportunities of Technology: Perspectives from the Humanities (Collaborative) grant program, submitted to the Office of Digital Humanities.

10. Date: December 6, 2024

This video meeting will discuss applications on the topic of Museums, for the Climate Smart Humanities Organizations grant program, submitted to the Office of Challenge Programs.

11. Date: December 6, 2024

This video meeting will discuss applications for the Dialogues on the Experience of War grant program, submitted to the Division of Education Programs.

12. Date: December 9, 2024

This video meeting will discuss applications on the topic of DLI–DEL Senior Research Grants, for the Documenting Endangered Languages Preservation grant program, submitted to the Division of Preservation and Access.

13. Date: December 10, 2024

This video meeting will discuss applications for the Dialogues on the Experience of War grant program, submitted to the Division of Education Programs.

14. Date: December 10, 2024

This video meeting will discuss applications on the topics of Cultural Organizations and Historic Sites, for the Climate Smart Humanities Organization grant program, submitted to the Office of Challenge Programs.

15. Date: December 10, 2024

This video meeting will discuss applications on the topics of Critical Data and Cultural Studies, for the Dangers and Opportunities of Technology: Perspectives from the Humanities (Collaborative) grant program, submitted to the Office of Digital Humanities.

16. Date: December 11, 2024

This video meeting will discuss applications for the Fellowship Programs at Independent Research Institutions grant program, submitted to the Division of Research Programs.

17. Date: December 13, 2024

This video meeting will discuss applications for the Fellowship Programs at Independent Research Institutions grant program, submitted to the Division of Research Programs.

Because these meetings will include review of personal and/or proprietary financial and commercial information given in confidence to the agency by grant applicants, the meetings will be closed to the public pursuant to sections 552b(c)(4) and 552b(c)(6) of Title 5, U.S.C., as amended. I have made this determination pursuant to the authority granted me by the Chair's Delegation of Authority to Close Advisory Committee Meetings dated April 15, 2016.

Dated: November 15, 2024.

Jessica Graves,

Paralegal Specialist, National Endowment for the Humanities.

[FR Doc. 2024-27230 Filed 11-20-24; 8:45 am]

BILLING CODE 7536-01-P

NATIONAL SCIENCE FOUNDATION

**Agency Information Collection
Activities: Comment Request: Survey
of Earned Doctorates**

AGENCY: National Center for Science and Engineering Statistics, National Science Foundation.

ACTION: Notice.

SUMMARY: The National Science Foundation (NSF) is announcing plans to renew this collection in accordance with the requirements of the Paperwork Reduction Act of 1995, we are providing opportunity for public comment on this action. After obtaining and considering public comments, NSF will prepare the submission requesting OMB clearance of this collection for three years.

DATES: Written comments on this notice must be received by January 21, 2025 to be assured consideration. Comments received after that date will be considered to the extent practicable. Send comments to the address below.

FOR FURTHER INFORMATION CONTACT: Suzanne H. Plimpton, Reports Clearance Officer, National Science Foundation, 2415 Eisenhower Avenue, Suite E6400, Alexandria, Virginia 22314; telephone (703) 292-7556; or send email to splimpto@nsf.gov. Individuals who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1-800-877-8339, which is accessible 24 hours a day, 7 days a week, 365 days a year (including Federal holidays).

SUPPLEMENTARY INFORMATION:

Title of Collection: Survey of Earned Doctorates.

OMB Control Number: 3145-0019.

Expiration Date of Current Approval: May 31, 2026.

Type of Request: Intent to seek approval to extend an information collection for three years.

Abstract: Established within the NSF by the America COMPETES Reauthorization Act of 2010 section 505, codified in the NSF Act of 1950, as amended, the National Center for Science and Engineering Statistics (NCSES) serves as a central Federal clearinghouse for the collection, interpretation, analysis, and dissemination of objective data on science, engineering, technology, and research and development for use by practitioners, researchers, policymakers, and the public.

The Survey of Earned Doctorates (SED) is part of NCSES' survey system that collects data on individuals to provide information on science and engineering education and careers in the United States. The SED has been conducted annually since 1958 and is jointly sponsored by four Federal agencies (NSF/NCSES, National Institutes of Health, U.S. Department of Education/National Center for Education Statistics, and National Endowment for the Humanities) to avoid duplication of effort in collecting such data. It is an accurate, timely source of information on one of our

Nation's most important resources—highly educated individuals. This request to extend the information collection for three years is to cover the 2026 and 2027 SED survey cycles.

Data are obtained via Web survey from each person earning a research doctorate at the time they receive the degree. Data are collected on their field of specialty, educational background, sources of support in graduate school, debt level, postgraduation plans, and demographic characteristics. NCSES publishes statistics from the survey in several reports. The survey will be collected in conformance with the Privacy Act of 1974. Responses from individuals are voluntary. NCSES will ensure that all individually identifiable information collected will be kept strictly confidential and will be used only for research or statistical purposes.

Use of the Information: The Federal Government, universities, researchers, policy makers, and others use the information extensively. Results from the SED are used to assess characteristics of the doctorate population and trends in doctoral education and degrees. Data from the survey are published annually on the NCSES website in a publication series reporting on all fields of study, titled *Doctorate Recipients from U.S. Universities* (<https://www.nsf.gov/statistics/doctorates>). Information from the SED is also included in other series available online: *Science and Engineering Indicators* (<https://nces.nsf.gov/indicators>); and *Women, Minorities, and Persons with Disabilities in Science and Engineering* (<https://www.nsf.gov/statistics/women>). In addition, access to tabular data from selected variables is available through the NCSES online data tool (<https://ncesdata.nsf.gov/builder/sed>) and the SED Restricted Data System (<https://ncesdata.nsf.gov/rdas>).

Expected Respondents: The SED is a census of all individuals receiving a research doctorate from an accredited U.S. academic institution in the academic year beginning 1 July and ending 30 June of the subsequent year. As such, the population for the 2026 SED consists of all individuals receiving a research doctorate in the 12-month period beginning 1 July 2025 and ending 30 June 2026. Likewise, the population for the 2027 SED consists of all individuals receiving a research doctorate in the 12-month period beginning 1 July 2026 and ending 30 June 2027. A research doctorate is a doctoral degree that (1) requires completion of an original intellectual contribution in the form of a dissertation or an equivalent

culminating project (e.g., musical composition) and (2) is not primarily intended as a degree for the practice of a profession. The most common research doctorate degree is the Ph.D. Recipients of professional doctoral degrees, such as MD, DDS, JD, DPharm, and PsyD, are not included in the SED. The 2026 and 2027 SED are expected to include about 630 separately reporting schools with eligible research doctoral programs from about 460 doctorate-granting institutions. Based on the historical trend and the disruptive impacts of the COVID 19 pandemic that suppressed the enrollment of research doctoral programs since 2020, NCSES expects a stable turnout of research doctorates for the next few years with a nominal increase from the 2025 cycle, estimating that approximately 58,000 individuals will receive a research doctorate from U.S. institutions in each of the 2026 and 2027 cycle.

In addition to the questionnaire for individuals receiving their research doctorates, the SED needs to collect administrative data such as graduation lists from participating academic institutions. The Institutional Coordinator at the institution helps distribute the Web survey link, track survey completions, and submit information to the SED survey contractor.

Estimate of Burden: An average overall response rate of 91.5% of the persons who earned a research doctorate from a U.S. institution was obtained in the academic years 2021, 2022, and 2023. Using the past response rate, the number of SED respondents is estimated to be 53,070 (58,000 doctorate recipients $\times$ 0.915 response rate) in each of the 2026 and 2027 cycles.

Based on the average Web survey completion time for the 2023 SED (19.5 minutes), NCSES estimates that, on average, 20 minutes per respondent will be required to complete the 2026 or 2027 SED Web survey. The annual respondent burden for completing the SED is therefore estimated at 17,690 hours each in 2026 and 2027 (based on 53,070 respondents $\times$ 20 minutes).

Based on focus groups conducted with Institutional Coordinators, it is estimated that the SED takes no more than 1% of the Institutional Coordinator's time over the course of a year, which computes to 20 hours per year per Institutional Coordinator (40 hours per week $\times$ 50 weeks per year $\times$.01). With about 650 schools expected to participate in the SED in 2026 and 2027, the estimated annual burden to Institutional Coordinators of administering the SED is 13,000 hours per survey cycle.

Therefore, the total information burden for the SED is estimated to be 30,690 (17,690 + 13,000) hours each in the 2026 and 2027 survey cycle. NCSES estimates that the average annual burden for the 2026 and 2027 survey cycles over the course of the three-year OMB clearance period will be no more than 20,460 hours [(30,690 hours + 30,690 hours)/3 years].

Comments: Comments are invited on (a) whether the proposed collection of information is necessary for the proper performance of the functions of the NSF, including whether the information shall have practical utility; (b) the accuracy of the NSF's estimate of the burden of the proposed collection of information; (c) ways to enhance the quality, use, and clarity of the information on respondents, including through the use of automated collection techniques or other forms of information technology; and (d) ways to 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.

Dated: November 18, 2024.

Suzanne H. Plimpton,

Reports Clearance Officer, National Science Foundation.

[FR Doc. 2024-27334 Filed 11-20-24; 8:45 am]

BILLING CODE 7555-01-P

NATIONAL SCIENCE FOUNDATION

Request for Information (RFI) on Science Research Goals/Objectives Affecting Proposed U.S. Antarctic Science Monitoring And Reliable Telecommunications (SMART) Cable and Route Design

AGENCY: U.S. National Science Foundation.

ACTION: Request for public comment; extension of comment period.

SUMMARY: On August 28, 2024, the U.S. National Science Foundation (NSF) published in the **Federal Register** a document entitled, "Request for Information (RFI) on Science Research Goals/Objectives Affecting Proposed U.S. Antarctic Science Monitoring and Reliable Telecommunications (SMART) Cable and Route Design." In response to delays to widely publicize the RFI within the science research community to enhance public response and provide sufficient time to adequately consider and respond to the RFI, NSF has determined that an extension of the comment period until Wednesday,

January 15 at 11:59 p.m. (eastern), is appropriate.

DATES: The end of the comment period for the document entitled "Request for Information" published on August 28, 2024 (89 FR 68934), is extended from November 5, 2024, until January 15, 2025.

ADDRESSES: To respond to this Request for Information, please use the official submission form available at:

• **Electronic On-line Submission:**
<https://www.surveymonkey.com/r/subseacable>.

Respondents only need to provide feedback on one or more questions of interest or relevance to them. Each question is voluntary and optional. Further announcements and information may be found on the NSF web page: https://www.nsf.gov/geo/opp/ail/subsea_cable/.

FOR FURTHER INFORMATION CONTACT: For further information, please direct questions to Patrick D. Smith through email: AntarcticSubseaCable-RFI@nsf.gov, phone: 703-292-7455, or mail: 2415 Eisenhower Avenue, Suite W7251, Alexandria, VA 22314, USA.

SUPPLEMENTARY INFORMATION:

Introduction

Over 500 subsea fiber optic telecommunications cables, including both installed and planned cables, cover nearly all ocean regions including multiple high Arctic cables. NSF is investigating the implementation of a modern subsea fiber optic telecommunications cable connecting the largest U.S. Antarctic Program (<https://www.usap.gov/>) research facility, McMurdo Station (77°50'47" S, 166°40'06" E) (<https://www.usap.gov/videoclipsandmaps/mcmwebcam.cfm?t=1>), with either New Zealand or Australia. Although the main scope of the installation is to provide advanced high-speed, low delay telecommunications, this cable will contain additional point sensors (e.g., SMART—Science Monitoring And Reliable Telecommunications) and/or distributed sensing infrastructure, enabling for the first time myriad investigations across a broad range of scientific disciplines.

The NSF Directorates for Geosciences (GEO), Computer and Information Science and Engineering (CISE), and Technology, Innovation, and Partnerships (TIP) have identified the potential subsea cable as an opportunity for transformational changes in the conduct of science, vast improvements in telecommunications capability supporting Antarctica, and innovative

public-private partnerships linking science and technology.

Additionally, the cable would have the ability to accommodate additional, multiple forms of distributed fiber optic sensing that are advancing rapidly in technology maturity (e.g., Distributed Acoustic Sensing, Distributed Temperature Sensing, State of Polarization, etc.). Preliminary cable routes have been established using standard subsea cable industry best practices that avoid areas posing high geophysical risk, as well as initial feedback from the scientific community via a virtual workshop in 2021, producing a broad corridor where opportunities exist to adjust the final route to best align with Earth science areas of high science research interest.

Further, science research supported by the cable sensors is of societal relevance on a global scale for a number of reasons, such as (1) filling significant knowledge gaps of key global ocean processes and trends for improved understanding and monitoring climate change, including ocean heat transport, CO₂ sequestration, and sea level rise; (2) regional seismic monitoring and early warning of potential tsunami seismic events; (3) global measurements of geophysical Earth structure; and (4) developing the technological capabilities to enhance other global telecommunications infrastructure for scientific research and human benefit.

Science Workshop

In late June 2021, the NSF Directorate for Geosciences, Office of Polar Programs (GEO/OPP) (<https://www.nsf.gov/div/index.jsp?div=OPP>) and Directorate for Computer Information Science and Engineering, Office of Advanced Cyberinfrastructure (CISE/OAC) (<https://new.nsf.gov/cise/oac>), jointly funded a research community-led science workshop (<https://www.pgc.umn.edu/workshops/antarctic-cable/>) to review the scientific benefits of a sensor-enabled subsea fiber cable. The Workshop endorsed the cable concept and noted that existing technology and cable systems make it feasible. The Workshop concluded that the proposed activity would benefit Antarctic science research by both increasing telecommunications capacity and including new science sensors in the cable design.

The Workshop's Executive Summary captured four primary findings:

Finding 1: Existing and future Antarctic research would be significantly enhanced if bandwidth limitations were eliminated through the availability of a modern submarine cable system.

Finding 2: A new submarine cable could be constructed with embedded instrumentation (a Scientific Monitoring And Reliable Telecommunications, or SMART, cable) that would itself enable meaningful new research and understanding of the region.

Finding 3: Robust bandwidth for interpersonal connectivity for scientists and staff, if thoughtfully approached, could be transformative for research and work functions, participation in Antarctic science, education, engagement, and community wellbeing.

Finding 4: Construction of a new SMART cable that provides essentially unlimited bandwidth to McMurdo is feasible and could also serve as the platform to extend connectivity to deep-field research sites as well as critical research programs at Amundsen-Scott South Pole Station. This level of connectivity can transform the science and research platforms for future generations.

Feasibility Study

In response to the 2021 Science Workshop, NSF contracted a comprehensive preliminary concept/feasibility study (known as a Desktop Study, or DTS <https://gbs1.com/desktop-studies/>), incorporating the unique attributes of implementing a sensor-enabled cable to Antarctica. The public version of the McMurdo Cable DTS (https://www.nsf.gov/geo/opp/documents/NSF_Public%20Release%20DTS_Final.pdf) was released in October 2023. NSF also provided a summary and news release (https://www.nsf.gov/news/newssumm.jsp?cntn_id=308774&org=OPP).

The DTS addresses two proposed routes for comparison: (1) McMurdo Station to Sydney, Australia and (2) McMurdo Station to Invercargill, New Zealand. It includes brief assessments of optional extensions from the main cable routes to Macquarie Island for potential interconnection to the Australian research station located there and to nearby international research stations located in the Western Ross Sea/Terra Nova Bay area. More details on the proposed routes including landing sites and relevant diagrams can be found in section 2 of the DTS.

The study Executive Summary summarizes the key study results in a comparison of the two routes considered.

Both routes were considered technically feasible with the following observations:

(1) The NZ route is 1,500 km shorter and thus considerably more economical.

(2) The Australian route has additional geophysical risk to the cable

arising from a crossing of the seismically active Macquarie Ridge Complex to the north of Macquarie Island.

(3) The New Zealand route covers more regions of science interest as indicated by science researcher input to the study. Seismologist interests obtained during the study proposed cable branching units located at 60°S and 50°S for future sea bottom seismometer instruments tapping the cable's power and communications.

(4) The risk from ice scour appears reasonable based upon detailed near-shore bathymetry—the Antarctic SMART Cable landing risk mitigation uses standard subsea cable landing techniques called Horizontal Directional Drilling (HDD). Bathymetry and iceberg keel depth studies pertaining to the cable route transit across the Ross Sea continental shelf yield a similar low risk assessment.

(5) Environmental assessments and permitting will be a significant component of future work, as is the case with all subsea cable projects, and will include the Antarctic Treaty Committee on Environmental Protection protocols. Coordination with the Committee for the Conservation of Antarctic Marine Living Resources (CCAMLR) will be needed as the proposed cable route transits the CCAMLR governed Marine Protected Areas in the Ross Sea region.

Subsea Cable Industry Considerations

A subsea cable installation represents a substantial economic investment. As such, modern subsea telecommunications cables are designed with a 25-year or greater lifetime and thus are designed for high reliability and low maintenance. The introduction of SMART sensors into commercial subsea telecommunications cables is a new phenomenon, with the Government of Portugal-sponsored Atlantic CAM cable (<https://www.infraestruturas.deportugal.pt/pt-pt/ip-e-asn-assinam-contrato-para-construcao-de-novo-anel-cam>) and the TAMTAM cable connecting New Caledonia and Vanuatu (<https://www.soest.hawaii.edu/soestwp/announce/news/contract-signed-vanuatu-new-caledonia/>) being the first examples. The introduction of sensors into a standard telecommunications cable meeting scientific requirements and inherent cable design life/reliability requirements represents both a new market opportunity and a new technical frontier for industry that will influence the design and adoption of SMART sensors. Point sensors also complement and enhance commercially available cable sensing technologies such as distributed fiber sensing.

Resources

- NSF, United States Antarctic Program Portal; <https://www.usap.gov/>
- NSF, Office of Polar Programs; <https://www.nsf.gov/div/index.jsp?div=OPP>
- NSF, Office of Advanced Cyberinfrastructure; <https://new.nsf.gov/cise/oac>
- NSF, McMurdo Station Webcams; <https://www.usap.gov/videoclipsandmaps/mcmwebcam.cfm>
- Joint Task Force on Science Monitoring And Reliable Telecommunications, SMART Cables; <https://www.smartcables.org/>
- Neff, P.D., Andreasen, J.R., Roop, H.A., Pundsack, J., Howe, B., Jacobs, G., Lassner, D., Yoshimi, G., and Timm, K. (2021). 2021 Antarctic Subsea Cable Workshop Report: High-Speed Connectivity Needs to Advance US Antarctic Science. October 1, 2021. University of Minnesota, Saint Paul, MN, USA; <https://www.pgc.umn.edu/workshops/antarctic-cable/>
- ICPC, Minimum Technical Requirements for a Desktop Study (6 March 2012), Recommendation No. 9, at pp. 4–8; www.iscpc.org/publications/recommendations
- NSF, Connecting the Last Continent: New desktop study on Antarctica's potential subsea telecommunications cable, with link to study, 27 December 2023; https://www.nsf.gov/news/newssumm.jsp?cntn_id=308774&org=OPP
- Infraestruturas de Portugal, IP and ASN sign contract for the construction of a New CAM Ring, 13 March 2024; <https://www.infraestruturasdeportugal.pt/pt-pt/ip-e-asn-assinam-contrato-para-construcao-de-novo-anel-cam>
- University of Hawai'i, Contract signed for world's first SMART subsea cable, connecting Vanuatu, New Caledonia, School of Ocean and Earth Science and Technology, 29 February 2024; <https://www.soest.hawaii.edu/soestwp/announce/news/contract-signed-vanuatu-new-caledonia/>

Definition of Terms/References

- 2021 Antarctic Subsea Cable Workshop; <https://www.pgc.umn.edu/workshops/antarctic-cable/>
- Branching Unit (BU); https://en.wikipedia.org/wiki/Submarine_branching_unit
- Ocean Bottom Pressure A–O–A Technology; <https://oceanobservatories.org/pi-instrument/a-o-a-calibrated-pressure-instrument/#:~:text=The%20A%20D0%2DA%20method,pressure%20inside%20the%20instrument%20housing.>
- Repeater: S. Lentz and B. Howe, "Scientific Monitoring And Reliable Telecommunications (SMART) Cable Systems: Integration of Sensors into Telecommunications Repeaters," 2018 OCEANS—MTS/IEEE Kobe Techno-Oceans (OTO), Kobe, Japan, 2018, pp. 1–7, doi: 10.1109/OCEANSKobe.2018.8558862. (pg. 2) https://www.researchgate.net/publication/329618575_Scientific_Monitoring_And_Reliable

Telecommunications SMART Cable Systems Integration of Sensors into Telecommunications Repeaters

SMART Cables; <https://www.smartcables.org/smart>

Technology Readiness Level (TRL); https://en.wikipedia.org/wiki/Technology_readiness_level

Information Requested

Through this notice, NSF seeks information from the public to evolve the development of the Antarctic SMART Cable. NSF requests information regarding the subsea cable route that both minimizes the risk to the cable and maximizes science research potential, the range of potential science sensors to include, as well as their geographic distribution, the locations of powered cable branching units for future sensor cable build-out or undersea observatory-style point sensor arrays, concepts for the incorporation of existing or promising distributed fiber sensing techniques, and suggested paths to catalyze the necessary technology to develop such a cable system. Additionally, NSF seeks information relevant to partnership opportunities with the public (U.S., international) and private (academia, for-profit and non-profit) sectors that will facilitate the conceptualization, development, deployment and sustainment of the cable system and related scientific infrastructure.

The information requested here will be used to inform the proposed Antarctic SMART Cable project via the NSF Major Research Equipment Facilities and Construction (MREFC) program that funds the development of facility infrastructure. MREFC projects are funded via a separate appropriation intended for large capital-intensive investments, distinct from the NSF appropriations funding research and related activities.

Responses submitted via Email and Letter Mail are requested to follow the Electronic On-line Submission data capture questions and format for ease in analyzing responses. These responses may address one or as many topics as desired from the enumerated list provided in this RFI, noting the corresponding number of the topic(s) to which the response pertains. Written submissions must be type-written and not exceed 3 pages (exclusive of cover page and accompanying graphics) in 11-point or larger font, single spacing and with a page number provided on each page.

Comments containing references, studies, research, and other empirical data that are not widely published or widely available should include copies or electronic links of the referenced

materials; these materials, as well as a list of references, do not count toward the 3-page limit. No business proprietary information, copyrighted information, or personally identifiable information (aside from optional information requested below) should be submitted in response to this RFI. Comments submitted in response to this RFI will be used internally at NSF and may be shared with other Federal agencies and NSF contractors assigned to process the responses.

Responders are asked to answer one or more of the following questions in responses to the RFI. There are no known risks to participating, and participation is voluntary. Unless provided by you, no identifying information will be collected; therefore, all responses will remain confidential, anonymous, and reported in the aggregate. While there is no sensitive content, you may skip a question at any time.

Demographic Questions

1. In which sector do you currently work?

- (a) Academia
- (b) Private or publicly traded company
- (c) Government agency/public sector
- (d) Non-governmental organization/non-profit
- (e) Venture capital/private equity
- (f) Other (Please specify)

2. Please select up to three (3) areas of expertise/interest:

- (a) Physical Oceanography
- (b) Cryosphere
- (c) Biochemistry
- (d) Science Education
- (e) Geodesy
- (f) Hydrology
- (g) Climate Change Research
- (h) Marine Geology/Geophysics
- (i) Natural Hazards
- (j) Solid Earth Geophysics
- (k) Subsea Fiber Optic Cable Systems
- (l) Sensor/Instrumentation Development
- (m) Data Management
- (n) Distributed Fiber Sensing
- (o) Other (Please specify)

3. For how long have you been working in your current field(s)?

- (a) Less than five years
- (b) Five to less than ten years
- (c) Ten to less than twenty years
- (d) Twenty years or more
- (e) Prefer not to answer

SMART Cables and Antarctic SMART Cable Science Objectives

4. How familiar are you with the overall SMART Cable concept?

- Very familiar
- Familiar

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[illegible]

9. If you'd like, please use this space to elaborate on your answers to Question 8.

10. How important is it for the sensor to measure each of the following?

11. If you'd like, please use this space to elaborate on your answers to Question 10.

Table: Responses for Question 10						
Pressure Parameters	Very Important	Important	Somewhat Important	Not Very Important	Not Important at All	Don't Know
Standard Absolute Pressure Gauge (smaller, loses calibration over time)	☐	☐	☐	☐	☐	☐
A-O-A Pressure Gauge (larger, does not lose calibration over time)	☐	☐	☐	☐	☐	☐

12. How important is it for the sensor to measure each of the following?

Table: Responses for Question 12						
Temperature Parameters	Very Important	Important	Somewhat Important	Not Very Important	Not Important at All	Don't Know
Resolution Measurable to 0.1°C	☐	☐	☐	☐	☐	☐
Resolution Measurable to 0.01°C	☐	☐	☐	☐	☐	☐
Resolution Measurable to 0.001°C	☐	☐	☐	☐	☐	☐

13. If you'd like, please use this space to elaborate on your answers to Question 12.

14. How important is it to include the following additional sensors in the cable?

Table: Responses for Question 14						
Sensor Types	Very Important	Important	Somewhat Important	Not Very Important	Not Important at All	Don't Know
Salinity	☐	☐	☐	☐	☐	☐
Dissolved Oxygen	☐	☐	☐	☐	☐	☐
Nutrients	☐	☐	☐	☐	☐	☐
Currents	☐	☐	☐	☐	☐	☐
Partial Pressure of CO2	☐	☐	☐	☐	☐	☐
No Additional Sensors Needed	☐	☐	☐	☐	☐	☐
Other (Please Specify)						

15. In the previous question, for any selections you indicated were “important” or “very important,” please explain why you feel these sensor types should be included on the cable:

16. In question #14, for any selections you indicated were “not very important” or “not important at all,” please explain why you feel these sensor types are not needed:

17. In your view, how do SMART and distributed fiber sensing (*i.e.*, DAS and DTS) complement one another?

18. What new scientific discoveries or breakthroughs do you anticipate as a direct result of having access to the long-term measurement data collected by the cable’s sensors?

New Sensor Technologies

To catalyze rapid sensor development and increase their Technology

Readiness Levels (TRLs) for inclusion in the Antarctic SMART Cable, a range of organizational approaches may be necessary.

19. Should NSF facilitate further development for SMART Cable sensors? If so, how (*i.e.*, research labs/institutions/industry/partnerships, etc.)?

Yes

No

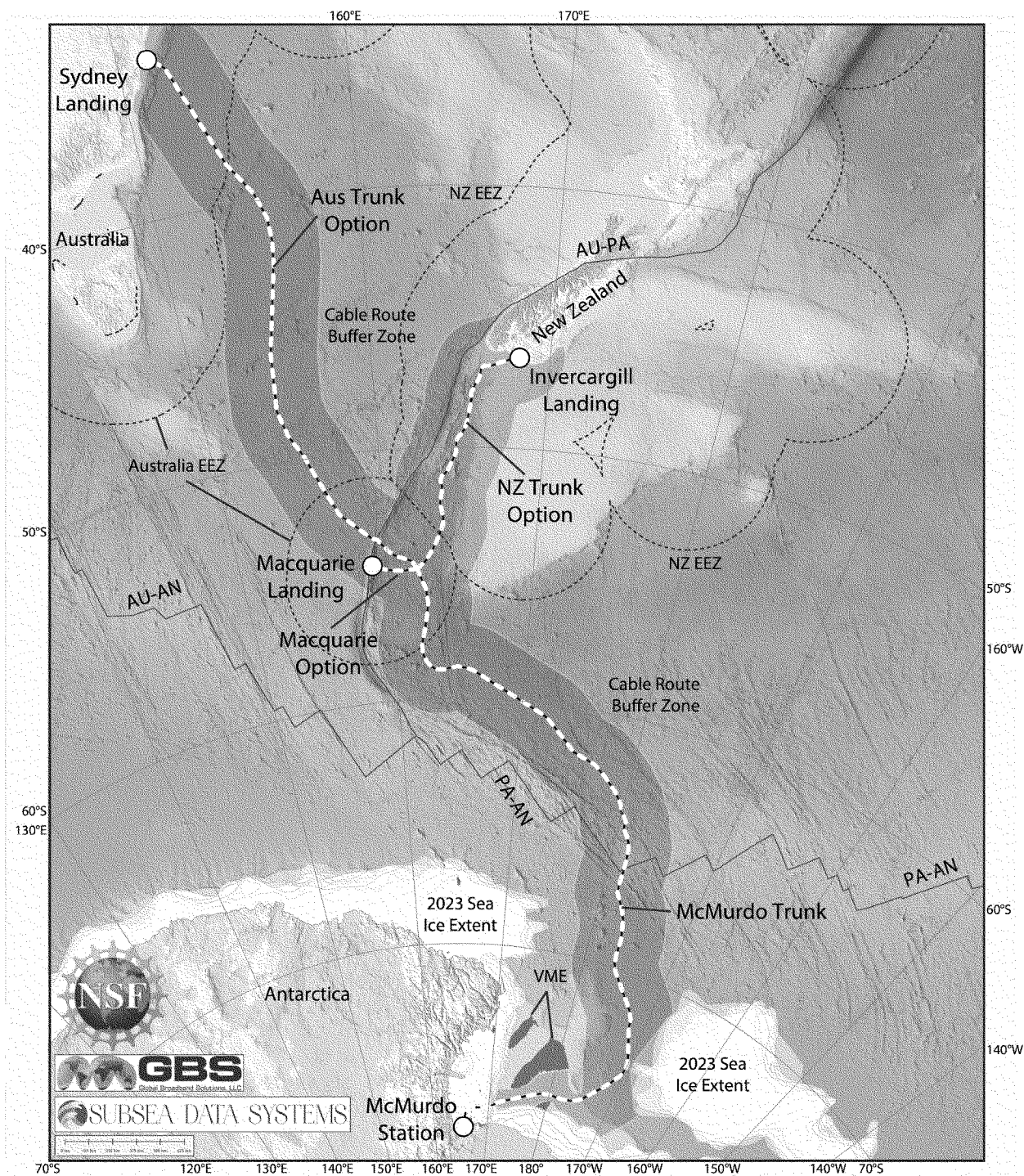
Don't know

20. If you'd like, please use this space to elaborate on your answer to question 19.

Location of the SMART Cable, Sensors, and Future Cable Expansion

For some segments of the cable, it may be possible to shift the cable's path slightly in some locations to accommodate additional science or

enable long-term monitoring of specific scientific targets. Further, depending upon the final technological solution(s) for how sensor units will be incorporated into the cable, there may be opportunities to select the locations of some of the sensor modules. Finally, the cable may be able to include one or more Branching Units (BUs). A BU can be used for multiple purposes, such as adding another cable branch, attaching a localized device, or providing an entry point for including a localized network of sensors focused on a specific area or areas.



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Figure Caption: Potential routes for the Antarctica SMART Cable system based on the 2023 Desktop Study (https://www.nsf.gov/geo/opp/documents/NSF_Public%20Release%20DTS_Final.pdf). Thick white dashed lines represent primary McMurdo Trunk and three proposed cable segments with optional landings at (a) Macquarie Island, (b)

Invercargill, New Zealand, and (c) Sydney, Australia. Proposed Cable Landing Stations are marked by white circles. Vulnerable Marine Ecosystem (VME) areas near McMurdo Station are shaded dark gray. The dark gray zone around trunk and cable options shows buffer zones where Branching Unit (BU) stubs could extend. Tectonic plate boundaries (AU: Indo-Australian Plate;

AN: Antarctic Plate; PA: Pacific Plate) are denoted by thin black lines.

21. Referring to the above Figure and noting the region of potential cable locations, would you shift the position of the proposed cable route within the buffer zone (dark gray area in the figure)? If so, where? Note that cable path shifts will be minimal without additional engineering evaluations for deployment feasibility and cable safety.

Yes
No
Don't know

22. If you'd like, please use this space to elaborate on your answer to question 21.

23. How valuable would it be to your research to be able to select the specific locations of the SMART sensor modules along the cable?

Very valuable
Valuable
Somewhat valuable
Not very valuable
Not valuable at all

24. How important is it to include one or more Branching Units?

Very important
Important
Somewhat important
Not very important
Not important at all

25. In terms of current and future research, in your view what are potential uses for Branching Units?

26. Referring again to the above Figure and noting the corridor available around the trunk lines to deploy stubs from Branching Units (dark gray shaded areas surrounding the white dotted lines), would you place additional BUs?

Yes
No
Don't Know

27. If you'd like, please use this space to elaborate on your answers to question 26. If you answered yes, please indicate where and why.

28. What potential do you see for the cable to enable the vision of the networked ocean as a relay platform for an "Internet of Underwater Things", such as subsea gliders, submersible float sensors, ROVs and similar submersible autonomous instrumentation systems?

Partnerships and the Project

The Whitepaper (<https://goosoocean.org/news/un-ocean-decade-challenge-7-white-paper-a-roadmap-for-the-observing-system-we-need/>) addressing Challenge 7 ("Expand the Global Ocean Observing System") from the UN IOC/UNESCO Decade of Ocean Science for Sustainable Development (2021–2030) ("Ocean Decade 2030") program indicates that significant investments will be needed to meet the challenges for global ocean observation goals while current investments and mechanisms are inadequate. There is a clear call for multi-sector engagements such as public-private partnerships and

international collaborations for a "new economic thinking" to provide the resources needed.

29. What private and/or public sector groups (e.g., academic, non-profit, industry, etc.) do you think may have an active interest in partnership activities with NSF for aspects of the cable system development?

Contribution of the Antarctic SMART Cable To Resolve Global Challenges

30. Beyond the potential direct benefits to support science in the Antarctic and the region covered directly by the Antarctic SMART Cable, there may be broader benefits to developing the Antarctic SMART Cable. In your view, what are the global, national, and societal benefits of this cable?

Future Science Workshop

31. A successor science workshop is being considered for 2025 to build upon and extend the work of the June 2021 workshop and this Electronic On-Line Submission. How interested would you be in attending virtually or in-person, provided full or partial travel expenses could be provided?

Table: Responses for Question 31

Future Science Workshop Participation	Very Interested	Interested	Somewhat Interested	Not Very Interested	Not Interested at All
Attending Virtually	☐	☐	☐	☐	☐
Attending In-person	☐	☐	☐	☐	☐

Final Thoughts

32. If there is anything else you'd like to share or elaborate upon regarding the topics mentioned here, please provide them here.

33. Please complete the form below to indicate your interest in future participation in this project. This is completely voluntary, and your responses collected will be included in the analysis regardless of your response below.

Name _____
Affiliation _____
Title/Position _____
Email address _____

Authority: 42 U.S.C. 1861, et al.

Dated: November 15, 2024.

Suzanne H. Plimpton,
Reports Clearance Officer, National Science Foundation.

[FR Doc. 2024–27292 Filed 11–20–24; 8:45 am]

BILLING CODE 7555–01–P

NUCLEAR REGULATORY COMMISSION

[Docket No. 50–263; NRC–2023–0031]

**Northern States Power Company;
Monticello Nuclear Generating Plant,
Unit 1; Final Site-Specific
Environmental Impact Statement**

AGENCY: Nuclear Regulatory Commission.

ACTION: Notice; issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) has published a final Site-Specific Environmental Impact Statement (EIS), issued as NUREG–1437, Supplement 26, Second Renewal, "Site-Specific Environmental Impact Statement for License Renewal of Nuclear Plants Regarding Subsequent License Renewal for Monticello Nuclear Generating Plant, Unit 1, Final Report." This EIS evaluates, on a site-specific basis, the environmental impacts of subsequent license renewal (SLR) of Facility Operating License No. DPR–22 for an additional 20 years of operation for Monticello Nuclear Generating Plant (Monticello), Unit 1. Monticello is located approximately 35 miles NW of Minneapolis, MN. Alternatives to the proposed action of subsequent license renewal for Monticello include the no-

action alternative and reasonable replacement power alternatives.

DATES: NUREG–1437, Supplement 26, Second Renewal, is available as of November 15, 2024.

ADDRESSES: Please refer to Docket ID NRC–2023–0031 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–2023–0031. Address questions about Docket IDs in *Regulations.gov* to Stacy Schumann; telephone: 301–415–0624; email: Stacy.Schumann@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 access 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, at 301–415–4737, or by email to PDR.Resource@nrc.gov. NUREG–1437, Supplement 26, Second Renewal, is available in ADAMS under Accession No. ML24309A221.

- **NRC's PDR:** The PDR, where you may examine and order copies of publicly available documents, is open by appointment. To make an appointment to visit the PDR, please send an email to PDR.Resource@nrc.gov or call 1–800–397–4209 or 301–415–4737, between 8 a.m. and 4 p.m. eastern time (ET), Monday through Friday, except Federal holidays.

- **Public Library:** A copy of the final site-specific EIS, NUREG–1437, Supplement 26, Second Renewal, regarding the proposed subsequent renewal of Renewed Facility Operating License No. DPR–22 for an additional 20 years of operation for Monticello, will be available for public review at the Monticello Great River Regional Library, 200 W 6th St., Monticello, MN 55362.

FOR FURTHER INFORMATION CONTACT: Jessica Umaña, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001; telephone: 301–415–5207; email: Jessica.Umana@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Background

In accordance with section 51.118 of title 10 of the *Code of Federal Regulations* (10 CFR), "Final environmental impact statement—notice of availability," the NRC is making available for public inspection NUREG–1437, Supplement 26, Second Renewal, regarding the subsequent license renewal of Northern States Power Company doing business as Xcel Energy (Xcel), renewed Facility Operating License No. DPR–22 for an additional 20 years of operation for Monticello. A notice of availability of the site-specific draft EIS (DEIS) (NUREG–1437, Supplement 26, Second Renewal) was published in the **Federal Register** on April 24, 2024 (89 FR 31225). The U.S. Environmental Protection Agency (EPA) issued its Notice of Availability on April 19, 2024 (89 FR 28771). To align the end of EPA's comment period with the NRC's comment period, on May 3, 2024 (89 FR 36815), the public comment period was initially extended from June 3, 2024, to June 10, 2024. On June 5, 2024 (89 FR 48196), the NRC staff extended the public comment period by 15 days to June 25, 2024, and on June 14, 2024, EPA also noticed the extension of the comment period to June 25, 2024 (89 FR 50586) to allow more time for members of the public to develop and submit their comments. The public comment period on the site-specific DEIS (NUREG–1437, Supplement 26, Second Renewal) ended on June 25, 2024, and the comments received on the site-specific DEIS are addressed in the final EIS (NUREG–1437, Supplement 26, Second Renewal).

II. Discussion

The site-specific draft EIS (NUREG–1437, Supplement 26, Second Renewal) was issued for public comment on April 24, 2024 (89 FR 31225). The site-specific final EIS addresses the comments received on the site-specific draft EIS (NUREG–1437, Supplement 26, Second Renewal). As discussed in Chapter 4 of the final EIS (NUREG–1437, Supplement 26, Second Renewal), the NRC staff has determined that the adverse environmental impacts of SLR for Monticello (*i.e.*, the continued operation of Monticello for a period of 20 years beyond the expiration date of the initial renewed license) are not so great that preserving the option of SLR for energy-planning decision-makers would be unreasonable. This recommendation is based on: (1) information provided in the environmental report, as supplemented, and other documents submitted by Xcel;

(2) consultation with Federal, State, Tribal, and local governmental agencies; (3) the NRC staff's independent environmental review; (4) consideration of public comments received during the scoping process, on the site-specific DEIS (NUREG–1437, Supplement 26, Second Renewal); and (5) consideration of public comments received on the site-specific draft EIS (NUREG–1437, Supplement 26, Second Renewal).

Dated: November 18, 2024.

For the Nuclear Regulatory Commission.

Theodore Smith,

Acting Deputy Director, Division of Rulemaking, Environmental, and Financial Support, Office of Nuclear Material Safety and Safeguards.

[FR Doc. 2024–27317 Filed 11–20–24; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

[NRC–2023–0201]

Information Collection: Requirements for Renewal of Operating Licenses for Nuclear Power Plants

AGENCY: Nuclear Regulatory Commission.

ACTION: Notice of submission to the Office of Management and Budget; request for comment.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) has recently submitted a request for renewal of an existing collection of information to the Office of Management and Budget (OMB) for review. The information collection is entitled, "Requirements for Renewal of Operating Licenses for Nuclear Power Plants."

DATES: Submit comments by December 23, 2024. 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 on or before this date.

ADDRESSES: Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to <https://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: David Cullison, NRC Clearance Officer, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001; telephone: 301–415–2084; email: Infocollects.Resource@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Obtaining Information and Submitting Comments

A. Obtaining Information

Please refer to Docket ID NRC–2023–0201 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–2023–0201.

- *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, at 301–415–4737, or by email to PDR.Resource@nrc.gov. The supporting statement is available in ADAMS under Accession No. ML24193A296.

- *NRC's PDR*: The PDR, where you may examine and order copies of publicly available documents, is open by appointment. To make an appointment to visit the PDR, please send an email to PDR.Resource@nrc.gov or call 1–800–397–4209 or 301–415–4737, between 8 a.m. and 4 p.m. eastern time (ET), Monday through Friday, except Federal holidays.

- *NRC's Clearance Officer*: A copy of the collection of information and related instructions may be obtained without charge by contacting the NRC's Clearance Officer, David Cullison, Office of the Chief Information Officer, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001; telephone: 301–415–2084; email: Infocollects.Resource@nrc.gov.

B. Submitting Comments

Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to <https://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.

The NRC cautions you not to include identifying or contact information in comment submissions that you do not want to be publicly disclosed in your comment submission. All comment submissions are posted at <https://www.regulations.gov> and entered into ADAMS. Comment submissions are not

routinely edited to remove identifying or contact information.

If you are requesting or aggregating comments from other persons for submission to the OMB, 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 comment submissions are not routinely edited to remove such information before making the comment submissions available to the public or entering the comment into ADAMS.

II. Background

Under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35), the NRC recently submitted a request for renewal of an existing collection of information to OMB for review entitled, "Requirements for Renewal of Operating Licenses for Nuclear Power Plants." The NRC hereby informs potential respondents that an agency may not conduct or sponsor, and that a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

The NRC published a **Federal Register** notice with a 60-day comment period on this information collection on June 27, 2024, 89 FR 53662.

1. *The title of the information collection*: Requirements for Renewal of Operating Licenses for Nuclear Power Plants.

2. *OMB approval number*: 3150–0155.

3. *Type of submission*: Extension.

4. *The form number, if applicable*: Not applicable.

5. *How often the collection is required or requested*: There is a one-time application for any licensee wishing to renew the operating license for its nuclear power plant. There is a one-time requirement for each licensee with a renewed operating license to submit a letter documenting the completion of inspection and testing activities. All holders of renewed licenses must perform yearly record keeping.

6. *Who will be required or asked to respond*: Commercial nuclear power plant licensees who wish to renew their operating licenses and holders of renewed licenses.

7. *The estimated number of annual responses*: 75 (13 reporting responses + 62 recordkeepers).

8. *The estimated number of annual respondents*: 69 (7 reporting respondents + 62 recordkeepers).

9. *The estimated number of hours needed annually to comply with the information collection requirement or request*: 323,818 hours (255,818 hours

reporting plus 68,000 hours recordkeeping).

10. *Abstract*: Part 54 of title 10 of the *Code of Federal Regulations* (10 CFR) establishes license renewal requirements for commercial nuclear power plants and describes the information that licensees must submit to the NRC when applying for a license renewal. The application must contain information on how the licensee will manage the detrimental effects of age-related degradation on certain plant systems, structures, and components to continue the plant's safe operation during the renewal term. The NRC needs this information to determine whether the licensee's actions will be effective in assuring the plants' continued safe operation during the period of extended operation. Holders of renewed licenses must retain in an auditable and retrievable form, for the term of the renewed operating license, all information and documentation required to document compliance with 10 CFR part 54. The NRC needs access to this information for continuing effective regulatory oversight.

Dated: November 18, 2024.

For the Nuclear Regulatory Commission.

David Cullison,

NRC Clearance Officer, Office of the Chief Information Officer.

[FR Doc. 2024–27309 Filed 11–20–24; 8:45 am]

BILLING CODE 7590–01–P

POSTAL REGULATORY COMMISSION

[Docket No. MC2025–424; Order No. 8003]

Mail Classification Schedule

AGENCY: Postal Regulatory Commission.

ACTION: Notice.

SUMMARY: The Commission is recognizing a recent Postal Service filing concerning product description changes to the Mail Classification Schedule related to International Mail. This document informs the public of the filing, invites public comment, and takes other administrative steps.

DATES: *Comments are due*: December 6, 2024.

ADDRESSES: Submit comments electronically via the Commission's Filing Online system at <https://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. Commission Action
- III. Ordering Paragraphs

I. Introduction

On November 15, 2024, pursuant to 39 CFR 3040.190, the Postal Service filed a notice to change Part D, which refers to the Country Price Lists for International Mail, in the *Mail Classification Schedule* (MCS) section 4000.¹ Effective January 19, 2025, the Postal Service plans to change the country price groups assigned to the Market Dominant product Outbound Single-Piece First-Class Mail International and competitive international mail products destined for Saint Pierre & Miquelon. Notice at 1.

II. Commission Action

The Commission establishes Docket No. MC2025–424 for consideration of matters raised by the Notice.

Pursuant to 39 CFR 3040.191, the Commission has posted the Notice on its website and invites comments on whether the Postal Service's filings are consistent with the policies and applicable criteria of chapter 36 of title 39 of the United States Code, 39 CFR 3040.190–192, and any applicable Commission directives and orders. Comments are due December 6, 2024. The public portions of the filings can be accessed via the Commission's website (<https://www.prc.gov>).

The Commission appoints Katrina R. Martinez to represent the interests of the general public (Public Representative) in this docket, pursuant to 39 U.S.C. 505 and 39 CFR 3040.191(d).

III. Ordering Paragraphs

It is ordered:

1. The Commission establishes Docket No. MC2025–424 for consideration of matters raised by the Postal Service's Notice.
2. Pursuant to 39 U.S.C. 505 and 39 CFR 3040.191(d), Katrina R. Martinez is appointed to serve as an officer of the Commission (Public Representative) to represent the interests of the general public in this proceeding.
3. Comments are due December 6, 2024.
4. The Secretary shall arrange for publication of this Order in the **Federal Register**.

¹ Notice of United States Postal Service of Minor Classification Changes, November 15, 2024 (Notice).

By the Commission.

Erica A. Barker,
Secretary.

[FR Doc. 2024–27293 Filed 11–20–24; 8:45 am]

BILLING CODE 7710–FW–P

POSTAL REGULATORY COMMISSION

[Docket Nos. MC2025–406 and K2025–404; MC2025–414 and K2025–412; MC2025–415 and K2025–413; MC2025–416 and K2025–414; MC2025–417 and K2025–415; MC2025–418 and K2025–416; MC2025–419 and K2025–417; MC2025–420 and K2025–418; MC2025–421 and K2025–419; MC2025–422 and K2025–420; MC2025–423 and K2025–421; MC2025–425 and K2025–422; MC2025–426 and K2025–423; MC2025–427 and K2025–424; MC2025–428 and K2025–425; MC2025–429 and K2025–426; MC2025–430 and K2025–427]

New Postal Products

AGENCY: Postal Regulatory Commission.
ACTION: Notice.

SUMMARY: The Commission is noticing a recent Postal Service filing for the Commission's consideration concerning a negotiated service agreement. This notice informs the public of the filing, invites public comment, and takes other administrative steps.

DATES: *Comments are due:* November 25, 2024.

ADDRESSES: Submit comments electronically via the Commission's Filing Online system at <https://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. Public Proceeding(s)
- III. Summary Proceeding(s)

I. Introduction

Pursuant to 39 CFR 3041.405, the Commission gives notice that the Postal Service filed request(s) for the Commission to consider matters related to Competitive negotiated service agreement(s). The request(s) may propose the addition of a negotiated service agreement from the Competitive product list or the modification of an existing product currently appearing on the Competitive product list.

The public portions of the Postal Service's request(s) can be accessed via

the Commission's website (<https://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

Section II identifies the docket number(s) associated with each Postal Service request, if any, that will be reviewed in a public proceeding as defined by 39 CFR 3010.101(p), the title of each such request, the request's acceptance date, and the authority cited by the Postal Service for each request. For each such 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 and 39 CFR 3000.114 (Public Representative). Section II also establishes comment deadline(s) pertaining to each such request.

The Commission invites comments on whether the Postal Service's request(s) identified in Section II, if any, are consistent with the policies of title 39. 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 3041. Comment deadline(s) for each such request, if any, appear in Section II.

Section III identifies the docket number(s) associated with each Postal Service request, if any, to add a standardized distinct product to the Competitive product list or to amend a standardized distinct product, the title of each such request, the request's acceptance date, and the authority cited by the Postal Service for each request. Standardized distinct products are negotiated service agreements that are variations of one or more Competitive products, and for which financial models, minimum rates, and classification criteria have undergone advance Commission review. *See* 39 CFR 3041.110(n); 39 CFR 3041.205(a). Such requests are reviewed in summary proceedings pursuant to 39 CFR 3041.325(c)(2) and 39 CFR 3041.505(f)(1). Pursuant to 39 CFR 3041.405(c)-(d), the Commission does not appoint a Public Representative or request public comment in proceedings to review such requests.

II. Public Proceeding(s)

1. *Docket No(s):* Docket No(s): MC2025–406 and K2025–404; *Filing Title:* USPS Request to Add Priority Mail & USPS Ground Advantage Contract 463 to the Competitive Product

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).

List and Notice of Filing Materials Under Seal; *Filing Acceptance Date*: November 15, 2024; *Filing Authority*: 39 U.S.C. 3642, 39 CFR 3035.105, and 39 CFR 3041.310; *Public Representative*: Almaroof Agoro; *Comments Due*: November 25, 2024.

2. *Docket No(s)*: MC2025–414 and K2025–412; *Filing Title*: USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage Contract 464 to the Competitive Product List and Notice of Filing Materials Under Seal; *Filing Acceptance Date*: November 15, 2024; *Filing Authority*: 39 U.S.C. 3642, 39 CFR 3035.105, and 39 CFR 3041.310; *Public Representative*: Almaroof Agoro; *Comments Due*: November 25, 2024.

3. *Docket No(s)*: MC2025–415 and K2025–413; *Filing Title*: USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage Contract 731 to the Competitive Product List and Notice of Filing Materials Under Seal; *Filing Acceptance Date*: November 15, 2024; *Filing Authority*: 39 U.S.C. 3642, 39 CFR 3035.105, and 39 CFR 3041.310; *Public Representative*: Almaroof Agoro; *Comments Due*: November 25, 2024.

4. *Docket No(s)*: MC2025–416 and K2025–414; *Filing Title*: USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage Contract 732 to the Competitive Product List and Notice of Filing Materials Under Seal; *Filing Acceptance Date*: November 15, 2024; *Filing Authority*: 39 U.S.C. 3642, 39 CFR 3035.105, and 39 CFR 3041.310; *Public Representative*: Almaroof Agoro; *Comments Due*: November 25, 2024.

5. *Docket No(s)*: MC2025–417 and K2025–415; *Filing Title*: USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage Contract 465 to the Competitive Product List and Notice of Filing Materials Under Seal; *Filing Acceptance Date*: November 15, 2024; *Filing Authority*: 39 U.S.C. 3642, 39 CFR 3035.105, and 39 CFR 3041.310; *Public Representative*: Almaroof Agoro; *Comments Due*: November 25, 2024.

6. *Docket No(s)*: MC2025–418 and K2025–416; *Filing Title*: USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage Contract 733 to the Competitive Product List and Notice of Filing Materials Under Seal; *Filing Acceptance Date*: November 15, 2024; *Filing Authority*: 39 U.S.C. 3642, 39 CFR 3035.105, and 39 CFR 3041.310; *Public Representative*: Jennaca Upperman; *Comments Due*: November 25, 2024.

7. *Docket No(s)*: MC2025–419 and K2025–417; *Filing Title*: USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage

Contract 734 to the Competitive Product List and Notice of Filing Materials Under Seal; *Filing Acceptance Date*: November 15, 2024; *Filing Authority*: 39 U.S.C. 3642, 39 CFR 3035.105, and 39 CFR 3041.310; *Public Representative*: Jennaca Upperman; *Comments Due*: November 25, 2024.

8. *Docket No(s)*: MC2025–420 and K2025–418; *Filing Title*: USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage Contract 466 to the Competitive Product List and Notice of Filing Materials Under Seal; *Filing Acceptance Date*: November 15, 2024; *Filing Authority*: 39 U.S.C. 3642, 39 CFR 3035.105, and 39 CFR 3041.310; *Public Representative*: Christopher Mohr; *Comments Due*: November 25, 2024.

9. *Docket No(s)*: MC2025–421 and K2025–419; *Filing Title*: USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage Contract 735 to the Competitive Product List and Notice of Filing Materials Under Seal; *Filing Acceptance Date*: November 15, 2024; *Filing Authority*: 39 U.S.C. 3642, 39 CFR 3035.105, and 39 CFR 3041.310; *Public Representative*: Christopher Mohr; *Comments Due*: November 25, 2024.

10. *Docket No(s)*: MC2025–422 and K2025–420; *Filing Title*: USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage Contract 736 to the Competitive Product List and Notice of Filing Materials Under Seal; *Filing Acceptance Date*: November 15, 2024; *Filing Authority*: 39 U.S.C. 3642, 39 CFR 3035.105, and 39 CFR 3041.310; *Public Representative*: Christopher Mohr; *Comments Due*: November 25, 2024.

11. *Docket No(s)*: MC2025–423 and K2025–421; *Filing Title*: USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage Contract 737 to the Competitive Product List and Notice of Filing Materials Under Seal; *Filing Acceptance Date*: November 15, 2024; *Filing Authority*: 39 U.S.C. 3642, 39 CFR 3035.105, and 39 CFR 3041.310; *Public Representative*: Christopher Mohr; *Comments Due*: November 25, 2024.

12. *Docket No(s)*: MC2025–425 and K2025–422; *Filing Title*: USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage Contract 738 to the Competitive Product List and Notice of Filing Materials Under Seal; *Filing Acceptance Date*: November 15, 2024; *Filing Authority*: 39 U.S.C. 3642, 39 CFR 3035.105, and 39 CFR 3041.310; *Public Representative*: Christopher Mohr; *Comments Due*: November 25, 2024.

13. *Docket No(s)*: MC2025–426 and K2025–423; *Filing Title*: USPS Request

to Add Priority Mail Express, Priority Mail & USPS Ground Advantage Contract 739 to the Competitive Product List and Notice of Filing Materials Under Seal; *Filing Acceptance Date*: November 15, 2024; *Filing Authority*: 39 U.S.C. 3642, 39 CFR 3035.105, and 39 CFR 3041.310; *Public Representative*: Gregory Stanton; *Comments Due*: November 25, 2024.

14. *Docket No(s)*: MC2025–427 and K2025–424; *Filing Title*: USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage Contract 740 to the Competitive Product List and Notice of Filing Materials Under Seal; *Filing Acceptance Date*: November 15, 2024; *Filing Authority*: 39 U.S.C. 3642, 39 CFR 3035.105, and 39 CFR 3041.310; *Public Representative*: Gregory Stanton; *Comments Due*: November 25, 2024.

15. *Docket No(s)*: MC2025–428 and K2025–425; *Filing Title*: USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage Contract 741 to the Competitive Product List and Notice of Filing Materials Under Seal; *Filing Acceptance Date*: November 15, 2024; *Filing Authority*: 39 U.S.C. 3642, 39 CFR 3035.105, and 39 CFR 3041.310; *Public Representative*: Gregory Stanton; *Comments Due*: November 25, 2024.

16. *Docket No(s)*: MC2025–429 and K2025–426; *Filing Title*: USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage Contract 743 to the Competitive Product List and Notice of Filing Materials Under Seal; *Filing Acceptance Date*: November 15, 2024; *Filing Authority*: 39 U.S.C. 3642, 39 CFR 3035.105, and 39 CFR 3041.310; *Public Representative*: Gregory Stanton; *Comments Due*: November 25, 2024.

17. *Docket No(s)*: MC2025–430 and K2025–427; *Filing Title*: USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage Contract 742 to the Competitive Product List and Notice of Filing Materials Under Seal; *Filing Acceptance Date*: November 15, 2024; *Filing Authority*: 39 U.S.C. 3642, 39 CFR 3035.105, and 39 CFR 3041.310; *Public Representative*: Gregory Stanton; *Comments Due*: November 25, 2024.

III. Summary Proceeding(s)

None. See Section II for public proceedings.

This Notice will be published in the **Federal Register**.

Erica A. Barker,
Secretary.

[FR Doc. 2024–27295 Filed 11–20–24; 8:45 am]

BILLING CODE 7710-FW-P

POSTAL REGULATORY COMMISSION**[Docket No. N2024–1; Order No. 7998]****Service Standard Changes****AGENCY:** Postal Regulatory Commission.**ACTION:** Notice.

SUMMARY: The Commission is acknowledging a recently-filed Postal Service request for an advisory opinion regarding planned changes to its processing and transportation networks. This document invites public comments on the request and addresses several related procedural steps.

DATES: *Notice of intent to file a rebuttal:* November 22, 2024; *Hearing:* December 4, 2024, at 10:00 a.m., Eastern Daylight Time, Virtual.

ADDRESSES: Submit notices electronically via the Commission's Filing Online system at <http://www.prc.gov>. Persons interested in intervening who cannot submit their views electronically should contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section.

FOR FURTHER INFORMATION CONTACT: David A. Trissell, General Counsel, at 202–789–6820.

SUPPLEMENTARY INFORMATION:**Table of Contents**

- I. Introduction
- II. Hearing Procedures
- III. Ordering Paragraphs

I. Introduction

On October 4, 2024, the Postal Service filed a request for an advisory opinion from the Commission regarding planned changes to its processing and transportation networks.¹ Specifically, the Postal Service proposes to create a nationwide network of Regional Processing and Distribution Centers (RPDCs) and Local Processing Centers (LPCs). Request at 3. Further, the Postal Service plans to implement its Regional Transportation Optimization (RTO) initiative on a nationwide basis. *Id.* The Postal Service also proposes to revise its service standards “to align with these operational initiatives” *Id.*

II. Hearing Procedures

Before issuing its advisory opinion, the Commission shall accord an opportunity for a formal, on-the-record hearing pursuant to 5 U.S.C. 556 and 557. 39 U.S.C. 3661(c). The procedural rules in 39 CFR part 3020 apply to Docket No. N2024–1. The Commission

will sit *en banc* for Docket No. N2024–1. See 39 CFR 3020.122(b). In Order No. 7695, the Commission stated that “[t]he form and manner for any hearings to be held in Docket No. N2024–1 shall be established by Commission Order or Presiding Officer Ruling at a later date.”²

A majority of the Commission has determined that it will conduct any hearings in Docket No. N2024–1 in person in the Commission's hearing room at 901 New York Avenue NW, Suite 200, Washington DC, 20268. Commissioner Ashley Poling shall preside over any hearings conducted as part of this proceeding. Additionally, the hearings will be live-streamed, and information on how to access the stream shall be forthcoming. The stream will only allow remote parties to view, but not interact with, the live hearing taking place at the Commission's hearing room. Individuals do not need to register in advance to access the livestream.

Additionally, the Commission, to better support the hearing, modifies the procedural schedule set forth in Order No. 7695 regarding certain deadlines in preparation for hearing and rebuttal case. The modified schedule appears below the signature of this Order as Attachment 1. Pursuant to that schedule, any party that intends to conduct oral cross-examination shall file a notice of intent to do so by November 22, 2024. The notice must include an estimate of the amount of time requested for each witness.

As noted in Order No. 7695, a rebuttal case is any evidence and testimony offered to disprove or contradict the evidence and testimony submitted by the Postal Service. A rebuttal case does not include cross-examination of the Postal Service's witnesses or argument submitted via a brief or statement of position. Any party that intends to file a rebuttal case must file a notice confirming its intent to do so by November 22, 2024. Any rebuttal case, consisting of any testimony and all materials in support of the case, must be filed by December 4, 2024. Any motion for leave to file a surrebuttal case is due December 6, 2024. See Order No. 7695 at 24.

If no party files a notice of intent to file a rebuttal case by November 22, 2024, the hearing of the Postal Service's direct case shall begin at 10:00 a.m. ET on December 4, 2024, with additional days reserved on December 5, 2024, and December 6, 2024.

If any party files a notice of intent to file a rebuttal case by November 22, 2024, but no surrebuttal testimony will be presented, then the hearing of the Postal Service's direct case shall begin at 10:00 a.m. ET on December 11, 2024, with additional days reserved on December 12, 2024, and December 13, 2024.

If any party files a notice of intent to file a rebuttal case by November 22, 2024, and the Commission approves the presentation of surrebuttal testimony, then the hearing of the Postal Service's direct case shall begin at 10:00 a.m. ET on December 18, 2024, and the hearing of the surrebuttal case shall end December 20, 2024.

Each individual seeking to attend the live hearing at the Commission's hearing room must register by sending an email to Registration@prc.gov, with the subject line “N2024–1 Hearing Registration” by November 22, 2024. The hearing is open to the public subject to space constraints in the Commission's hearing room, however only intervenors are able to question Postal Service witnesses. In order to facilitate orderly public participation, this email shall provide the following information:

- your first and last name;
- your email address;
- your affiliation (if you are participating in your capacity as an employee, officer, or member of an entity such as a corporation, association, or government agency).

The Registration@prc.gov email address is established solely for the exchange of information relating to the logistics of registering for, and attending, the live hearing.³ No information related to the substance of the Postal Service's Request shall be communicated, nor shall any information provided by participants apart from the list identified above be reviewed or considered. Only documents filed with the Commission's docket system will be considered by the Commission.

III. Ordering Paragraphs

It is ordered:

1. The Commission will conduct any hearings in Docket No. N2024–1 in person at the Commission's hearing room.

2. The modified procedural schedule for this proceeding is set forth below the signature of this Order.

¹ United States Postal Service Request for an Advisory Opinion on Changes in the Nature of Postal Services, October 4, 2024 (Request).

² Notice and Order on the Postal Service's Request for an Advisory Opinion on Changes in the Nature of Postal Services, October 9, 2024, at 14 (Order No. 7695).

³ Please refer to the Commission's privacy policy which is available at <https://www.prc.gov/privacy>.

3. The Secretary shall arrange for publication of this order in the **Federal Register**.

By the Commission.
Erica A. Barker,
Secretary.

PROCEDURAL SCHEDULE FOR DOCKET NO. N2024–1

[Modified by the Commission, November 15, 2024]

Technical Conference Dates:	
Deadline to Email <i>Registration@prc.gov</i> to Register to Participate in the Live Technical Conference via Microsoft Teams.	October 15, 2024.
Filing of the Postal Service's Materials (if any) for the Technical Conference	October 15, 2024.
Technical Conference (live via Microsoft Teams)	October 16, 2024, at 1:00 p.m. Eastern Time (ET).
Intervention Deadline:	
Filing of Notice of Intervention	October 21, 2024.
Discovery Deadlines for the Postal Service's Direct Case:	
Last Filing of Discovery Requests	November 5, 2024.
Filing of the Postal Service's Answers to Discovery	November 12, 2024.
Deadlines in Preparation for Hearing (assuming no rebuttal case):	
Filing of Notice Confirming Intent to Conduct Oral Cross-Examination	November 22, 2024.
Filing of Request to Present Oral Argument	November 22, 2024.
Filing of Notice of Designations (Parties)	November 26, 2024.
Filing of Notices of Designated Materials (Postal Service)	December 2, 2024.
Rebuttal Case Deadlines (if applicable):	
Filing of Notice Confirming Intent to File a Rebuttal Case	November 22, 2024.
Filing of Rebuttal Case	December 4, 2024.
Surrebuttal Case Deadlines (if applicable):	
Filing of Motion for Leave to File Surrebuttal Case	December 6, 2024.
Filing of Response to Motion for Leave to File Surrebuttal Case	December 10, 2024.
Filing of Surrebuttal Case (if authorized)	December 13, 2024.
Hearing Dates:	
Hearings (with no Rebuttal Case)	December 4 to 6, 2024.
Hearings (with Rebuttal Case, but no authorized Surrebuttal Case)	December 11 to 13, 2024.
Hearings (with Rebuttal Case and authorized Surrebuttal Case)	December 18 to 20, 2024.
Briefing Deadlines:	
Filing of Initial Briefs (with no Rebuttal Case)	December 12, 2024.
Filing of Reply Briefs (with no Rebuttal Case)	December 19, 2024.
Statement of Position Deadline:	
Filing of Statement of Position (with no Rebuttal Case)	December 12, 2024.
Advisory Opinion Deadline:	
Filing of Advisory Opinion	January 31, 2025.

[FR Doc. 2024–27281 Filed 11–20–24; 8:45 am]

BILLING CODE 7710–FW–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 14, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 712 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–391, K2025–389.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.

[FR Doc. 2024–27190 Filed 11–20–24; 8:45 am]

BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail and USPS Ground Advantage® 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:* November 21, 2024.

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 November 14, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail & USPS Ground Advantage® Contract 463 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–406, K2025–404.

Sean Robinson,
Attorney, Corporate and Postal Business Law.

[FR Doc. 2024–27205 Filed 11–20–24; 8:45 am]

BILLING CODE 7710–12–P

POSTAL SERVICE**Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 13, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 704 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–381, K2025–379.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27176 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE**Product Change—Priority Mail and USPS Ground Advantage® 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:* November 21, 2024.

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 November 15, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail & USPS Ground Advantage® Contract 466 to Competitive Product List*. Documents

are available at www.prc.gov, Docket Nos. MC2025–420, K2025–418.

Sean Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27233 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE**Product Change—Priority Mail and USPS Ground Advantage® 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:* November 21, 2024.

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 November 13, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail & USPS Ground Advantage® Contract 460 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–389, K2025–387.

Sean Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27191 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE**Product Change—Priority Mail and USPS Ground Advantage® 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:* November 21, 2024.

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 November 12, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail & USPS Ground Advantage® Contract 455 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–375, K2025–373.

Sean Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27181 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE**Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 13, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 708 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–386, K2025–384.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27174 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE**Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:*
November 21, 2024.

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 November 14, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 714 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–393, K2025–391.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27193 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:*
November 21, 2024.

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 November 15, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 734 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–419, K2025–417.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27237 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:*
November 21, 2024.

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 November 12, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 696 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–367, K2025–365.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27161 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:*
November 21, 2024.

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 November 15, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 740 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–427, K2025–424.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27243 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:*
November 21, 2024.

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 November 15, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 742 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–430, K2025–427.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27245 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:*
November 21, 2024.

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 November 14, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 717 to Competitive Product List*. Documents

are available at www.prc.gov, Docket Nos. MC2025–397, K2025–395.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27200 Filed 11–20–24; 8:45 am]

BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 14, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 713 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–392, K2025–390.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27180 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 14, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 728 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–410, K2025–408.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27226 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 15, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 733 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–418, K2025–416.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27236 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 12, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 687 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–354, K2025–352.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27135 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 12, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 691 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–360, K2025–358.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27164 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE**Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 13, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 710 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–388, K2025–386.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27186 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE**Product Change—Priority Mail and USPS Ground Advantage® 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:* November 21, 2024.

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 November 12, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail & USPS Ground Advantage® Contract 454 to Competitive Product List*. Documents

are available at www.prc.gov, Docket Nos. MC2025–371, K2025–369.

Sean Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27157 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE**Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 14, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 721 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–401, K2025–399.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27224 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE**Product Change—Priority Mail and USPS Ground Advantage® 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:* November 21, 2024.

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 November 12, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail & USPS Ground Advantage® Contract 453 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–370, K2025–368.

Sean Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27166 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE**Product Change—Priority Mail and USPS Ground Advantage® 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:* November 21, 2024.

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 November 13, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail & USPS Ground Advantage® Contract 458 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–380, K2025–378.

Sean Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27188 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE**Product Change—Priority Mail and USPS Ground Advantage® 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:*
November 21, 2024.

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 November 12, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail & USPS Ground Advantage® Contract 450 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–359, K2025–357.

Sean Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27154 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:*
November 21, 2024.

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 November 15, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 737 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–423, K2025–421.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27240 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:*
November 21, 2024.

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 November 12, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 690 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–358, K2025–356.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27147 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:*
November 21, 2024.

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 November 14, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 731 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–415, K2025–413.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27234 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:*
November 21, 2024.

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 November 15, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 739 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–426, K2025–423.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27242 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail and USPS Ground Advantage® 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:*
November 21, 2024.

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 November 15, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail & USPS Ground Advantage® Contract 465 to Competitive Product List*. Documents

are available at www.prc.gov, Docket Nos. MC2025–417, K2025–415.

Sean Robinson,

Attorney, Corporate and Postal Business Law.

[FR Doc. 2024–27232 Filed 11–20–24; 8:45 am]

BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 15, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 741 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–428, K2025–425.

Sean C. Robinson,

Attorney, Corporate and Postal Business Law.

[FR Doc. 2024–27244 Filed 11–20–24; 8:45 am]

BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 12, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 698 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–369, K2025–367.

Sean C. Robinson,

Attorney, Corporate and Postal Business Law.

[FR Doc. 2024–27165 Filed 11–20–24; 8:45 am]

BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 12, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 692 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–362, K2025–360.

Sean C. Robinson,

Attorney, Corporate and Postal Business Law.

[FR Doc. 2024–27155 Filed 11–20–24; 8:45 am]

BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 12, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 693 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–363, K2025–361.

Sean C. Robinson,

Attorney, Corporate and Postal Business Law.

[FR Doc. 2024–27150 Filed 11–20–24; 8:45 am]

BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 13, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 707 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–385, K2025–383.

Sean C. Robinson,

Attorney, Corporate and Postal Business Law.

[FR Doc. 2024–27192 Filed 11–20–24; 8:45 am]

BILLING CODE 7710–12–P

POSTAL SERVICE**Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 12, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 701 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–374, K2025–372.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27173 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE**Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 12, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 694 to Competitive Product List*. Documents

are available at www.prc.gov, Docket Nos. MC2025–365, K2025–363.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27136 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE**Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 14, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 722 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–403, K2025–401.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27210 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE**Product Change—Priority Mail and USPS Ground Advantage® 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:* November 21, 2024.

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 November 12, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail & USPS Ground Advantage® Contract 451 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–361, K2025–359.

Sean Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27162 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE**Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 14, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 725 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–407, K2025–405.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27197 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE**Product Change—Priority Mail and USPS Ground Advantage® 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:*
November 21, 2024.

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 November 12, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail & USPS Ground Advantage® Contract 449 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–356, K2025–354.

Sean Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27137 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:*
November 21, 2024.

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 November 14, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 715 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–395, K2025–393.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27209 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:*
November 21, 2024.

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 November 14, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 723 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–404, K2025–402.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27207 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:*
November 21, 2024.

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 November 15, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 732 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–416, K2025–414.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27235 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:*
November 21, 2024.

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 November 15, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 738 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–425, K2025–422.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27241 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:*
November 21, 2024.

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 November 14, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 724 to Competitive Product List*. Documents

are available at www.prc.gov, Docket Nos. MC2025–405, K2025–403.

Sean C. Robinson,

Attorney, Corporate and Postal Business Law.

[FR Doc. 2024–27201 Filed 11–20–24; 8:45 am]

BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 12, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 689 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–357, K2025–355.

Sean C. Robinson,

Attorney, Corporate and Postal Business Law.

[FR Doc. 2024–27160 Filed 11–20–24; 8:45 am]

BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 15, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 736 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–422, K2025–420.

Sean C. Robinson,

Attorney, Corporate and Postal Business Law.

[FR Doc. 2024–27239 Filed 11–20–24; 8:45 am]

BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 12, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 699 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–372, K2025–370.

Sean C. Robinson,

Attorney, Corporate and Postal Business Law.

[FR Doc. 2024–27156 Filed 11–20–24; 8:45 am]

BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail and USPS Ground Advantage® 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:* November 21, 2024.

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 November 12, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail & USPS Ground Advantage® Contract 456 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–376, K2025–374.

Sean Robinson,

Attorney, Corporate and Postal Business Law.

[FR Doc. 2024–27184 Filed 11–20–24; 8:45 am]

BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 14, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 729 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–411, K2025–409.

Sean C. Robinson,

Attorney, Corporate and Postal Business Law.

[FR Doc. 2024–27211 Filed 11–20–24; 8:45 am]

BILLING CODE 7710–12–P

POSTAL SERVICE**Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 12, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 702 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–377, K2025–375.

Sean C. Robinson,

Attorney, Corporate and Postal Business Law.

[FR Doc. 2024–27182 Filed 11–20–24; 8:45 am]

BILLING CODE 7710–12–P

POSTAL SERVICE**Product Change—Priority Mail and USPS Ground Advantage® 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:* November 21, 2024.

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 November 12, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail & USPS Ground Advantage® Contract 452 to Competitive Product List*. Documents

are available at www.prc.gov, Docket Nos. MC2025–364, K2025–362.

Sean Robinson,

Attorney, Corporate and Postal Business Law.

[FR Doc. 2024–27149 Filed 11–20–24; 8:45 am]

BILLING CODE 7710–12–P

POSTAL SERVICE**Change in Rates and Classifications of General Applicability for Competitive Products****AGENCY:** Postal Service™.

ACTION: Notice of a change in rates and classifications of general applicability for competitive products.

SUMMARY: This notice sets forth changes in rates and classifications of general applicability for competitive products.

DATES: *Applicability date:* January 19, 2025.

FOR FURTHER INFORMATION CONTACT: Elizabeth Reed, 202–268–3179.

SUPPLEMENTARY INFORMATION: On November 13, 2024, pursuant to their authority under 39 U.S.C. 3632, the Governors of the Postal Service established price and classification changes for competitive products. The Governors' Decision and the record of proceedings in connection with such decision are reprinted below in accordance with section 3632(b)(2). Mail Classification Schedule language containing the new prices can be found at www.prc.gov.

Christopher Doyle,

Attorney, Ethics & Legal Compliance.

Decision of the Governors of the United States Postal Service on Changes in Rates and Classifications of General Applicability for Competitive Products (Governors' Decision No. 24–7)

November 13, 2024

Statement of Explanation and Justification

Pursuant to authority under section 3632 of title 39, as amended by the Postal Accountability and Enhancement Act of 2006 ("PAEA"), we establish prices and classifications of general applicability for the Postal Service's competitive products. The changes are described generally below, with a detailed description of the changes in the Postal Service's associated draft Mail Classification Schedule change document. That document contains the draft Mail Classification Schedule sections with classification changes in legislative format, and new prices displayed in the price charts.

As shown in the nonpublic annex being filed under seal herewith, the changes we establish should enable each competitive product to cover its attributable costs (39 U.S.C. 3633(a)(2)) and should result in competitive products as a whole complying with 39 U.S.C. 3633(a)(3), which, as implemented by 39 CFR 3035.107(c), requires competitive products collectively to contribute a minimum of 9.6 percent to the Postal Service's institutional costs. Accordingly, no issue of subsidization of competitive products by market dominant products should arise (39 U.S.C. 3633(a)(1)). We therefore find that the new prices and classification changes are in accordance with 39 U.S.C. 3632–3633 and 39 CFR 3035.102 and 104.

I. Domestic Products**A. Priority Mail Express**

Overall, the Priority Mail Express price change represents a 3.2 percent increase. In 2023, we consolidated the Commercial Base and Commercial Plus price categories into one Commercial price category and differentiated the "Local, 1, 2" Zone prices. For January 2025, this new structure will be maintained. Dimensional weighting, which was introduced for all zones in 2019, will also continue in 2025.

Retail prices will increase an average of 3.2 percent. The price for the Retail Flat Rate Envelope, a significant portion of all Priority Mail Express volume, will increase to \$31.40, with the Legal Size and Padded Flat Rate Envelopes priced at \$31.65 and \$32.25, respectively.

The Commercial price category will increase 3.2 percent on average. Commercial prices will, on average, reflect a 12.4 percent discount off of Retail prices. New for 2025, a Live Animal and Perishable Handling Fee of \$7.50 will be introduced under Priority Mail Express to cover the additional costs associated with handling and transporting these items.

B. Priority Mail

On average, the Priority Mail prices will be increased by 3.2 percent. Similar to Priority Mail Express, the Commercial Base and Commercial Plus price categories were consolidated into one Priority Mail Commercial price category and "Local, 1, 2" Zone prices were differentiated in 2023. For January 2025, this new structure will be maintained. Dimensional weighting, which was introduced for all zones in 2019, will also continue in 2025.

Retail prices will increase by an average of 3.2 percent. Retail Flat Rate Box prices will be: Small, \$10.65;

Medium, \$19.15; Large, \$26.30 and Large APO/FPO/DPO, \$25.05. Thus, the Large APO/FPO/DPO Flat Rate Box will be \$1.25 less than the Large Flat Rate Box. The regular Flat Rate Envelope will be priced at \$10.10, with the Legal Size and Padded Flat Rate Envelopes priced at \$10.40 and \$10.85, respectively.

The Commercial price category will increase by 3.2 percent on average. Commercial prices will, on average, reflect a 20.8 percent discount off of Retail prices. New for 2025, a Live Animal and Perishable Handling Fee of \$15.00 will be introduced under Priority Mail to cover the additional costs associated with handling and transporting these items.

C. Parcel Select

On average, Parcel Select prices as a whole will increase 9.2 percent. For destination delivery unit (DDU) entered parcels, the average price increase is 10.3 percent. For destination hub (Dhub) entered parcels, the average price increase is 0.0 percent. For destination sectional center facility (DSCF) destination entered parcels, the average price increase is 7.1 percent. For destination network distribution center (DNDC) parcels, the average price increase is 9.7 percent. For Connect Local, introduced in 2022, the average price increase is 5.4 percent. Dimensional weighting, which was introduced for all zones in 2019, will continue in 2025. To account for inflation, the fee for Forward and Return to Sender will be increased to \$3.60, while the fee for Address Correction Service (ACS) with Shipper Paid Forwarding/Returns will be increased to \$3.00.

D. USPS Ground Advantage

USPS Ground Advantage, introduced in July 2023, is the Postal Service's flagship ground package product. The existing structure will be maintained for 2025. Overall, USPS Ground Advantage prices will increase 3.9 percent on average. Retail prices will increase 4.9 percent on average, while Commercial prices will increase 3.2 percent on average. The Alaska Limited Overland Routes (LOR) price category will see a 9.0 percent average increase for January 2025. New for 2025, a Live Animal and Perishable Handling Fee of \$7.50 will be introduced under USPS Ground Advantage to cover our additional handling costs for these items.

F. Domestic Extra Services

Premium Forwarding Service (PFS) prices will increase 6.1 percent on average in 2025. The retail counter enrollment fee will increase to \$26.85.

The online enrollment option, introduced in 2014, will increase to \$24.70. The weekly reshipment fee will increase to \$27.80. The reshipment fee for PFS Local, which was introduced in 2019 for P.O. Box customers, will increase to \$27.80. Prices for Adult Signature service will decrease to \$8.40 for the basic service and \$8.65 for the person-specific service. Address Enhancement Service prices will increase 8.9 percent on average in 2025. Competitive Post Office Box prices will be increasing 5.7 percent on average, within the existing price ranges. Package Intercept Service will increase to \$18.35. The Pickup On Demand fee will remain unchanged for 2025, at \$26.50. Premium Data Retention and Retrieval Service (USPS Tracking Plus), which was introduced in 2020, will have its prices increase 86.3 percent on average in 2025. The fee for Label Delivery Service, introduced in 2023 under the Competitive Ancillary Services product, will remain at \$1.55 for 2025.

Finally, in 2025, the fee for deterring overweight/oversized items found in the system will be increased from \$100.00 to \$200.00. The upper bounds for the price ranges for Greeting Cards and Stationery and Officially Licensed Retail Products will be increased to accommodate current and future offerings.

II. International Products

A. Expedited Services

PMEI will be subject to an overall 4.9 percent increase. Commercial Plus prices will be equivalent to Commercial Base.

B. Priority Mail International

The overall increase for Priority Mail International (PMI) will be 4.9 percent. Commercial Plus prices will be equivalent to Commercial Base.

C. International Priority Airmail and International Surface Air Lift

Published prices for International Priority Airmail (IPA) and International Surface Air Lift (ISAL) will increase by 4.9 percent and 28.9 percent, respectively.

D. Airmail M-Bags

The published prices for Airmail M-Bags will remain the same on average and not increase, although a few prices will change slightly.

E. First-Class Package International Service™

The overall increase for First-Class Package International Service (FCPIS) prices will be 4.9 percent. Commercial

Plus prices will be equivalent to Commercial Base.

F. International Ancillary Services and Special Services

Prices for several international ancillary services will be increased, including a 5.0 percent increase for International Certificate of Mailing, a 10.0 percent decrease for International Insurance, a 4.8 percent increase for International Registered Mail, and a 3.5 percent increase for the Customs and Clearance Delivery Fee.

Order

The changes in prices and classes set forth herein shall be effective at 12:01 a.m. on January 19, 2025. We direct the Secretary of the Board of Governors Office to have this decision published in the **Federal Register** in accordance with 39 U.S.C. 3632(b)(2) and direct management to file with the Postal Regulatory Commission appropriate notice of these changes.

By The Governors:

/s/

Roman Martinez IV,
Chairman, Board of Governors.

United States Postal Service Office of the Board of Governors

Certification of Governors' Vote on Governors' Decision No. 24-7

Consistent with 39 U.S.C. 3632(a), I hereby certify that, on November 13, 2024, the Governors voted on adopting Governors' Decision No. 24-7, and that a majority of the Governors then holding office voted in favor of that Decision.

Date: November 13, 2024.

/s/

Michael J. Elston,
Secretary of the Board of Governors.

[FR Doc. 2024-27132 Filed 11-20-24; 8:45 am]

BILLING CODE 7710-12-P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:*
November 21, 2024.

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 November 12, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 688 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–355, K2025–353.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27152 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:*
November 21, 2024.

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 November 14, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 719 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–399, K2025–397.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27203 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:*
November 21, 2024.

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 November 14, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 720 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–400, K2025–398.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27212 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail and USPS Ground Advantage® 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:*
November 21, 2024.

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 November 14, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail & USPS Ground Advantage® Contract 461 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–394, K2025–392.

Sean Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27202 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:*
November 21, 2024.

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 November 12, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 700 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–373, K2025–371.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27151 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:*
November 21, 2024.

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 November 14, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 726 to Competitive Product List*. Documents

are available at www.prc.gov, Docket Nos. MC2025–408, K2025–406.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27204 Filed 11–20–24; 8:45 am]

BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 14, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 718 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–398, K2025–396.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27196 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 12, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 695 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–366, K2025–364.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27153 Filed 11–20–24; 8:45 am]

BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 12, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 703 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–378, K2025–376.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27185 Filed 11–20–24; 8:45 am]

BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 13, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 706 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–384, K2025–382.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27179 Filed 11–20–24; 8:45 am]

BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail and USPS Ground Advantage® 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:* November 21, 2024.

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 November 14, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail & USPS Ground Advantage® Contract 462 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–402, K2025–400.

Sean Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27198 Filed 11–20–24; 8:45 am]

BILLING CODE 7710–12–P

POSTAL SERVICE**Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 13, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 705 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–382, K2025–380.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27189 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE**Product Change—Priority Mail and USPS Ground Advantage® 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:* November 21, 2024.

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 November 13, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail & USPS Ground Advantage® Contract 459 to Competitive Product List*. Documents

are available at www.prc.gov, Docket Nos. MC2025–383, K2025–381.

Sean Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27178 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE**Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 12, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 697 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–368, K2025–366.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27148 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE**Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 14, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 730 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–412, K2025–410.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27208 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE**Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 15, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 735 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–421, K2025–419.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024–27238 Filed 11–20–24; 8:45 am]
BILLING CODE 7710–12–P

POSTAL SERVICE**Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 13, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 711 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025-390, K2025-388.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024-27177 Filed 11-20-24; 8:45 am]
BILLING CODE 7710-12-P

POSTAL SERVICE

Product Change—Priority Mail and USPS Ground Advantage® 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:* November 21, 2024.

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 November 15, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail & USPS Ground Advantage® Contract 464 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025-414, K2025-412.

Sean Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024-27214 Filed 11-20-24; 8:45 am]
BILLING CODE 7710-12-P

POSTAL SERVICE

Product Change—Priority Mail and USPS Ground Advantage® 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:* November 21, 2024.

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 November 13, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail & USPS Ground Advantage® Contract 457 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025-379, K2025-377.

Sean Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024-27175 Filed 11-20-24; 8:45 am]
BILLING CODE 7710-12-P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 13, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 709 to Competitive Product List*. Documents

are available at www.prc.gov, Docket Nos. MC2025-387, K2025-385.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024-27183 Filed 11-20-24; 8:45 am]
BILLING CODE 7710-12-P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 14, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 727 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025-409, K2025-407.

Sean C. Robinson,
Attorney, Corporate and Postal Business Law.
[FR Doc. 2024-27213 Filed 11-20-24; 8:45 am]
BILLING CODE 7710-12-P

POSTAL SERVICE

Product Change—Priority Mail Express, Priority Mail, and USPS Ground Advantage® 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:* November 21, 2024.

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 November 14, 2024, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Express, Priority Mail & USPS Ground Advantage® Contract 716 to Competitive Product List*. Documents are available at www.prc.gov, Docket Nos. MC2025–396, K2025–394.

Sean C. Robinson,

Attorney, Corporate and Postal Business Law.

[FR Doc. 2024–27206 Filed 11–20–24; 8:45 am]

BILLING CODE 7710–12–P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–101643; File No. SR–MEMX–2024–43]

Self-Regulatory Organizations; MEMX LLC; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Amend the Fee Schedule Concerning Options Transaction Fees

November 15, 2024.

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 October 31, 2024, MEMX LLC (“MEMX” 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 Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization’s Statement of the Terms of Substance of the Proposed Rule Change

The Exchange is filing with the Commission a proposed rule change to amend the Exchange’s fee schedule applicable to Members³ pursuant to Exchange Rules 15.1(a) and (c). The Exchange proposes to implement the changes to the MEMX Options Fee Schedule (the “Options Fee Schedule”) pursuant to this proposal immediately. The text of the proposed rule change is provided in Exhibit 5.

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 amend the Options Fee Schedule to (1) amend the Transaction Fees section of the Options Fee Schedule to separate the existing transaction rebates and fees for executions of contracts made in the Market Maker capacity⁴ from transaction rebates and fees for executions of contracts made in the Professional,⁵ Firm,⁶ Away Market Maker,⁷ or Broker-Dealer⁸ capacities;⁹ (2) reduce the transaction rebate for executions of contracts where the underlying security of the applicable option is in the Penny Interval program (“Penny options”)¹⁰ which add liquidity to the MEMX Options Book¹¹ and which are made in the Professional, Firm, Away Market Maker, or Broker-Dealer capacities; and (3) reduce the transaction rebate for executions of contracts where the underlying security of the applicable option is not in the Penny Interval program (“Non-Penny

options”)¹² which add liquidity to the MEMX Options Book and which are made in the Professional, Firm, Away Market Maker, or Broker-Dealer capacities, each as further described below.

The Exchange first notes that it operates in a highly competitive market in which market participants can readily direct order flow to competing venues if they deem fee levels at a particular venue to be excessive or incentives to be insufficient. The Exchange is one of only 18 options venues to which market participants may direct their order flow. Based on publicly available information, no single options exchange has more than approximately 17.13% of the market share and currently the Exchange represents only approximately 3.29% of the market share.¹³ In such a low-concentrated and highly competitive market, no single options exchange, including the Exchange, possesses significant pricing power in the execution of option order flow. The Exchange believes that the ever-shifting market share among the exchanges from month to month demonstrates that market participants can shift order flow, discontinue, or reduce use of certain categories of products in response to fee changes. Accordingly competitive forces constrain the Exchange’s transaction fees, and market participants can readily trade on competing venues if they deem pricing levels at those other venues to be more favorable. The Exchange’s Fee Schedule sets forth standard rebates and rates applied per contract.

Amended Transaction Fees Section of the Options Fee Schedule To Separate the Transaction Rebates and Fees for Executions in the Market Maker Capacity From Executions in Other Non-Customer Capacities

Currently, the Exchange provides the same standard transaction rebates and fees for all executions in Market Maker, Professional, Firm, Away Market Maker, and Broker-Dealer capacities (each a “non-Customer” capacity). Specifically, the Exchange provides a standard transaction rebate of \$0.45 per contract for executions of Penny options (as defined above) in all non-Customer capacities which add liquidity to the MEMX Options Book, a standard transaction rebate of \$0.80 per contract for executions of non-Penny options (as defined above) in all non-Customer

⁴ MEMX Options provides fee qualifier “m” for market maker transactions. Fee qualifiers will be provided by the Exchange on the monthly invoices provided to Options Members.

⁵ MEMX Options provides fee qualifier “p” for professional transactions.

⁶ MEMX Options provides fee qualifier “f” for firm transactions.

⁷ MEMX Options provides fee qualifier “a” for away market maker transactions.

⁸ MEMX Options provides fee qualifier “b” for broker-dealer transactions.

⁹ Each of professional transactions, firm transactions, away market maker transactions, and broker-dealer transactions, and market maker transactions are referred to as “non-Customer” transactions.

¹⁰ MEMX Options provides Fee Code “P” for transactions in Penny options. Fee Codes are provided by the Exchange on the monthly invoices provided to Options Members.

¹¹ MEMX Options provides Fee Code “D” for transactions which add liquidity to the MEMX Options Book.

¹² MEMX Options provides Fee Code “N” for transactions in Non-Penny options.

¹³ Market share percentage calculated as of October 31, 2024. The Exchange receives and processes data made available through the consolidated data feeds (*i.e.*, OPRA).

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b–4.

³ See Exchange Rule 1.5(p).

capacities which add liquidity to the MEMX Options Book, a standard transaction fee of \$0.50 per contract for executions of Penny options in all non-Customer capacities which remove liquidity from the MEMX Options Book, and a standard transaction fee of \$1.21 per contract for executions of non-Penny options in all non-Customer capacities which remove liquidity from the MEMX Options Book. The Transaction Fees table within the Options Fee Schedule currently groups together all non-Customer capacities and shows that executions made in any non-Customer capacity receive the same standard transaction rebates and fees. Now, the Exchange proposes to provide different transaction rebates and fees for executions in the Market Maker capacity than are provided for other non-Customer capacities (namely, different than the transaction rebates and fees provided for executions in the Professional, Firm, Away Market Maker, and Broker-Dealer capacities). As such, the Exchange proposes to delete the rows “Professional (“p”)”, “Firm (“f”)”, “Away Market Maker (“a”)”, and “Broker-Dealer (“b”)” in the fourth row of the table and to create a new fifth row of the table that separates out the fees and rebates applicable to executions in the Market Maker capacity. The Exchange does not propose to change any of the fees charged or rebates provided for any executions in the Market Maker capacity, which remain in the fourth row of the table.

The Exchange proposes to make these changes in order to align its Options Fee Schedule with those of other national securities exchanges and to offer different transaction fees and rebates for executions made in the non-Customer, non-Market Maker capacity from transactions made in the Customer capacity and in the Market Maker capacity. The Exchange notes that the Options Fee Schedules of several national securities exchanges separate transaction fees and rebates for executions in the Market Maker capacity from the transaction fees and rebates for executions made in other non-Customer capacities.¹⁴ The Exchange also notes

that other national securities exchanges have established separate transaction fees and rebates for executions made in each non-Customer capacity.¹⁵

Reduced Transaction Rebate for Executions of Penny Options in the Professional, Firm, Away Market Maker, or Broker Dealer Capacities Which Add Liquidity to the MEMX Options Book

Currently, the Exchange provides a standard transaction rebate of \$0.45 per contract for executions of Penny options

executions of non-Penny options in the C2 Market-Maker capacity which add liquidity to C2, and a transaction fee of \$0.90 for executions of non-Penny options in the C2 Market-Maker capacity which remove liquidity from C2. The C2 Options Fee Schedule groups together transactions in the “Non-Customer, Non-Market Maker” capacities, which includes Professional Customer, Firm, Broker/Dealer, non-C2 Market-Maker, and Joint Back Office capacities. The C2 Options Fee Schedule provides a transaction rebate of \$0.36 for executions of Penny options in the Non-Customer, Non-Market Maker capacity which add liquidity to C2, a transaction fee of \$0.50 for Penny options executed in the Non-Customer, Non-Market Maker capacity which remove liquidity from C2, a transaction rebate of \$0.65 for executions of non-Penny options in the Non-Customer, Non-Market Maker capacity which add liquidity to C2, and a transaction fee of \$0.93 for executions of non-Penny options in the Non-Customer, Non-Market Maker capacity which remove liquidity from C2. *See also* the MIAX Pearl Options Fee Schedule, available at <https://www.miaxglobal.com/markets/us-options/pearl-options/fees>. The MIAX Pearl Options Fee Schedule separates executions in the “All MIAX Pearl Market Maker” capacity from executions in other non-Customer capacities (the “Non-Priority Customer, Firm, BD, and Non-MIAX Pearl Market Makers” origin capacities listed on the MIAX Pearl Options Fee Schedule. Specifically, the MIAX Pearl Options Fee Schedule sets forth a rebate ranging from \$0.25 to \$0.48 (based on tier) for executions of Penny options in the MIAX Pearl Market Maker capacity which add liquidity to MIAX Pearl where the contra side of the contract arises from a non-Priority Customer, a rebate ranging from \$0.22 to \$0.46 (based on tier) for executions of Penny options in the MIAX Pearl Market Maker capacity which add liquidity to MIAX Pearl where the contra side of the contract arises from a Priority Customer, a fee of \$0.50 for executions of Penny Options in the MIAX Pearl Market Maker capacity which remove liquidity from MIAX Pearl, a rebate ranging from \$0.30 to \$0.85 (based on tier) for executions of non-Penny options in the MIAX Pearl Market Maker capacity which add liquidity to MIAX Pearl, and a fee ranging from \$1.07 to \$1.10 (based on tier) for executions of non-Penny options in the MIAX Pearl Market Maker capacity which remove liquidity from MIAX Pearl.

¹⁵ See the Cboe BZX Options Fee Schedule, available at https://www.cboe.com/us/options/membership/fee_schedule/bzx/. The Cboe BZX Options Fee Schedule establishes separate ranges of transaction fees and rebates, based on tier, for executions made in the Customer, Professional, Firm/Broker-Dealer/Joint Back Office, Market Maker, and Away Market Maker capacities. *See also* the MIAX Options Fee Schedule, available at <https://www.miaxglobal.com/markets/us-options/miax-options/fees>. The MIAX Options Fee Schedule establishes separate ranges of transaction fees and rebates for executions made in the capacity of all MIAX Market Makers, Priority Customers, Public Customers that are not Priority Customers, Non-MIAX Market Makers, Non-Member Broker-Dealer, and Firm capacity.

(as defined above) in the Professional, Firm, Market Maker, Away Market Maker, and Broker Dealer capacities which add liquidity to the MEMX Options Book. Now, the Exchange proposes to reduce the standard transaction rebate on contracts for executions of Penny options made in non-Market Maker, non-Customer capacities which add liquidity to the MEMX Options Book from \$0.45 per contract to \$0.42 per contract. Specifically, the Exchange proposes to create a separate line on the Options Fee Schedule for executions made in the Professional, Firm, Away Market Maker, and Broker-Dealer capacities and to note on the Options Fee Schedule that the standard transaction rebates for executions of Penny options in such capacities which add liquidity to the MEMX Options Book is \$0.42 per contract.

The purpose of reducing the rebate is for business and competitive reasons as the Exchange believes that reducing such rebate would decrease the Exchange’s expenditures with respect to transaction pricing in a manner that is still consistent with the Exchange’s overall pricing philosophy of encouraging executions which add liquidity to the MEMX Options Book. As noted above, other national securities exchanges separate out the transaction rebate provided for executions in non-Customer, non-Market Maker capacities from those executions made in Customer capacity and executions made in the Market Maker capacity. The Exchange notes that the proposed reduced rebate is competitive with, or exceeds the transaction rebate provided by other national securities exchanges for executions in non-Customer, non-Market Maker capacities in Penny options which add liquidity.¹⁶

Reduced Transaction Rebate for Executions of Non-Penny Options in the Professional, Firm, Away Market Maker, or Broker Dealer Capacities Which Add Liquidity to the MEMX Options Book

Currently, the Exchange provides a standard transaction rebate of \$0.80 per contract for executions of non-Penny options (as defined above) in the Professional, Firm, Market Maker, Away Market Maker, and Broker Dealer capacities which add liquidity to the MEMX Options Book. Now, the Exchange proposes to reduce; the standard transaction rebate on contracts for the execution of non-Penny options made in non-Market Maker, non-Customer capacities which add liquidity

¹⁴ See the Cboe C2 Options Fee Schedule, available at https://www.cboe.com/us/options/membership/fee_schedule/ctwo/. The Cboe C2 Options Fee Schedule separates executions in the C2 Market-Maker capacity from executions in other non-Customer capacities (the “Non-Customer, Non-Market-Maker” capacity on the C2 Options Fee Schedule). Specifically, the C2 Options Fee Schedule provides a transaction rebate of \$0.41 for executions of Penny options in the C2 Market-Maker capacity which add liquidity to C2, a transaction fee of \$0.50 for Penny options executed in the C2 Market-Maker capacity which remove liquidity from C2, a transaction rebate of \$0.73 for

¹⁶ See *infra* note 22.

to the MEMX Options Book from \$0.80 per contract to \$0.72 per contract. Specifically, the Exchange proposes to create a separate line on the Options Fee Schedule for executions made in the Professional, Firm, Away Market Maker, and Broker-Dealer capacities and to note on the Options Fee Schedule that the standard transaction rebates for execution of non-Penny options in such capacities which add liquidity to the MEMX Book is \$0.72 per contract.

The purpose of reducing the rebate is for business and competitive reasons as the Exchange believes that reducing such rebate would decrease the Exchange's expenditures with respect to transaction pricing in a manner that is still consistent with the Exchange's overall pricing philosophy of encouraging executions which add liquidity to the MEMX Options Book. As discussed above, other national securities exchanges separate out the transaction rebate for non-Customer, non-Market Maker capacities from those executions made in the Customer capacity. The Exchange notes that the proposed reduced rebate is competitive with, or exceeds the transaction rebate provided by other national securities exchanges for executions in non-Customer, non-Market Maker capacities in non-Penny options which add liquidity.¹⁷

2. Statutory Basis

The Exchange believes that its proposal to amend its Options Fee Schedule is consistent with the provisions of Section 6 of the Act,¹⁸ in general, and with Sections 6(b)(4) and 6(b)(5) of the Act,¹⁹ in particular, in that it provides for the equitable allocation of reasonable dues, fees and other charges among Options Members and other persons using its facilities. The Exchange also believes the proposal furthers the objectives of Section 6(b)(5) of the Act in that it is designed to promote just and equitable principles of trade, 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, issuers, brokers, or dealers.

MEMX Options operates in a highly fragmented and competitive market in which market participants can readily direct order flow to competing venues if they deem fee levels at a particular venue to be excessive or incentives to be

insufficient, and the Exchange represents only a small percentage of the overall market. The Commission and the courts have repeatedly expressed their preference for competition over regulatory intervention in determining prices, products, and services in the securities markets. In Regulation NMS, the Commission highlighted the importance of market forces in determining prices and SRO revenues and also recognized that current regulation of the market system "has been remarkably successful in promoting market competition in its broader forms that are most important to investors and listed companies."²⁰

Accordingly, competitive forces constrain the Exchange's transaction fees and rebates, and market participants can readily trade on competing venues if they deem pricing levels at those other venues to be more favorable. The Exchange believes the proposal reflects a reasonable and competitive pricing structure which the Exchange believes would promote price discovery and enhance liquidity and market quality on the Exchange to the benefit of all Members and market participants.

The Exchange believes that it is reasonable and equitable to provide different transaction rebates and fees for executions in non-Customer, non-Market Maker capacities, than for executions in the Customer capacity or in the Market Maker capacity. The Exchange believes that providing different rebates and assessing different fees for executions in non-Customer, non-Market Maker capacities is equitable and not unfairly discriminatory because each Member who executes contracts in such capacities will be assessed the respective fees or provided the respective rebates. As noted above, other national securities exchanges separate transaction fees and rebates for executions in the Market Maker capacity from the transaction fees and rebates for executions made in other non-Customer capacities.²¹

The Exchange believes that the proposed changes to reduce the rebate for executions of Penny options made in non-Market Maker, non-Customer capacities which add liquidity to the MEMX Options Book from \$0.45 per contract to \$0.42 per contract, and to reduce the rebate for executions of non-Penny options made in non-Market Maker, non-Customer capacities which add liquidity to the MEMX Options

Book from \$0.80 per contract to \$0.72 per contract, are reasonable because such changes are designed to decrease the Exchange's expenditures with respect to its transaction pricing in a manner that is still consistent with the Exchange's overall pricing philosophy of encouraging executions which add liquidity to the MEMX Options Book in both Penny and non-Penny options. The Exchange believes that the proposed changes are equitable and not unfairly discriminatory because the reduced rebates will apply to all market participants who make executions of Penny options or non-Penny options, respectively, in non-Market Maker, non-Customer capacities which add liquidity to the MEMX Options Book.

The Exchange believes the proposed reduced rebate for executions of Penny options made in non-Market Maker, non-Customer capacities which add liquidity to the MEMX Options Book is appropriate because it exceeds or is comparable to, and competitive with, the rebates provided by other exchanges for executions of Penny options made in non-Market Maker and non-Customer capacities which add liquidity.²² Similarly, the Exchange believes that the proposed reduced rebate for executions of non-Penny options made in non-Market Maker, non-Customer capacities which add liquidity to the MEMX Options Book is appropriate because it exceeds or is comparable to, and competitive with, the rebates offered by other national securities exchanges on Options platforms for executions of non-Penny options made in non-Market Maker and non-Customer capacities which add liquidity.²³ The

²² For example, the Cboe C2 Options Exchange offers a rebate of \$0.36 for transaction in non-Customer, non-Market Maker capacities in Penny options which add liquidity to the C2 Book. See the Cboe C2 Options Fee Schedule, available at https://www.cboe.com/us/options/membership/fee_schedule/ctwo/. The MIAx Pearl Options Exchange offers rebates ranging from \$0.22 to \$0.48 for transactions in non-Priority Customer, Firm, Broker-Dealer, and Non-MIAx Pearl Market Maker capacities in Penny options which add liquidity to the MIAx Pearl Options Book. See the MIAx Pearl Options Fee Schedule, available at <https://www.miaxglobal.com/markets/us-options/pearl-options/fees>.

²³ For example, the Cboe C2 Options Exchange offers a rebate of \$0.65 for transaction in non-Customer, non-Market Maker capacities in non-Penny options which add liquidity to the C2 Book. See the Cboe C2 Options Fee Schedule, available at https://www.cboe.com/us/options/membership/fee_schedule/ctwo/. The MIAx Pearl Options Exchange offers rebates ranging from \$0.85 to \$0.30 for transactions in non-Priority Customer, Firm, Broker-Dealer, and Non-MIAx Pearl Market Maker capacities in non-Penny options which add liquidity to the MIAx Pearl Options Book. See the MIAx Pearl Options Fee Schedule, available at <https://www.miaxglobal.com/markets/us-options/pearl-options/fees>.

¹⁷ See *infra* note 23.

¹⁸ 15 U.S.C. 78f.

¹⁹ 15 U.S.C. 78f(b)(4) and (5).

²⁰ Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496, 37499 (June 29, 2005).

²¹ See *supra* note 14.

Exchange believes that the proposed reduced rebates which add liquidity to the MEMX Book in Penny and non-Penny options in non-Market Maker, non-Customer capacities will provide right-sized incentives which will continue to attract non-Market Maker, non-Customer order flow to the Exchange.

For the reasons discussed above, the Exchange submits that its proposed change to the Options Transaction Fee Schedule satisfies the requirements of Sections 6(b)(4) and 6(b)(5) of the Act²⁴ in that it provides for the equitable allocation of reasonable dues, fees and other charges among its Members and other persons using its facilities and are not designed to unfairly discriminate between customers, issuers, brokers, or dealers. As described more fully below in the Exchange's statement regarding burden on competition, the Exchange believes that its transaction pricing is subject to significant competitive forces, and that the proposed rebate described herein is appropriate to address such forces.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposal will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. Instead, as discussed above, the proposal is intended to decrease the Exchange's expenditures, generate additional revenue with respect to its transaction pricing, incentivize market participants to direct additional order flow to the MEMX Options platform, which the Exchange believes would promote price discovery and enhance liquidity and market quality on the Exchange to the benefit of all Members and market participants. Further, MEMX Options' proposed modified transaction fees and rebates exceed or are comparable to the transaction fees and rebates assessed by other options exchanges.²⁵ As a result, the Exchange believes that the proposal furthers the Commission's goal in adopting Regulation NMS of fostering competition among orders, which promotes "more efficient pricing of individual stocks for all types of orders, large and small."²⁶

Intramarket Competition

The Exchange does not believe that the proposed rule change will impose any burden on intramarket competition that is not necessary or appropriate in

furtherance of the purposes of the Act because the proposed rebate applies equally to all Options Members. The proposed pricing structure is intended to decrease the Exchange's expenditures and generate additional revenue with respect to its transaction pricing, in a manner that is comparable with the rebates and fees offered by other exchanges for executions in the non-Customer, non-Market Maker capacities in both Penny and non-Penny options. The Exchange believes that the proposed reduced rebates are consistent with the Exchange's overall pricing philosophy. As the proposed rebate is equally applicable to all market participants, the Exchange does not believe there is any burden on intramarket competition.

Intermarket Competition

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. To the contrary, the Exchange believes that the proposed pricing structure will increase competition and is intended to provide rebates for executions in non-Customer, non-Market Maker capacities which add liquidity to the MEMX Options book which are comparable to those offered by other exchanges, which the Exchange believes will help to encourage Members to send orders to the Exchange to the benefit of all Exchange participants. As the proposed rebate is equally applicable to all market participants, the Exchange does not believe there is any burden on intramarket competition.

Additionally, the Commission has repeatedly expressed its preference for competition over regulatory intervention in determining prices, products, and services in the securities markets. Specifically, in Regulation NMS, the Commission highlighted the importance of market forces in determining prices and SRO revenues and, also, recognized that current regulation of the market system "has been remarkably successful in promoting market competition in its broader forms that are most important to investors and listed companies."²⁷ The fact that this market is competitive has also long been recognized by the courts. In *NetCoalition v. SEC*, the D.C. Circuit stated as follows: "[n]o one disputes that competition for order flow is 'fierce.' . . . As the SEC explained, '[i]n the U.S. national market system, buyers and sellers of securities, and the broker-dealers that act as their order-routing

agents, have a wide range of choices of where to route orders for execution'; [and] 'no exchange can afford to take its market share percentages for granted' because 'no exchange possesses a monopoly, regulatory or otherwise, in the execution of order flow from broker dealers'"²⁸ Accordingly, the Exchange does not believe its proposed pricing changes impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act.

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

The foregoing rule change has become effective pursuant to Section 19(b)(3)(A)(ii) of the Act²⁹ and Rule 19b-4(f)(2)³⁰ thereunder.

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 (<https://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include file number SR-MEMX-2024-43 on the subject line.

²⁸ *NetCoalition v. SEC*, 615 F.3d 525, 539 (D.C. Cir. 2010) (quoting Securities Exchange Act Release No. 59039 (December 2, 2008), 73 FR 74770, 74782-83 (December 9, 2008) (SR-NYSE-2006-21)).

²⁹ 15 U.S.C. 78s(b)(3)(A)(ii).

³⁰ 17 CFR 240.19b-4(f)(2).

²⁴ 15 U.S.C. 78f(b)(4) and (5).

²⁵ See *supra* notes 22 and 23.

²⁶ See *supra* note 20.

²⁷ See *supra* note 20.

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–MEMX–2024–43. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's internet website (<https://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street NE, Washington, DC 20549, on official business days between the hours of 10 a.m. and 3 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. Do not include personal identifiable information in submissions; you should submit only information that you wish to make available publicly. We may redact in part or withhold entirely from publication submitted material that is obscene or subject to copyright protection. All submissions should refer to file number SR–MEMX–2024–43 and should be submitted on or before December 12, 2024.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.³¹

Stephanie J. Fouse,
Assistant Secretary.

[FR Doc. 2024–27222 Filed 11–20–24; 8:45 am]

BILLING CODE 8011–01–P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–101635; File No. SR–NYSENAT–2024–31]

Self-Regulatory Organizations; NYSE National, Inc.; Notice of Filing and Immediate Effectiveness of Proposed Rule Change To Amend NYSE National Rule 7.13 To Remove References to the Chair of the Board and a Cross-Reference to NYSE National Rule 5.5

November 15, 2024.

Pursuant to Section 19(b)(1) ¹ of the Securities Exchange Act of 1934 (“Act”) ² and Rule 19b–4 thereunder, ³ notice is hereby given that on November 8, 2024, NYSE National, Inc. (“NYSE National” or the “Exchange”) 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 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 amend NYSE National Rule 7.13 to remove references to the Chair of the Board and a cross reference. 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 amend NYSE National Rule 7.13 (Trading Suspensions) to remove references to the Chair of the Board of Directors of the Exchange (“Board”) and a cross reference.

Under current Rule 7.13,⁴ except as otherwise stated in Rule 5.5, the Chair of the Board or the President of the Exchange, or the officer designee of the Chair or the President, has the power to suspend trading on any and all securities traded on the Exchange whenever in his or her opinion such suspension would be in the public interest. No such action shall continue longer than two days or as soon thereafter as a quorum of Directors can be assembled, unless the Board approves the continuation of such suspension.

The Exchange believes that it is advisable to remove the cross-reference to Rule 5.5 in the current rule, as there is no Exchange Rule 5.5. Although a Rule 5.5 was proposed at the same time as the current Rule 7.13, Rule 5.5 was removed from the relevant filing in an amendment.⁵ The cross-reference is therefore meaningless.

The Exchange believes that it is advisable to remove the references to the Chair in Rule 7.13 because the Chair has not acted under Rule 7.13 since the rule was adopted and the Exchange does not anticipate that an independent or non-employee Chair will have sufficient involvement in the day-to-day

⁴ The current text of Rule 7.13 was adopted in 2018. See Securities Exchange Act Release No. 83289 (May 17, 2018), 83 FR 23968 (May 23, 2018) (SR–NYSENAT–2018–02) (Notice of Filing of Amendment No. 1 and Order Granting Accelerated Approval of a Proposed Rule Change, as Amended by Amendment No. 1, To Support the Re-Launch of NYSE National, Inc. on the Pillar Trading Platform).

⁵ Proposed Rule 5.5 contained rules for the delisting of investment company units (an exchange traded product) and listed the rules pursuant to which the Exchange may have determined that it was appropriate to either suspend dealings in and/or remove securities from listing. Proposed Rule 5.5 was removed in an amendment of the relevant filing. See Exhibit 1 to SR–NYSENAT–2018–02 (February 21, 2018) (available at <https://www.nyse.com/publicdocs/nyse/markets/nyse-national/rule-filings/filings/2018/NYSENat-2018-02,%20Re-file.pdf>), and Amendment No. 1 to SR–NYSENAT–2018–02 (May 16, 2018), at 10 (stating that “in this Amendment No. 1, the Exchange will not be proposing rules relating to the listing of Exchange Traded Products in Rule[] 5”) (available at <https://www.nyse.com/publicdocs/nyse/markets/nyse-national/rule-filings/filings/2018/NYSENat-2018-02,%20Am.1.pdf>). See also 83 FR 23968, *supra* note 4.

¹ 15 U.S.C. 78s(b)(1).

² 15 U.S.C. 78a.

³ 17 CFR 240.19b–4.

³¹ 17 CFR 200.30–3(a)(12).

operations of the Exchange to act under the Rule.

Moreover, the proposed changes to Rule 7.13 would make it substantially similar to the rule text governing Trading Suspensions currently in place on the Exchange's affiliate the New York Stock Exchange LLC ("NYSE") in its Rule 7.13.⁶ The proposed changes to Rule 7.13 therefore would harmonize the Exchange's rules with those of its affiliate NYSE and provide for consistent authority to suspend trading across the Exchange and the NYSE.

To effectuate the change, the first sentence of Rule 7.13 would be amended as follows (proposed deletions bracketed, proposed additions italicized):

[Except as otherwise stated in Rule 5.5, the Chair of the Board or t]The President, or the officer designee of [the Chair or] the President, shall have the power to suspend trading in any and all securities traded on the Exchange whenever in his or her opinion such suspension would be in the public interest.

The requirement that no such action continue longer than two days or as soon thereafter as a quorum of Directors can be assembled, unless the Board approves the continuation of such suspension, would remain. No other changes to Rule 7.13 are proposed.

2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with Section 6(b) of the Act,⁷ in general, and furthers the objectives of Section 6(b)(1)⁸ in particular, in that it enables the Exchange to be so organized as to have the capacity to be able to carry out the purposes of the Act and to comply, and to enforce compliance by its exchange members and persons associated with its exchange members, with the provisions of the Act, the rules and regulations thereunder, and the rules of the Exchange. The Exchange also believes that the proposed rule change is consistent with Section 6(b)(5) of the Act,⁹ 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, 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. In addition, the Exchange believes that the proposed rule change is designed to provide fair procedures for the denial of membership to any person seeking Exchange membership, the barring of any person from becoming associated with a member, and the prohibition or limitation by the Exchange of any person with respect to access to services offered by the Exchange or a member thereof, consistent with the objectives of Section 6(b)(7)¹⁰ and Section 6(d)(2)¹¹ of the Act.

The proposed amendment would enable the Exchange to continue to be so organized as to have the capacity to carry out the purposes of the Act, thereby furthering the objectives of Section 6(b)(1)¹² of the Act. Amending Rule 7.13 to remove the references to the Chair would contribute to the orderly operation of the Exchange, as it would make Rule 7.13 more accurately reflect current practice, as the Chair has not acted under Rule 7.13 since the rule was adopted. It would also reflect the fact that the Exchange does not anticipate that an independent or non-employee Chair will have sufficient involvement in the day-to-day operations of the Exchange to act under the Rule. At the same time, the Chair would continue to have an oversight role, since the requirement would remain that no suspension of trading continue longer than two days or as soon thereafter as a quorum of Directors can be assembled, unless the Board approves the continuation of such suspension. Given that, the Board—including the Chair—would continue to oversee the length of time any suspension of trading made under the Rule would be in effect.

Because amended Rule 7.13 would more accurately reflect current practice while still giving the Chair an oversight role, the Exchange believes that the proposed change would be beneficial to both investors and the public interest, thereby promoting the maintenance of a fair and orderly market and the protection of investors and the public interest consistent with Section 6(b)(5) of the Act.¹³ Moreover, the Exchange believes that the proposed change would remove impediments to and perfect the mechanism of a free and open market and a national market

system, and in general, protect investors and the public interest because substantially similar authority to suspend trading already exists on the Exchange's affiliate NYSE, and therefore is not novel. At the same time, amending Rule 7.13 to remove a meaningless cross reference would make it more clear, promoting clarity and transparency and protecting investors and the public interest.

For the same reasons, the Exchange believes that the proposed changes would continue to provide fair procedures for the prohibition or limitation by the Exchange of any person with respect to access to services offered by the Exchange consistent with the objectives of Section 6(b)(7)¹⁴ and Section 6(d)(2)¹⁵ of the Act.

For these reasons, the Exchange believes that the proposal is consistent with the Act.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange believes that the proposal will not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of Section 6(b)(8) of the Act.¹⁶ The proposed rule change is not intended to address competitive issues but rather is concerned solely with amending Rule 7.13 so that it removes a meaningless cross reference, more accurately reflects current practice and is substantially similar to NYSE Rule 7.13.

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 Act¹⁷ and subparagraph (f)(6) of Rule 19b-4 thereunder.¹⁸

¹⁴ 15 U.S.C. 78f(b)(7).

¹⁵ 15 U.S.C. 78f(d)(2).

¹⁶ 15 U.S.C. 78f(b)(8).

¹⁷ 15 U.S.C. 78s(b)(3)(A).

¹⁸ 17 CFR 240.19b-4(f)(6). In addition, Rule 19b-4(f)(6)(iii) requires a self-regulatory organization to

⁶ The differences are that the NYSE rule uses "CEO" instead of "President" and "trading on the Exchange" instead of "traded on the Exchange." See Securities and Exchange Act Release No. 101477 (October 30, 2024), 89 FR 87917 (November 5, 2024) (SR-NYSE-2024-58) (Order Approving a Proposed Rule Change to Amend NYSE Rule 7.13).

⁷ 15 U.S.C. 78f(b).

⁸ 15 U.S.C. 78f(b)(1).

⁹ 15 U.S.C. 78f(b)(5).

¹⁰ 15 U.S.C. 78f(b)(7).

¹¹ 15 U.S.C. 78f(d)(2).

¹² 15 U.S.C. 78f(b)(1).

¹³ 15 U.S.C. 78f(b)(5).

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 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 (<https://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include file number SR-NYSE-NAT-2024-31 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-NAT-2024-31. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's internet website (<https://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street NE, Washington, DC 20549, on official

business days between the hours of 10 a.m. and 3 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. Do not include personal identifiable information in submissions; you should submit only information that you wish to make available publicly. We may redact in part or withhold entirely from publication submitted material that is obscene or subject to copyright protection. All submissions should refer to file number SR-NYSE-NAT-2024-31 and should be submitted on or before December 12, 2024.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.¹⁹

Stephanie J. Fouse,

Assistant Secretary.

[FR Doc. 2024-27216 Filed 11-20-24; 8:45 am]

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-101644; File No. PCAOB-2024-05]

Public Company Accounting Oversight Board; Notice of Filing of Proposed Rules on Constructive Requests To Withdraw From Registration

November 15, 2024.

Pursuant to Section 107(b) of the Sarbanes-Oxley Act of 2002 ("Sarbanes-Oxley," or the "Act"), notice is hereby given that on Thursday, November 14, 2024, the Public Company Accounting Oversight Board (the "Board" or the "PCAOB") filed with the Securities and Exchange Commission (the "Commission" or the "SEC") the proposed rules described in Items I and II below, which items have been prepared by the Board. The Commission is publishing this notice to solicit comments on the proposed rules from interested persons.

I. Board's Statement of the Terms of Substance of the Proposed Rules

On November 14, 2024, the Board adopted *Constructive Requests To Withdraw from Registration* ("proposed rules"). The text of the proposed rules appears in Exhibit A to the SEC Filing Form 19b-4 and is available on the Board's website at <https://pcaobus.org/about/rules-rulemaking/rulemaking-dockets/docket-054> and at the Commission's Public Reference Room.

II. Board's Statement of the Purpose of, and Statutory Basis for, the Proposed Rules

In its filing with the Commission, the Board included statements concerning the purpose of, and basis for, the proposed rules and discussed any comments it received on the proposed rules. The text of these statements may be examined at the places specified in Item IV below. The Board prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements. In addition, to the extent that Section 103(a)(3)(C) of the Act applies to the proposed rules, the Board is requesting that the Commission approve the proposed rules, pursuant to that provision, for application to audits of emerging growth companies ("EGCs"), as that term is defined in Section 3(a)(80) of the Securities Exchange Act of 1934 ("Exchange Act"). The Board's request is set forth in section D.

A. Board's Statement of the Purpose of, and Statutory Basis for, the Proposed Rules

(a) Purpose

To further enhance the PCAOB's registration program, the Board adopted an amendment to its rule regarding withdrawals from registration. The amendment establishes a new procedural mechanism that will enable the Board to address situations in which a registered firm has ceased to exist, is nonoperational, or no longer wishes to remain registered, as demonstrated by its failures to file annual reports (PCAOB Form 2, *Annual Report*) and pay annual fees for at least two consecutive reporting years. Until now, a firm could be removed from PCAOB registration only if the Board either (1) authorized a withdrawal from registration based on firm-initiated withdrawal request or (2) imposed a disciplinary sanction revoking the firm's registration. The amendment the Board adopted introduces a third procedural mechanism for removing a firm from PCAOB registration. It builds on the existing framework of firm-initiated withdrawal requests under PCAOB Rule 2107, *Withdrawal from Registration*, by creating a process that treats consecutive delinquencies as a constructive request from a firm for leave to withdraw from registration. New paragraph (h) ("*Constructive Withdrawal Requests*") of Rule 2107 will allow the Board, under certain conditions, to update its registration records by (1) treating a firm's failure both to file annual reports and to pay annual fees for at least two consecutive

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.

¹⁹ 17 CFR 200.30-3(a)(12).

reporting years as a constructive request by the firm for leave to withdraw from registration, and (2) deeming the firm's registration withdrawn.

If approved by the Commission, Rule 2107(h) will take effect initially for annual reports and annual fees that are due in 2025, meaning that a registered firm that does not file an annual report and does not pay an annual fee for both the 2025 and 2026 reporting years could be deemed withdrawn from registration under Rule 2107(h) beginning in the fall of 2026.

See Exhibit 3 for additional discussion of the purpose of this project.

(b) Statutory Basis

The statutory basis for Rule 2107(h) is Title I of the Act, and, specifically, Section 102 of the Act (registration) and Sections 101(c)(1), (c)(5), (f)(6), and (g)(1) of the Act (duties, powers, and rules of the Board). Rule 2107(h) directly relates to the Board's statutory duties and the purposes for its establishment.

B. Board's Statement on Burden on Competition

Not applicable. The Board's consideration of the economic impacts of the proposed rules is discussed in section D below.

C. Board's Statement on Comments on the Proposed Rules Received From Members, Participants or Others

The Board initially released the proposed rules for public comment in PCAOB Release No. 2024-001 (February 27, 2024).¹ The Board received 18 written comment letters relating to its initial proposed rules. See Exhibits 2(a)(B) and 2(a)(C). The Board adopted its proposed amendment to Rule 2107 with modifications to address comments it received. The Board is continuing to consider next steps relating to other aspects of the initial proposed rules that the Board did not adopt on November 14, 2024. The Board has carefully considered comments received on proposed Rule 2107(h). The Board's response to the comments it received, and the changes it made to the initial proposed rules in response to the comments received, are discussed below.

Background

Each year, a registered firm must file an annual report with the Board and pay

an annual fee to the Board.² Despite repeated reminders, a consistent group of firms neither files annual reports nor pays annual fees each year. The PCAOB's Registration staff devotes resources each year to sending multiple communications to these firms, but these efforts have repeatedly failed to yield the required annual reports and annual fees from this persistent group of delinquent firms. As of August 31, 2024, data show that 80 registered firms did not file annual reports and did not pay annual fees for both the 2022 and 2023 reporting years.³

To be clear, the 80 registered firms in question were not merely *late* in filing their annual reports and paying their annual fees by the respective due dates. These firms have not filed annual reports and have not paid annual fees *at all* for both the 2022 and 2023 reporting years. It is possible that many of these firms either may no longer exist or may not understand that they remain registered with the PCAOB, given their consecutive failures to file annual reports and pay annual fees. The PCAOB staff believes that these firms include, for example, sole proprietorships that remain registered even though the sole proprietor has died; firms that registered with the Board years ago but now appear to be defunct; and small firms, often in foreign countries, that cannot be reached through the primary contact person designated by the firm.⁴ Additionally, the PCAOB staff believes that none of these 80 firms has recently

issued an audit report for an issuer.⁵ For 79 of these firms, there is no indication that they have recently played a substantial role in issuer audits.⁶ This suggests that, with respect to the vast majority of consecutively delinquent firms—79 of the 80 identified firms—there is no indication of recent engagement in services requiring PCAOB registration.

The presence of consecutively delinquent firms on the Board's list of registered firms hinders several regulatory objectives, including its ability to maintain an accurate public record of registered public accounting firms in operation that wish to remain registered; to ensure that the information required on annual reports is being reported to the public and the PCAOB; to collect mandatory annual fees; and to efficiently use PCAOB staff time and resources. Before now, the PCAOB has lacked an effective procedural mechanism to deal with such firms. The prior framework offered only two methods of removing a firm from PCAOB registration: (1) the Board authorizing a withdrawal based on a firm-initiated withdrawal request,⁷ and

⁵ Based on Audit Analytics data, PCAOB staff analyzed audit reports issued between January 1, 2021, and August 31, 2024, which covers the 2022 and 2023 reporting years. The terms "audit," "audit report," "issuer," "broker," and "dealer" are used as defined in the Act and PCAOB Rule 1001, *Definitions of Terms Employed in Rules*. The term "broker-dealer" refers to entities registered with the SEC as either a "broker" or a "dealer," or both.

⁶ Without a firm's own Form 2 reporting, it is challenging for the PCAOB staff to conclusively determine whether a firm has played a substantial role in preparing or furnishing an audit report for an issuer or broker-dealer. Based on a review of Form AP data, the PCAOB staff noted that one of the 80 firms that did not file annual reports and did not pay annual fees for both the 2022 and 2023 reporting years was reported by another registered firm as potentially playing a substantial role in issuer audit reports issued in 2022, 2023, and 2024. However, the inferences that the PCAOB can draw from this are limited by the constraints inherent in Form AP reporting: (1) only the firm that issues the audit report to the issuer files Form AP, and it alone identifies "other accounting firm" participants and the audit hours attributable to those firms; and (2) for purposes of Form AP reporting, an "other accounting firm" is categorized as a participant in an issuer audit if any of its principals or professional employees performed work on the audit that was supervised by the firm that issues the audit report, irrespective of whether the "other accounting firm" itself participated in the audit. Therefore, after reviewing available data, the PCAOB staff has not found any indications that 79 of the 80 firms have recently engaged in any services requiring PCAOB registration, and the participation of the remaining firm in such services remains uncertain due to the characteristics of Form AP reporting.

⁷ Pursuant to PCAOB rules, subject to certain limitations, a firm's registration with the Board is deemed withdrawn if the firm requests leave to withdraw by filing Form 1-WD, *Request for Leave to Withdraw from Registration*, and (i) the Board grants leave to withdraw, or (ii) the Board does not, within 60 days of receipt of the request, order that

¹ See *Proposals Regarding False or Misleading Statements Concerning PCAOB Registration and Oversight and Constructive Requests to Withdraw from Registration*, PCAOB Release No. 2024-001 (Feb. 27, 2024) ("Proposing Release").

² See PCAOB Rule 2200, *Annual Report*; PCAOB Rule 2202, *Annual Fee*.

³ Figure 3 of the Proposing Release reflected 87 registered firms, as of December 31, 2023, that did not file annual reports and did not pay annual fees for both the 2022 and 2023 reporting years. By August 31, 2024, this number decreased to 80 firms. Five of the original 87 firms withdrew from registration in 2024, removing them from PCAOB registration as of August 31, 2024. Based on the PCAOB staff's analysis of data from Audit Analytics and PCAOB Form AP, *Auditor Reporting of Certain Audit Participants*, there is no indication that these five firms have performed any services for issuers requiring PCAOB registration between January 1, 2021, and August 31, 2024. Additionally, two of the original 87 firms addressed their prior noncompliance by filing their annual reports and paying their annual fees for the 2022 and 2023 reporting years after the due dates had passed, thus these firms are also no longer included in the analysis. Although five firms withdrew from registration and two firms are no longer delinquent, it is difficult to attribute this behavior directly to the Proposing Release. Moreover, this subset of firms is small compared to the 92 percent of firms (80 out of 87) that continue to exhibit a pattern of delinquency spanning at least two consecutive reporting years.

⁴ See Figure 1 for a breakdown by firm type of the 80 firms that did not file annual reports and did not pay annual fees for the 2022 and 2023 reporting years.

(2) the Board instituting formal disciplinary proceedings that could lead to the revocation of the firm's registration due to violations of laws, rules, or standards that the Board is charged with enforcing.⁸

As discussed below, the Board believes a "constructive withdrawal request" mechanism will provide the PCAOB with a reasonable, efficient, and equitable way of identifying and removing from registration firms that have ceased to exist, are nonoperational, or no longer wish to remain registered. After furnishing a consecutively delinquent firm with written notice and 60 days to contact the Registration staff, the new provision of the PCAOB's rule relating to withdrawal from registration permits the Board to treat a firm's failure both to file annual reports and to pay annual fees for at least two consecutive reporting years as a constructive request by the firm for leave to withdraw from registration, and to deem the firm's registration withdrawn. As indicated above, updating the PCAOB's registration records through this process will promote the quality of information by removing from registration firms that have ceased to exist, are nonoperational, or no longer wish to remain registered.

Discussion

The PCAOB added a provision to an existing rule to advance the PCAOB's investor protection mission and to enhance the Board's registration program by creating a more accurate public record of registered public accounting firms in operation that wish to remain registered.

Specifically, the PCAOB adopted an amendment to an existing rule to add a new provision that will permit the Board to deem a firm's registration withdrawn—under specified conditions and subject to enumerated safeguards—if the firm fails to file its annual reports and to pay its annual fees for at least two consecutive reporting years. This dual condition, involving the lack of *both* annual report submission *and* annual fee payment over two consecutive reporting years, is designed to identify and remove from registration firms that have ceased to exist, are nonoperational, or no longer wish to remain registered.

withdrawal of the firm's registration be delayed. See Rule 2107(a).

⁸ Under Section 105(c)(4) and (5) of the Act and PCAOB Rule 5300, *Sanctions*, the Board can revoke a firm's registration as a sanction in a Board disciplinary proceeding under certain circumstances. See Rule 1001(r)(ii) (defining "revocation" as "a permanent disciplinary sanction terminating a firm's registration").

Until now, the PCAOB has had no effective and efficient procedural mechanism to withdraw consecutively delinquent firms from registration. As noted above, under the Board's current rules, there are only two ways for a registered firm to depart from PCAOB registration. One is a firm-initiated withdrawal: a firm seeking to withdraw from registration can file a form requesting leave to withdraw.⁹ The other is revocation: when appropriate, a firm's registration can be revoked as a sanction in a Board disciplinary proceeding upon a finding of intentional, reckless, or repeatedly negligent conduct.¹⁰

Withdrawal and revocation often suffice as methods for managing the PCAOB's registration records, but each of these paths depends on some form of active engagement with the registered firm. They begin either with the firm filing a withdrawal request or with the PCAOB's Office of the Secretary providing notice of an Order Instituting Disciplinary Proceedings ("OIP") to the firm.¹¹ In some circumstances, however, such as when a firm that has ceased to exist or is nonoperational or for some other reason consecutively fails to file its annual reports and pay its annual fees, it may not be possible to actively engage with that registered firm. To account for such situations, the Board believes there should be a procedural mechanism for the Board to update the PCAOB's registration records.

Building on the Board's current withdrawal framework in Rule 2107, the

⁹ Rule 2107 provides that a registered firm may request leave to withdraw from registration at any time by filing Form 1-WD. Withdrawal, however, is not immediately effective; the Board may order that withdrawal be delayed while the Board carries out an inspection, investigation, or disciplinary proceeding. See Rule 2107(d). After a firm's registration is withdrawn, the firm is permitted to participate in audits of issuers or broker-dealers and otherwise associate with registered firms only so long as the withdrawn firm's participation falls below the "substantial role" threshold. See Rule 1001(p)(iii). A firm that withdraws from registration and later decides that it wishes to re-register must reapply for registration by filing a new PCAOB Form 1, *Application for Registration*.

¹⁰ After the Board revokes a firm's registration, the firm is not permitted to participate in audits involving issuers or broker-dealers or otherwise associate with a registered firm; even participation that falls below the "substantial role" threshold would violate the order revoking the firm's registration. See *Rules on Investigations and Adjudications*, PCAOB Release No. 2003-015 (Sept. 29, 2003), at A2-7 (a revocation "prohibit[s] the firm from preparing or issuing, or participating in the preparation or issuance of, audit reports"). The revocation remains in operation unless and until the Board approves a new application for registration submitted by the firm. See generally paragraphs (a) and (c) of PCAOB Rule 5302, *Applications for Relief From, or Modification of, Revocations and Bars*.

¹¹ See generally PCAOB Rule 5201, *Notification of Commencement of Disciplinary Proceedings*.

core premise of Rule 2107(h) is that a two-year period of noncompliance with the PCAOB's annual reporting and annual payment requirements, following warnings of these omissions, can reasonably be interpreted as a constructive request by the firm for leave to withdraw from registration, provided that appropriate procedural safeguards are in place. Often, a firm's failure to file an annual report and pay an annual fee is the first indication that the firm may be defunct or no longer wishes to remain registered. Therefore, the Board believes that, when a firm fails to submit annual reports and to pay annual fees for at least two consecutive reporting years, it is reasonable to infer that the firm has ceased to exist, is no longer operational, or no longer wishes to remain registered with the PCAOB.

As a withdrawal-based mechanism, Rule 2107(h) is not a disciplinary proceeding or disciplinary process. Instead of resulting in a disciplinary sanction (like a revocation), Rule 2107(h) would result in withdrawal of the firm from registration. Unlike a revocation, a withdrawal under Rule 2107(h) would not be reported as a disciplinary sanction to the Commission, state regulatory authorities, foreign accountancy licensing boards, or the public.¹² A withdrawal under Rule 2107(h) would, instead, be reflected on the PCAOB's website as a withdrawal from registration. Should the firm seek re-registration, it would be required to file a Form 1 like other firms that were previously registered but withdrew from registration, without the need to adhere to the requirements of Rule 5302(a) or (c), which relate to the termination of revocation sanctions. Under Rule 2107(h), a firm whose registration is withdrawn, in contrast to a firm whose registration is revoked,¹³ would retain eligibility to perform work on audits of issuers or broker-dealers, provided that work remains below the substantial role threshold established by Rule 1001(p)(ii) and PCAOB Rule 2100, *Registration Requirements for Public Accounting Firms*. In accordance with Rule 2107(b)(1), a firm that has withdrawn from registration is permitted to reissue or give consent to the use of a prior audit report issued by the firm while registered with the Board; however, the firm is not allowed to update or dual-date any previously issued audit report once the firm is no longer registered.

¹² Cf. Section 105(d) of the Act.

¹³ See footnote 10.

Consecutively Delinquent Firms and Current Responses

Section 102(d) of the Act requires each registered firm to submit an annual report to the PCAOB. The PCAOB's annual reporting framework implements Section 102(d) by requiring each registered firm to report, on an annual basis, general information about the firm and its audit practice over the most recent 12-month reporting period. Annual reports must be filed on Form 2 and must be filed no later than June 30 of each year.¹⁴

Annual reporting is an important part of the investor protection framework prescribed by the Act and PCAOB rules. Information provided by registered firms in their annual reports informs the

PCAOB's oversight activities and provides information to the public regarding the nature and extent of each registered firm's audit practice with respect to issuers and broker-dealers. Annual reporting also keeps the PCAOB's records current on such basic information as the firm's name, location, and contact information, and provides assurance, through a firm certification,¹⁵ that the firm has reported the occurrence of various significant events during the reporting period on PCAOB Form 3, *Special Report*. When a firm does not comply with the reporting requirements, it deprives the public of valuable information and impacts the PCAOB's analysis and planning for inspections and other Board responsibilities.

Each registered firm must also pay an annual fee. Section 102(f) of the Act directs the Board, in relevant part, to assess and collect annual fees from each registered firm in amounts that, together with registration fees, are sufficient to recover the costs of processing and reviewing registration applications and annual reports. Annual fees are due on or before July 31 of each year.¹⁶

Since the Board's annual reporting and annual fee requirements became effective in 2010, a number of registered firms have continuously failed both to file annual reports and to pay annual fees, in violation of PCAOB rules. While some firms have belatedly made their required filings and payments, others remain persistently noncompliant.

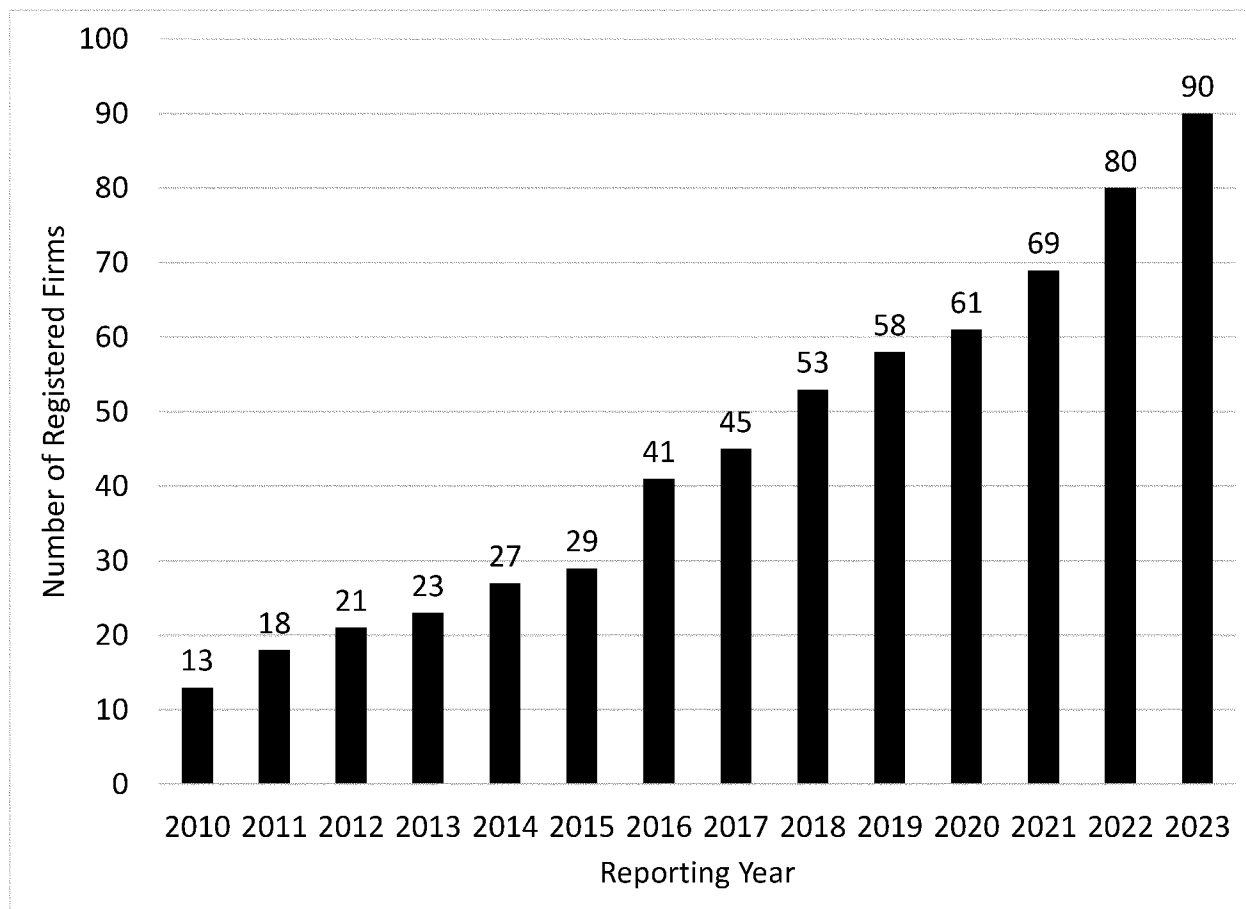
¹⁴ See Rule 2200 and PCAOB Rule 2201, *Time for Filing of Annual Report*.

¹⁵ See Form 2, Item 10.1.

¹⁶ See Rule 2202.

Figure A. Cumulative Number of Registered Firms With Continuous Noncompliance From the Indicated Reporting Year Through the 2023 Reporting Year¹⁷

BILLING CODE 8011-01-P



Source: RASR.¹⁸

BILLING CODE 8011-01-C

Note: Reporting years are based on the PCAOB's reporting year-end of March 31 (e.g., the 2023 reporting year covers April 1, 2022, to March 31, 2023). Registered firms must submit an annual report by June 30 and pay an annual fee by July 31 each year, covering the 12-month period from April 1 to March 31.

Figure A is based on data available as of August 31, 2024. Each bar in Figure

A illustrates the cumulative number of firms registered with the PCAOB as of August 31, 2024, that have continuously failed both to file annual reports and to pay annual fees from each reporting year listed on the x-axis through August 31, 2024. These data exclude firms that were previously noncompliant but subsequently either withdrew from registration or belatedly made their

required filings and payments before August 31, 2024.¹⁹

For example, the bar for the 2010 reporting year shows that 13 firms failed both to file annual reports and pay annual fees starting in reporting year 2010, and those firms have remained consistently noncompliant every subsequent reporting year through 2023. By the 2011 reporting year, the cumulative total increases to 18 firms,

¹⁷ The PCAOB staff's analysis ends with the 2023 reporting year. Although annual reports and annual fees for the 2024 reporting year were due several months ago, in the PCAOB's experience some firms eventually file their annual reports and pay their annual fees many months after these deadlines. Including those firms in the analysis could potentially prevent an accurate count of delinquent firms for the 2024 reporting year and skew the assessment of the number of firms that might be

subject to withdrawal from registration under Rule 2107(h). However, the PCAOB believes this decision does not affect the PCAOB's inferences, as a preliminary review of reporting year 2024 data through August 31, 2024, shows no significant deviations from the patterns observed through reporting year 2023.

¹⁸ The term "RASR" refers to the PCAOB's web-based Registration, Annual, and Special Reporting System, which provides access to publicly available

PCAOB information about registered public accounting firms, and is available at <https://rasr.pcaobus.org/Search/Search.aspx>.

¹⁹ The number of delinquent firms depicted in the graph does not account for firms' filing and payment activities after August 31, 2024. Therefore, for example, if a firm was delinquent for reporting year 2023 but subsequently filed an annual report or paid an annual fee after August 31, 2024, it would still be considered delinquent in the graph.

representing an additional five firms that first failed to meet both annual obligations in 2011 and continued their noncompliance through the end of this period. This cumulative count grows progressively with each subsequent reporting year as more firms fall into continuous noncompliance through the end of this period, reaching a total of 90 firms by the 2023 reporting year. This represents just under six percent of the total population of 1,554 PCAOB-registered firms as of August 31, 2024.²⁰

These data indicate that, over time, a number of firms have persistently failed to fulfill both annual obligations, with more than 50 firms in noncompliance for at least six consecutive years and 13 firms in noncompliance for 14 consecutive reporting years. Based on the PCAOB staff's experience, the Board believes that many of these continuously delinquent firms may be defunct. Consequently, it is unlikely that these firms will either (1) voluntarily request leave to withdraw from registration or (2) assert to the PCAOB that their registration was withdrawn under Rule 2107(h) when they needed to remain registered in order to perform audit work for issuers or broker-dealers.

In each reporting year, the Registration staff contacted all registered firms to remind them of their obligations to file annual reports and to pay annual fees prior to their respective due dates. After the relevant due dates passed, the Registration staff followed up by sending at least one warning letter to each delinquent firm, specifically highlighting its failure to meet the annual filing and annual payment requirements. These warning letters have been effective in spurring most delinquent firms to act.

But each year, a recurring set of firms does not cure delinquencies and yet remains registered. Without Rule 2107(h), the PCAOB would have no effective and efficient procedural mechanism to withdraw these

consecutively delinquent firms from registration.

Relying on firm-initiated withdrawals is not currently a viable avenue, as these consecutively delinquent firms have not requested leave to withdraw from PCAOB registration and, given their extended unresponsiveness and repeated noncompliance, are unlikely to do so in the future. Moreover, existing Board rules do not permit PCAOB staff to file a request for leave to withdraw from registration on a firm's behalf, even upon information and belief that the firm no longer exists or has ceased operations.

Nor have enforcement efforts proven to be a desirable approach—or even a viable option—in certain circumstances. Historically, the PCAOB's Division of Enforcement and Investigations ("DEI") has allocated its resources toward higher risk delinquencies, prioritizing enforcement action with respect to delinquent firms that continue to issue audit reports or play a substantial role in the preparation or furnishing of audit reports. Since 2011, the Board has issued more than three dozen OIPs against delinquent firms,²¹ and while most of those cases settled (or were dismissed in connection with the delinquent firm's withdrawal from registration), nine of those cases proceeded to an initial decision by a hearing officer.²² Although the facts and legal issues in these proceedings were generally straightforward, each case consumed substantial time and resources that could have been expended pursuing other oversight activities. And in some cases, the PCAOB has encountered difficulties providing notice of the institution of a disciplinary proceeding to a firm that appears to have ceased operations; serving OIPs on seemingly nonexistent or nonoperational firms may be

unnecessarily challenging, if even possible.

Additionally, encumbering the disciplinary process to address a registered firm's noncompliance with the PCAOB's annual reporting and payment requirements may often be a disproportionate response to a defunct firm's failure to request leave to withdraw from registration before ceasing operations. Instituting approximately 80 new disciplinary proceedings, one for each registered firm that failed to file an annual report and pay the annual fee for both the 2022 and 2023 reporting periods, would impose significant resource demands on the Board and its staff and could require significant time to resolve. The Board believes a more efficient process, with appropriate procedural safeguards, should be available to address circumstances where a registered firm's conduct gives rise to the inference that the firm has ceased to exist, is nonoperational, or no longer wishes to remain registered with the PCAOB.

Mechanics of Rule 2107(h)

The Board designed Rule 2107(h) expressly to fall within the framework of a withdrawal from registration. Rule 2107(h) is aimed at registered firms that have ceased to exist, are nonoperational, or no longer wish to remain registered. Still, in the absence of procedural safeguards, the Board recognizes that there is some risk that a constructive-withdrawal-request approach could unintentionally affect a firm that wishes to remain registered. Anticipating that risk, Rule 2107(h) includes a set of procedural safeguards to protect the interests of any firm that wishes to remain registered, including written notice and website notice, and an opportunity to stop the Rule 2107(h) process merely by emailing the Registration staff.

On balance, the Board believes that Rule 2107(h) will avoid unnecessary expenditures of PCAOB resources while still affording a registered firm notice and an opportunity to stop the withdrawal process. It would also cause consecutively delinquent firms either to contact the Registration staff or to be withdrawn from registration more efficiently than is possible currently. Thus, the Board believes Rule 2107(h) will provide a reasonable and effective way to identify and remove from the PCAOB's registration records those firms that have ceased to exist, are nonoperational, or no longer wish to remain registered.

Commenters broadly supported proposed Rule 2107(h), and the Board adopted the proposed amendment with

²⁰ Section III.B.1 of the Proposing Release provided similar data as depicted in Figure A, but with a cutoff date of December 31, 2023, instead of August 31, 2024. As a result, the number of firms that both did not file an annual report and did not pay an annual fee for reporting years 2022 and 2023 decreased. Specifically, the number of noncompliant firms for the 2022 and 2023 reporting years decreased from 87 and 108 as of December 31, 2023, to 80 and 90 firms, respectively, as of August 31, 2024. The number decreased because some of the initially noncompliant firms either (1) withdrew from registration in 2024 or (2) filed annual reports and/or paid annual fees for the corresponding reporting year in 2024. See footnote 3 for a similar discussion of the reasons why the number of firms that did not file annual reports and did not pay annual fees for both the 2022 and 2023 reporting years changed.

²¹ This figure represents OIPs that solely relate to delinquent annual reports or annual fees, or both. See, e.g., *R.A. Bianchi & Associates, An Accountancy Corporation*, PCAOB Release No. 105–2015–003 (Jan. 22, 2015); *Baumgarten & Company LLP*, PCAOB Release No. 105–2013–001 (Feb. 21, 2013); *Reuben E. Price & Co., Public Accountancy Corp.*, PCAOB Release No. 105–2011–008 (Dec. 20, 2011); *GLO CPAs, LLLP*, PCAOB Release No. 105–2011–006 (Nov. 30, 2011).

²² See *Monte C. Waldman CPA*, PCAOB File No. 105–2015–013 (Aug. 4, 2016); *Chr. Mortensen Revisionsfirma, statsautoriseret revisionsinteressentskab*, PCAOB File No. 105–2015–008 (Jan. 12, 2016); *David W. Dube*, PCAOB File No. 105–2014–005 (Nov. 30, 2015); *Joseph Troche, CPA*, PCAOB File No. 105–2014–007 (Mar. 6, 2015); *P.S. Yap & Associates*, PCAOB File No. 105–2013–006 (May 8, 2014); *Kenneth J. McBride*, PCAOB File No. 105–2012–007 (May 7, 2013); *Eric C. Yartz, P.C.*, PCAOB File No. 105–2012–006 (May 7, 2013); *Buckno Lisicky & Company, P.C.*, PCAOB File No. 105–2011–004 (Jan. 9, 2012); *Paul Gaynes*, PCAOB File No. 105–2011–006 (Jan. 3, 2012).

certain limited modifications, as discussed below. One commenter, an academic, expressed concern that withdrawing a firm from registration through the Rule 2107(h) process would remove the firm from the PCAOB's enforcement authority. However, the Board may consider its enforcement-related responsibilities when deciding whether or when to employ Rule 2107(h)'s constructive-withdrawal-request process with respect to a particular firm, just as it may consider whether a firm-initiated withdrawal from registration should be delayed in light of the Board's responsibilities to conduct investigations or disciplinary proceedings.²³

1. Prerequisites

Under Rule 2107(h)(1), the withdrawal process would be available only if a registered firm, for at least two consecutive Form 2 reporting years, has neither filed an annual report nor paid an annual fee.²⁴ The two-year benchmark is intended to serve as a proxy to assist the Board in identifying firms that may fairly be deemed to have made a constructive withdrawal request. The Board believes delinquency for a period of at least two consecutive reporting years is an effective indication that a firm has ceased to exist, is nonoperational, or no longer wishes to remain registered.²⁵ Under the two-year benchmark, all firms that recently filed an annual report or paid an annual fee would fall outside the scope of Rule 2107(h). The Board believes that a single missed filing or payment, or even one reporting year's worth of missed annual reports and payments, is an insufficient

basis upon which to infer that a firm no longer wishes to remain registered.²⁶ On the other hand, allowing three or more years of delinquency before presuming a firm no longer wishes to remain registered may unduly delay appropriate regulatory action. The *minimum* amount of time that a firm would have to be delinquent before meeting the threshold of "two consecutive reporting years" would be 13 months, encompassing the first overdue annual report following the June 30 deadline, the first overdue annual fee following the July 31 deadline, the second overdue annual report following June 30 of the second consecutive year, and the second overdue annual fee following July 31 of the second consecutive year.

The Rule 2107(h) process is discretionary. Whether Rule 2107(h) is used, and the exact timing of how it is used, is left to the Board. Establishing a discretionary process, rather than a mandatory or automatic one, allows the Board to consider specific facts and circumstances—including whether a firm is providing services requiring PCAOB registration and whether the firm is subject to a current or forthcoming inspection or investigation—when determining whether to deem the firm's registration withdrawn under Rule 2107(h). The Board did not receive any comments on the discretionary nature of Rule 2107(h).

The Registration staff will continue its practice of sending warning letters each year to delinquent registered firms. These notices will continue to call attention to any missed annual report filings or annual fee payments.

While commenters generally supported the two-year threshold for considering a firm's non-submission of annual reports and non-payment of annual fees as a basis for a constructive withdrawal request, some commenters suggested either reducing this period to one year or treating a single missed annual report or annual fee as a sufficient basis to initiate a firm's withdrawal from PCAOB registration. The Board considered these options, but, as explained in the Proposing Release and above, the Board believes that a two-year criterion, encompassing both annual reports and annual fees, is an appropriate indicator that a firm has ceased to exist, is nonoperational, or no longer wishes to remain registered.

Of course, the failure to file reports or pay fees when due constitutes a

violation of PCAOB rules concerning annual reporting and fees, and firms should bear in mind that new paragraph (h) of Rule 2107 does not limit the Board's enforcement authority with respect to violations of those requirements.

2. Notice of Delinquency and Impending Withdrawal

Pursuant to Rule 2107(h)(2), the Board commences the Rule 2107(h) process by sending a written notice to the registered firm's primary contact with the Board as identified in the firm's most recent filing on Form 1, Form 2, Form 3, or PCAOB Form 4, *Succeeding to Registration Status of Predecessor*. That notice (the "Notice of Delinquency and Impending Withdrawal") would specify the annual reports and annual fees that are past due and remain outstanding and provide information to the firm about the impending withdrawal of its registration, including the opportunity to avoid withdrawal by contacting the Registration staff within 60 days. The Notice of Delinquency and Impending Withdrawal is intended to provide the firm notice of the commencement of the Rule 2107(h) process, the reason for the commencement of that process, its potential significance for the firm's registration, and the firm's opportunity to avoid withdrawal by sending an email to the Registration staff within 60 days.

The Board would send the Notice of Delinquency and Impending Withdrawal to the registered firm's primary contact with the Board as identified in the firm's most recent filing on Form 1, Form 2, Form 3, or Form 4, via a mail or commercial courier service, and the Board would obtain a confirmation of actual or attempted delivery.²⁷ In considering the fairness of this approach, the Board has taken into account that if there has been a change in the identity or business mailing address of the firm's primary contact from the information disclosed in a previous form filing, the firm is required to report that change to the PCAOB within 30 days on Form 3.²⁸ In light of a firm's longstanding obligation to maintain up-to-date primary contact information, the Board believes it is fair and reasonable for the Registration staff

²³ See Rule 2107(d) (the Board may delay a firm-initiated withdrawal by up to 18 months, if done within 60 days of receiving a completed Form 1—WD and determined necessary to fulfill the Board's inspection, investigative, or disciplinary responsibilities under the Act); *see also* Rule 2107(e) (automatically delaying a firm's withdrawal if a Board disciplinary proceeding is pending against the firm or any of its associated persons).

²⁴ A Form 2 reporting year covers the 12-month period from April 1 to March 31. *See* Form 2, General Instruction 4.

²⁵ While the PCAOB recognizes that seven of the originally identified 87 consecutively delinquent firms either withdrew from registration (five firms) or caught up on overdue annual reports and annual fees (two firms), this activity supports the rationale for adopting Rule 2107(h). The actions of these firms reinforce the utility of establishing a clear benchmark to infer that a consecutively delinquent firm, if it still exists, no longer wishes to remain registered with the PCAOB. The two-year marker of consecutive noncompliance with the annual reporting and annual fee requirements will serve as an effective and clear benchmark for interpreting such consecutive noncompliance as a firm's constructive request for leave to withdraw from registration. And the procedural safeguards built into Rule 2107(h) provide a clear and easy course of action for a firm if the inference that the firm no longer wishes to remain registered is inaccurate.

²⁶ Of course, rule violations related to noncompliance with the Board's annual reporting and payment requirements remain subject to enforcement.

²⁷ In the adopted rule, the PCAOB revised the proposed phrase "that results in a confirmation of actual or attempted delivery" to "and obtains a confirmation of actual or attempted delivery." This change aims to enhance clarity. The Board did not receive any comments on this specific phrasing, and this change is not intended to alter the rule's meaning.

²⁸ *See* PCAOB Rule 2203, *Special Reports*, and Items 2.18 and 7.2 of Form 3.

to send the Notice of Delinquency and Impending Withdrawal to the firm's primary contact at the address reported in the firm's most recent filing.²⁹

One commenter suggested that the PCAOB should use email in addition to traditional mail or a commercial courier service when providing notice of the initiation of the Rule 2107(h) withdrawal process. The Board emphasizes that all registered firms are required to keep their primary contact's mailing address updated under current PCAOB rules. Moreover, as discussed in the next subsection, notice by mail or commercial courier service would be supplemented, as required under Rule 2107(h), by a notice on the PCAOB's website. Together, the Board believes that these methods of providing notice are sufficient. However, the Board also notes that the rule does not prohibit the Board or its staff from using email as an additional, discretionary means by which to provide notice of the initiation of the Rule 2107(h) process to firms. Though the use of email is not mandated by Rule 2107(h), the Board or PCAOB staff may deem it appropriate, under certain circumstances, to supplement the prescribed notice with email.

3. Website Notice

After the Notice of Delinquency and Impending Withdrawal is sent to the registered firm's primary contact, the Board will publish notice of the impending withdrawal on its public website, pursuant to Rule 2107(h)(3). The Board will make reasonable efforts to do so promptly. The website posting is intended to provide reasonable notice to the firm and to others, including any current or former audit clients, who may be able to alert the firm of the impending withdrawal of its registration and its 60-day window to avoid withdrawal. Disclosing the firm's pending withdrawal on the Board's website is also consistent with the current firm-initiated withdrawal process.³⁰

²⁹ See generally Rule 141 of the Commission's Rules of Practice, 17 CFR 201.141, which similarly permits service to the most recent address shown on a registered entity's most recent filing with the Commission.

³⁰ See Rule 2107(b)(2) (requiring disclosure of the identity of any firm with a pending request to withdraw from registration and the date the Board received the Form 1-WD); see also Registered Public Accounting Firms—Withdrawal Request Pending, available at https://assets.pcaobus.org/pcaob-dev/docs/default-source/registration/firms/documents/withdrawal-requests.pdf?sfvrsn=d30aab29_287.

4. Sixty-Day Opportunity To Avoid Withdrawal From Registration

After the date the Board sends the Notice of Delinquency and Impending Withdrawal to the registered firm's primary contact, the firm, under Rule 2107(h)(4), would have 60 days to stop the withdrawal process.³¹ The Board believes 60 days is a reasonable amount of time for the firm to become aware of the initiation of the Rule 2107(h) process, review the Notice of Delinquency and Impending Withdrawal, consider whether it wishes to remain registered, and contact the Registration staff by email.³²

To stop the Rule 2107(h) process, the registered firm's primary contact would be required to send an email to a designated electronic address specified in the Notice of Delinquency and Impending Withdrawal within the 60-day period. In contemplating how a firm should stop the Rule 2107(h) process, the Board sought to establish a method of contacting the PCAOB that would not be overly burdensome. Requiring that an email be sent by the firm's primary contact increases the likelihood that the person who contacts the PCAOB is an authorized representative of the firm.³³ This requirement also increases the likelihood that future communications to the firm would result in actual notice to the firm.³⁴ In particular, this process

³¹ PCAOB Rule 1002, *Time Computation*, governs the computation of periods of time prescribed in or allowed by the Board's rules. Rule 1002's time computation principles would apply to the 60-day period specified in the Notice of Delinquency and Impending Withdrawal.

³² The limitations imposed in Rule 2107(c) do not apply to firms that have received notice of the commencement of the Rule 2107(h) process. Those limitations apply only to firms that choose to initiate the withdrawal process through the filing of a completed Form 1-WD.

³³ If the email address of the firm's primary contact on file with the Board is outdated, the firm is required to update this information using Form 3 before transmitting an email to stop the Rule 2107(h) process. See Items 2.18 and 7.2 of Form 3. This ensures that any email received by the Registration staff to stop the Rule 2107(h) process originates from an authorized representative of the firm, who has access to the firm's account in the RASR system.

³⁴ One firm expressed concern that emails sent to the PCAOB to stop the Rule 2107(h) process potentially could be marked as spam. The commenter suggested that the Board should either allow for additional communication methods or commit to confirming receipt of emails so that the sender has confidence that an email was received. The Board believes that having a single channel for communications from firms to stop the Rule 2107(h) process promotes efficiency and the proper administration of the rule, and the Board believes that email is the optimal method because it is fast, not unduly burdensome, and in writing. Given the significance of an email from a firm under Rule 2107(h)(4), the PCAOB staff will confirm receipt of such an email. This confirmation will provide assurance to firms regarding the successful delivery of their email to the PCAOB.

expedites further communications with the firm regarding its legal obligations to file annual and special reports and pay annual fees, and will facilitate its ability to institute, as the Board deems appropriate, a disciplinary proceeding against the firm.³⁵

In the Proposing Release, the Board suggested a 30-day period for firms to send an email to the Registration staff to stop the withdrawal process. One firm suggested that a 60-day period might be more appropriate. The Board has decided to adopt a 60-day window for sending an email to the Registration staff. This extension aims to provide firms with sufficient time to become aware of the initiation of the Rule 2107(h) process, which includes notification of pending withdrawals posted on its website. The extended period also allows firms sufficient time to have internal discussions to determine whether they wish to remain registered. It also accommodates any updates needed regarding the firm's primary contact with the Board to facilitate the email to the Registration staff.

5. Withdrawal From Registration

If, after the 60-day period in Rule 2107(h), the registered firm has not emailed the Registration staff, the Board would be able to treat the firm's consecutive failures to file annual reports and to pay annual fees as a constructive request for leave to withdraw from registration, and to deem the firm's registration withdrawn.³⁶ The provision reflects the Board's judgment that a firm that has not filed an annual report and has not paid an annual fee over a period of at least two consecutive reporting years may reasonably be deemed to have made a constructive request for leave to withdraw from PCAOB registration. After the Board deems a registration withdrawn pursuant to Rule 2107(h), the Registration staff, consistent with existing practices, would send written notification to the firm regarding the withdrawal. The withdrawal of the firm from registration would also be reflected on the Board's website.

³⁵ If a firm sends an email to the Registration staff to stop Rule 2107(h)'s withdrawal process, it still could face potential enforcement action, just like any other registered firm that violates the PCAOB's annual reporting or annual fee requirements.

³⁶ As noted, the intent of Rule 2107(h) is to identify firms that have ceased to exist, are nonoperational, or no longer wish to remain registered. It is not intended as a disciplinary measure against firms that wish to remain registered but fail to fulfill their obligations to file annual reports or pay annual fees. The PCAOB has other mechanisms to address such noncompliance.

After a firm's registration is withdrawn pursuant to Rule 2107(h), the consequences would mirror those of any other withdrawal from PCAOB registration. Specifically, the withdrawn firm, like any other unregistered firm, would be prohibited from engaging in the preparation or issuance of an audit report for an issuer or broker-dealer, or playing a substantial role in the preparation or furnishing of an audit report for an issuer or broker-dealer, other than to issue a consent to the use of an audit report for a prior period that it issued while registered.³⁷ A firm that has had its registration withdrawn pursuant to Rule 2107(h) would no longer have to comply with the PCAOB's annual reporting or annual fee requirements. Should such a firm wish to re-register, it would have to file a new registration application and pay a registration fee, as is required of all firms reapplying after withdrawal. In reviewing any such registration application from the firm, the Board has discretion to consider its past interactions with the firm during the firm's previous registration period. This includes considering any instances in which the firm did not file required reports, including annual reports, or pay required annual fees.³⁸

Effective Date

The Board has determined that Rule 2107(h), if approved by the Commission, will take effect initially for annual reports and annual fees that are due in 2025, meaning that a registered firm that does not file an annual report and does not pay an annual fee in 2025 and in 2026 could have its registration deemed withdrawn under Rule 2107(h) beginning in the fall of 2026.

³⁷ See Section 102(a) of the Act; Rule 2100; Rule 1001(p)(ii). Note 2 to Rule 2100 clarifies that issuing a consent to include an audit report for a prior period does not, in itself, obligate a public accounting firm to be registered with the PCAOB. This provision applies to a firm whose registration has been withdrawn, including a firm whose registration has been withdrawn pursuant to Rule 2107(h).

³⁸ Consistent with the Board's current practices, a history of not filing annual reports or paying annual fees has, in some cases, led to disapproval of a withdrawn firm's subsequent application for re-registration. See, e.g., *Registration Application of Alas Oplas & Co., CPAs*, PCAOB Release No. 102-2024-004 (Aug. 20, 2024); *Registration Application of S S Kothari Mehta and Company*, PCAOB Release No. 102-2021-001 (Nov. 23, 2021); *Registration Application of GYL Decauwer LLP*, PCAOB Release No. 102-2018-001 (June 13, 2018); *Registration Application of David R. Ramos, CPA*, PCAOB Release No. 102-2014-002 (Mar. 6, 2014); *Registration Application of Lawrence Hoffman, Certified Public Accountant, P.C.*, PCAOB Release No. 102-2014-001 (Jan. 28, 2014); *Registration Application of Vail & Knauth LLP*, PCAOB Release No. 102-2013-001 (Feb. 21, 2013).

The Board initially proposed that annual reports and annual fees due in 2024 could be considered if Rule 2107(h) was adopted. While most commenters did not comment on the proposed amendment's effective date, one commenter supported the proposed effective date. In addition, one firm suggested that missing annual reports and unpaid annual fees for 2024 should be taken into consideration under Rule 2107(h) only if the final rule amendment took effect prior to the 2024 deadlines for these annual obligations.

In light of the timing of Rule 2107(h)'s adoption, the Board opted to defer the initial consideration of annual reports and annual fees under Rule 2107(h) to those due in 2025. This approach ensures that registered firms are adequately informed of the constructive-withdrawal-request mechanism introduced by Rule 2107(h).

D. Economic Considerations and Application to Audits of Emerging Growth Companies

Economic Analysis

The Board is mindful of the economic impacts of its rulemaking. This section discusses the economic baseline, need, expected economic impacts of the final rule amendment, and alternative approaches considered. The Board's economic discussion is largely qualitative in nature due to data limitations. However, where reasonable and feasible, the analysis incorporates quantitative information, including data from the PCAOB's RASR system.

The Board sought information relevant to the economic analysis throughout this rulemaking³⁹ and has carefully considered the comments submitted. Some commenters expressed favorable opinions about the economic analysis and also commented on specific sections of the economic analysis such as the baseline, need, benefit, and cost sections. Some commenters raised concerns about certain aspects of the economic analysis. The Board discussed these comments and its responses to them in the relevant sections below.

Baseline

This section establishes the economic baseline against which the impacts of the final rule amendment can be considered. The discussion above describes important components of the

baseline, including the current regulatory framework and certain firms' consecutive failures to file annual reports and pay annual fees. This section discusses two additional components that inform the Board's understanding of the economic baseline: (1) the PCAOB staff's analysis of RASR data and (2) a consideration of relevant research.

Commenters indicated that the baseline and the data provided in the economic analysis are helpful in understanding the economic impacts of the proposals.

1. Analysis of RASR Data

To inform the Board's understanding of the baseline for the Rule 2107(h) amendment, the PCAOB staff has analyzed RASR data to calculate the number of registered firms with repeated failures to file annual reports and pay annual fees (Figure 1 below).

This section examines statistics of registered firms that failed to file annual reports and/or pay annual fees. Figure 1 presents the number of registered firms that failed to file annual reports and/or pay annual fees for reporting years 2022 and 2023.⁴⁰ Among all 1,554 registered firms as of August 31, 2024,⁴¹ 1,406 firms (90 percent) were required to file annual reports and pay annual fees for reporting years 2022 and 2023.⁴² Of those 1,406 registered firms, 84 firms failed for both years to file annual reports, 84 firms failed for both years to pay annual fees, and 80 firms failed for those two reporting years to both pay annual fees and file annual reports.⁴³ The overall rate of registered firms that failed to both file annual reports and pay annual fees for reporting years 2022

⁴⁰ As previously noted, annual report (Form 2) reporting years span from April 1 of the previous year to March 31 of the reporting year. The 2022 reporting year covers April 1, 2021, to March 31, 2022. The 2023 reporting year covers April 1, 2022, to March 31, 2023.

⁴¹ The PCAOB staff based this analysis of reporting years 2022 and 2023 using August 31, 2024, as the cutoff date. As discussed above, the PCAOB did not include data from reporting year 2024.

⁴² Firms with pending withdrawal requests are excluded from the analysis. Also, as of August 31, 2024, some registered firms were not required to pay annual fees or file annual reports for reporting years 2022 and 2023. For example, firms that registered after March 31, 2023, were not required to file the 2023 annual report or pay the 2023 annual fee.

⁴³ Four firms failed to file annual reports for both years but paid an annual fee for at least one of the years, and another four firms failed to pay annual fees for both years but filed an annual report for at least one of the years. The PCAOB does not have access to specific information on the reasons for this partial noncompliance. The PCAOB notes that these firms would not meet the criteria for withdrawal under Rule 2107(h).

³⁹ See, e.g., Proposing Release at 44, 52, 56, 60–61, 62–63. Although the Proposing Release's economic analysis also addressed proposed Rule 2400 and the proposed amendment to Form 3, this economic discussion is limited to the amendment to Rule 2107 that the Board has adopted.

and 2023 is just under six percent (80 out of 1,406).

Ninety-nine percent of the firms that failed to file annual reports and pay annual fees for both years are non-affiliate firms (“NAFs”) (79 out of 80), which tend to be smaller firms.⁴⁴ Thirty-

three percent of these 80 firms (26 firms) are U.S. NAFs and 66 percent (53 firms) are non-U.S. NAFs; thus non-U.S. NAFs account for twice as many instances of failing to both file annual reports and pay annual fees for both years. Within firm types, four percent of U.S. NAFs

and 12 percent of non-U.S. NAFs failed to file annual reports and pay annual fees for both years. In comparison, no U.S. GNFs and only one non-U.S. GNF failed to file annual reports and pay annual fees for both years.

FIGURE 1—NUMBER OF REGISTERED FIRMS THAT DID NOT FILE ANNUAL REPORTS AND/OR PAY ANNUAL FEES AS OF AUGUST 31, 2024

	Firms required to file annual reports and pay annual fees for reporting years 2022 and 2023	Firms that did not file annual reports for reporting years 2022 and 2023	Firms that did not pay annual fees for reporting years 2022 and 2023	Firms that both did not file annual reports and did not pay annual fees for reporting years 2022 and 2023	Percentage of firms that both did not file annual reports and did not pay annual fees for reporting years 2022 and 2023 (%)
Firms	1,406	84	84	80	6
By firm type:					
U.S. GNF	6	0	0	0	0
Non-U.S. GNF	323	1	1	1	0.3
U.S. NAF	633	27	26	26	4
Non-U.S. NAF	444	56	57	53	12

Source: RASR.

The PCAOB staff’s analysis of the 80 registered firms that failed to file annual reports and pay annual fees for reporting years 2022 and 2023 (reflected in Figure A above) shows a consistent pattern over multiple reporting years. Notably, a majority of these firms have failed to file annual reports and pay annual fees for more than two consecutive reporting years. For example, Figure A shows that 58 of these 80 firms failed both to file an annual report and to pay an annual fee for reporting year 2019, and these 58 firms continued to neglect these obligations for five consecutive years, from reporting years 2019 to 2023.

2. Consideration of Relevant Research and Implications

The PCAOB staff has reviewed literature related to the final rule amendment. To the PCAOB’s knowledge, no studies specifically address the economic consequences of situations where an audit firm has ceased to exist, is nonoperational, or no longer wishes to remain registered—as

indicated by consecutive delinquencies in its annual reporting and annual fee obligations—and yet continues to appear as registered on the PCAOB website. Additionally, there is a lack of research on the effects of withdrawing such firms from registration.⁴⁵

The presence of registered firms that have ceased to exist, are nonoperational, or no longer wish to remain registered impacts the utility and value of the registration data on the PCAOB’s website and in its internal records. First, there is a significant misalignment: the PCAOB’s registration records continue to list these firms as registered, which implies they exist, are operational, and wish to remain registered, despite their actual statuses potentially being to the contrary—nonexistent, nonoperational, or no longer wishing to remain registered. Second, these firms do not file annual reports, resulting in outdated information about their existence, operational status, and scope of practice. Third, while it is more common for the PCAOB to have limited or no information about the operational

status of registered firms that have stopped filing annual reports and paying annual fees, there are exceptional circumstances where the PCAOB staff is aware of information, such as the death of a sole proprietor, indicating that a registered firm has ceased to exist or become nonoperational. In these instances, despite having information that the firm has ceased operations, the PCAOB currently lacks a mechanism to adjust its registration records to reflect this reality. This limitation introduces a discrepancy between the PCAOB staff’s internal knowledge and the information reflected on the PCAOB’s website.

Academic research provides insights into the broader implications of lower-quality information in the registration data. Studies indicate that higher information processing costs—arising from the need to verify and interpret potentially lower-quality information on registered firms—can lead to inefficiencies in information search costs.⁴⁶ Currently, the inclusion of persistently delinquent firms in the

⁴⁴ NAFs are accounting firms registered with the Board that are not global network firms (“GNFs”). GNFs are the member firms of the six global accounting firm networks that include the largest number of PCAOB-registered non-U.S. firms (BDO International Ltd., Deloitte Touche Tohmatsu Ltd., Ernst & Young Global Ltd., Grant Thornton International Ltd., KPMG International Cooperative, and PricewaterhouseCoopers International Ltd.). The discussion in this release uses “U.S. GNF” to refer to a GNF member firm based in the United States, and “non-U.S. GNF” to refer to a GNF member firm based outside the United States. Similarly, “U.S. NAF” refers to a NAF firm based

in the United States, and “non-U.S. NAF” refers to a NAF firm based outside the United States.

⁴⁵ The PCAOB did not receive any comments regarding additional data or academic studies in response to its request for such information in the Proposing Release.

⁴⁶ See, e.g., E. Blankespoor, E. deHaan, and I. Marinovic, *Disclosure processing costs, investors’ information choice, and equity market outcomes: A review*, 70 *Journal of Accounting and Economics* 1 (2020). Blankespoor et al. (2020) study how information processing costs—such as the costs of monitoring, acquiring, and integrating public

information—impact investor behavior and market outcomes. They argue that high processing costs, such as acquiring and integrating information into decision-making, can discourage stakeholders from engaging with available data, leading to inefficient outcomes. Extending these findings to the PCAOB registration context, it suggests that removing persistently delinquent firms from registration could decrease information processing costs by lowering the costs of assessing the operational status of these firms. Thus, improving the overall quality of information available could reduce inefficiencies in audit search decisions.

PCAOB's registration list could impose additional search costs, as the information available to stakeholders is less useful. Additionally, in circumstances where the PCAOB has information indicating that certain firms may no longer exist, are nonoperational, or no longer wish to remain registered, the PCAOB lacks a mechanism to withdraw these firms from registration. Without a mechanism to update PCAOB registration records to reflect this information, search costs could remain elevated for stakeholders attempting to verify the operational status of PCAOB-registered firms.

For stakeholders such as audit committees of potential clients assessing a firm's suitability as an auditor, these higher information processing costs can delay their analysis and potentially impact the efficiency of audit-related decisions. Improving the quality of the PCAOB's registration records by removing persistently delinquent firms would reduce stakeholders' information processing costs and better support well-informed decision-making in the audit market.

Partners or former partners of audit firms are typically aware of their firm's operational status—including whether the firm no longer exists, is nonoperational, or no longer wishes to remain registered. Additionally, the PCAOB staff sometimes gathers anecdotal information through its interactions with firms and their personnel, further informing its understanding of a firm's operational status. However, such information bearing upon a registered firm's operational status may not be readily available to the public. Together, these discrepancies obscure the true status of these firms, resulting in a gap between what the PCAOB staff knows internally and what is publicly available on the PCAOB website. Additionally, there are gaps between what firms, including their partners or former partners, know about their operational status and what is accessible to the public on the PCAOB's website.

Currently, without a mechanism to remove consecutively delinquent firms from registration, the PCAOB lacks a means to accurately convey the status of these firms to stakeholders, which could result in less-informed decisions.

Need and How the Changes Would Address the Need

This section discusses the problem that needs to be addressed and explains how the final rule amendment is expected to address it.

The PCAOB currently has no effective and efficient procedural mechanism to

withdraw from registration firms that are consecutively delinquent with respect to filing required annual reports and paying mandatory annual fees. As discussed in Figure 1, PCAOB staff analysis indicates that as of August 31, 2024, 80 firms did not file annual reports and did not pay annual fees for both the 2022 and 2023 reporting years. Many of these firms may be defunct.

The presence of such firms on the PCAOB's registration records may not only disrupt the PCAOB's regulatory objectives, such as maintaining an accurate public record of operational registered firms that wish to remain registered and efficiently using PCAOB staff time and resources, which diminishes the Board's ability to fulfill its investor protection mission, but could also adversely impact investor confidence in the capital markets. While their number is small and there is no indication that these firms are currently issuing audit reports on which investors rely, the fact that a firm may fail to comply with fundamental obligations incident to registration and yet remain registered could lessen the significance of PCAOB registration in the market. Firms that are complying with the annual reporting and fee requirements may form a mistaken belief that they also may be able to forgo compliance with their reporting and fee obligations when they observe that these consecutively delinquent firms remain registered with the Board. It is also possible that this conduct could persist,⁴⁷ necessitating resolution to maintain confidence in the capital markets.

In addition, PCAOB staff spend time and resources seeking to contact these firms year after year so that they will comply with their basic legal obligations, including annual reporting and the payment of annual fees that contribute to funding the PCAOB's registration program. Also, utilizing enforcement mechanisms to pursue these firms would not always be feasible, and even where feasible, would further strain staff time and resources. These firms' inattention, inactivity, or inanimacy would cause the PCAOB to incur recurring costs with no expected improvement in sight.

Rule 2107(h) would address the need to make the PCAOB's oversight more

effective and efficient by providing an effective procedural mechanism to withdraw from PCAOB registration firms that have ceased to exist or are otherwise defunct, or no longer wish to remain registered.

Commenters were generally supportive of the proposed amendment to Rule 2107 and stated that they understood the rationale for the amendment to the rule. In particular, one commenter expressed agreement that the proposed amendment to Rule 2107 would result in more efficient use of PCAOB resources.

Furthermore, commenters agreed that the proposed amendment to Rule 2107(h) would address the need to make the PCAOB's oversight more effective and efficient. One commenter agreed that the amendment generally will accomplish the objective of providing a mechanism for the Board to remove from the PCAOB's registration records firms that are delinquent in filing their annual reports with the PCAOB and paying their annual fees. Another commenter indicated the proposed amendment to Rule 2107 would provide the PCAOB with a mechanism to keep its registration records updated, providing issuers and broker-dealers in the process of selecting an appropriate accounting firm greater confidence that any accounting firm they consider hiring is operational and wishes to remain registered with the PCAOB.

In general, commenters did not introduce arguments or data that caused the Board to change its assessment of the need for the final rule amendment. The Board believes the final rule amendment addresses the problem discussed above, yielding the economic impacts discussed further below.

Economic Impacts

This section discusses the expected benefits and costs of the final rule amendment and potential unintended consequences. One commenter expressed agreement with the benefit and cost evaluation provided in the Proposing Release and stated that it was not currently aware of any additional academic studies or data related to the economic impacts of the proposals that could be used to quantify the benefits and costs.

1. Benefits

Rule 2107(h) would provide an effective procedural mechanism to withdraw from PCAOB registration firms that have ceased to exist, are nonoperational, or no longer wish to remain registered. Therefore, it would facilitate the PCAOB's regulatory objectives discussed above by enabling

⁴⁷ The accumulation of possibly defunct or nonoperational firms on the PCAOB's registration list potentially reflects a growing issue. See Figure A and the accompanying description. If a significant portion of all registered firms is perceived as never filing annual reports or paying annual fees without apparent consequence, it risks creating a perception of widespread noncompliance and PCAOB inaction.

the public and the PCAOB to have a higher quality list of registered firms. Such an improvement could provide informational benefits to investors, audit committees, and other stakeholders by reducing their information search and processing costs. Additionally, it would reduce the gaps in information about the operational status of registered firms.

Additionally, Rule 2107(h) would reduce resources spent by the PCAOB in efforts to bring delinquent firms into compliance with the annual reporting and fee payment requirements. This would allow the PCAOB to more effectively allocate PCAOB staff resources that are currently used to attempt to contact delinquent firms, which could enhance the PCAOB's ability to advance its investor protection mission. One commenter agreed that, by allowing the PCAOB to reallocate staff resources away from contacting delinquent firms, Rule 2107(h) would enhance the PCAOB's ability to further its mission.

Further, removing firms that consistently fail to meet their annual reporting and annual payment obligations will help promote the integrity of the list of registered firms. By treating consecutive delinquencies as a constructive request for leave to withdraw, the PCAOB may foster a sense of fairness among all registered firms, and a level playing field where compliance with basic requirements, such as filing annual reports and paying annual fees, is maintained.

Given the nature of these benefits, the PCAOB does not expect a substantial influence on efficiency, competition, or capital formation as a result of the rule amendment.

2. Costs

Rule 2107(h) would impose potential incremental costs only on operating firms with at least two years of consecutive delinquencies. As discussed above, 80 firms currently meet the criterion for Rule 2107(h)'s withdrawal process. For firms that no longer exist, are nonoperational, or no longer wish to remain registered, the Board does not anticipate any costs with respect to being removed from the PCAOB's registration records.⁴⁸

⁴⁸ As discussed above, among the 80 firms that meet the criterion for Rule 2107(h)'s constructive-withdrawal-request process based on the 2022 and 2023 reporting years, 58 had not filed annual reports and had not paid annual fees since at least 2019. The PCAOB staff's analysis has found that only one of the 80 firms has any indication that it may have performed services requiring registration in recent years. Should this firm's noncompliance persist, it could be subject to the Rule 2107(h) constructive-withdrawal-request process and could

For any firms that wish to remain registered, they would incur the cost of stopping the withdrawal process under Rule 2107(h), by preparing and submitting an email to the PCAOB notifying the staff of their desire to remain registered with the Board as directed in the Notice of Delinquency and Impending Withdrawal within the 60-day period.

Rule 2107(h) includes several safeguards to protect firms that wish to remain registered but may be unaware that the withdrawal process has commenced. These include multiple forms of notice, a 60-day window during which firms can stop the withdrawal process, and a straightforward process to stop the withdrawal. These measures should significantly reduce the likelihood of a firm being withdrawn under Rule 2107(h) without its knowledge, which should attenuate any potential costs or disruptions associated with an unexpected withdrawal.⁴⁹

The Board did not receive specific comments on the costs of Rule 2107(h). However, a commenter expressed the belief that the expected implementation costs of the proposals as a whole would be minimal, which would result in a net positive economic impact. Based on the above discussion of the incremental costs expected to result from this amendment, the Board does not anticipate a significant impact on efficiency, competition, or capital formation.

3. Potential Unintended Consequences

In addition to the benefits and costs discussed above, the final rule amendment could have unintended economic consequences. One commenter noted that the potential unintended consequences discussed in the proposals are adequate. There were no other comments related to potential unintended consequences with respect to the proposed amendment to Rule 2107. The following discussion describes potential unintended consequences considered by the Board and, where applicable, factors that mitigate those potential consequences.

utilize the rule's safeguards to stop the withdrawal process if it wishes to remain registered.

⁴⁹ While unlikely, there exists a possibility that a firm might unexpectedly discover that its registration has been withdrawn under Rule 2107(h), despite the rule's safeguards. Should this occur, the firm would need to undertake the process of re-registering with the PCAOB if it wished to provide services requiring registration, thereby incurring the costs associated with registration. Additionally, the firm could lose business from issuers or broker-dealers that might have engaged the firm's audit services had it maintained its PCAOB registration.

Rule 2107(h) provides a new procedural mechanism that would make consecutively delinquent registered firms eligible for withdrawal from PCAOB registration. Because this mechanism does not require affirmative action by a firm, an unintended consequence could arise if a firm was withdrawn from registration contrary to the firm's wishes. This could potentially impact clients, potential clients, and the public. However, as noted above, Rule 2107(h) includes several safeguards—including multiple forms of notice and a straightforward process to stop the withdrawal process—that should significantly reduce the likelihood of such an occurrence. Should such an exceptional situation arise, the firm has the option to reapply for registration and present to the PCAOB any special circumstances that led to the firm's noncompliance with the PCAOB's annual reporting and fee payment rules and its inability to stop the Rule 2107(h) withdrawal procedure.⁵⁰

Alternatives Considered

The Board considered alternatives to the final rule amendment, taking into account feedback from commenters on alternative approaches considered in the Proposing Release, as well as other alternatives suggested by commenters. This section considers all of the alternative approaches and discusses what the Board believes to be the most reasonable alternatives.

Rather than a constructive-withdrawal-request approach to delinquent annual reports and annual fees, the Board considered an expedited enforcement approach. Although issuing an order imposing a disciplinary sanction on these firms, upon a finding of consecutive violations of the Board's annual reporting and annual payment requirements, is a possibility, instituting and resolving an expedited disciplinary proceeding would require significantly more PCAOB staff time and other Board resources than the approach outlined in Rule 2107(h).⁵¹ Furthermore, revocation

⁵⁰ While unlikely, it is conceivable that, despite the PCAOB's best efforts to provide notice, a firm deemed withdrawn under Rule 2107(h) may issue an audit report, or update or dual-date a previously-issued report, that gets included in a filing with the Commission. In such a scenario, the Commission has authority to bring an enforcement action against the firm; the Board may consider such conduct if the firm applies to re-register; and issuer and broker-dealer clients of the firm may incur costs to engage a new accounting firm, as well as reputational costs.

⁵¹ In such litigation, even in circumstances where the firm is defunct, the hearing officer may need to address service issues (including for non-U.S. firms), issue a show-cause order, enter default (after DEI files a motion), and issue an initial decision specifying and justifying sanctions. Such litigation

would take significantly longer as compared to the approximately 60 days it would take following the approach outlined in Rule 2107(h). Therefore, the Board has adopted the constructive-withdrawal-request approach largely as it was originally proposed.

Some commenters stated they would be supportive of constructive withdrawal requests if a firm fails to file annual reports *or* fails to pay annual fees. The Board believes the dual condition of both failure to file annual reports and failure to pay annual fees appropriately identifies firms that cease to exist, are nonoperational, or no longer wish to remain registered. A firm that has done one or the other but not both implies some level of activity at the firm and wish to remain registered, indicating that other tools in the PCAOB's toolkit may be available to promote compliance.

One commenter suggested reducing the threshold for constructive withdrawal requests to one year of noncompliance, but the Board concluded that this could increase the risk of withdrawing from registration operational firms that wish to remain registered.⁵²

The Board believes that both of these alternative processes suggested by commenters would enhance the risk of a withdrawal from registration of operational firms that wish to remain registered. The procedural safeguards in Rule 2107(h), including the timing parameters, help ensure that the Rule 2107(h) process does not impose a significant burden on firms that inadvertently fail to comply with the annual reporting and annual payment requirements or on other entities (clients, investors, etc.). The requirements set forth in Rule 2107(h) provide firms sufficient notice and a clear process that governs how and when a firm's registration would be

also consumes significant DEI staff time, in light of the production requirements of PCAOB Rule 5422, *Availability of Documents For Inspection and Copying*, as well as the motion practice and briefing that is expected on sanctions. The adopted approach would avoid these delays.

⁵² As discussed above, the minimum amount of time that a firm must be delinquent in filing annual reports and paying annual fees before meeting the threshold of two consecutive reporting years is 13 months. In contrast, under a framework that considers only a single reporting year's noncompliance, a firm would be eligible for the constructive-withdrawal-request mechanism after only one month of delinquency, spanning from the firm's failure to file an annual report by June 30 of the reporting year to the firm's failure to pay the annual fee by July 31 of the same reporting year. The Board believes that such a brief period of delinquency is not sufficient to indicate that a firm has ceased to exist, is nonoperational, or no longer wishes to remain registered.

withdrawn based on a constructive withdrawal request.

In response to a commenter's suggestion, the Board extended from 30 days to 60 days the time that these firms have to decide whether to send an email to the Registration staff so that firms can remain registered. This change may incrementally reduce the likelihood of withdrawals from registration of a firm that is operational and wishes to remain registered.

Special Considerations for Audits of Emerging Growth Companies

Pursuant to Section 104 of the Jumpstart Our Business Startups ("JOBS") Act, rules adopted by the Board subsequent to April 5, 2012, generally do not apply to the audits of emerging growth companies ("EGCs"), as defined in Section 3(a)(80) of the Exchange Act, unless the Commission "determines that the application of such additional requirements is necessary or appropriate in the public interest, after considering the protection of investors, and whether the action will promote efficiency, competition, and capital formation."⁵³ As a result of the JOBS Act, the rules that the Board adopts are generally subject to a separate determination by the Commission regarding their applicability to audits of EGCs.

The final rule amendment does not impose any additional requirements on emerging growth company audits. Accordingly, the Board believes that Section 103(a)(3)(C) of the Act does not apply. Nevertheless, the Board has included this analysis to inform the rulemaking. The discussion of benefits, costs, and unintended consequences above generally applies to audits of EGCs.

To inform consideration of the application of PCAOB rules and standards to audits of EGCs, PCAOB staff prepares a white paper annually that provides general information about characteristics of EGCs.⁵⁴ As of the

November 15, 2022 measurement date, PCAOB staff identified 3,031 companies that self-identified with the Commission as EGCs and filed audited financial statements in the 18 months preceding the measurement date.⁵⁵

EGCs are likely to be newer companies, and their audit committees may have limited experience in seeking and selecting PCAOB-registered public accounting firms. The removal of consecutively delinquent firms from the PCAOB registration database, as facilitated by Rule 2107(h), could enhance the quality of the information available and reduce information search costs, thereby aiding the decision-making of these stakeholders. As for the costs associated with the final rule amendment, which are likely to be incremental for operating firms that wish to remain registered, the Board has no reason to believe that registered firms providing services to EGCs will incur costs that are greater than those incurred by firms providing services to non-EGCs.

Commenters agreed that the proposals generally should apply to audits of EGCs and that excluding the application of the proposals from audits of EGCs would be inconsistent with protecting the public interest.

Accordingly, and for the reasons explained above, the Board has requested that the Commission determine, to the extent that Section 103(a)(3)(C) of the Act applies, that it is necessary or appropriate in the public interest, after considering the protection of investors and whether the action will promote efficiency, competition, and capital formation, to apply the final rule amendment to audits of EGCs.

III. Date of Effectiveness of the Proposed Rules and Timing for Commission Action

Within 45 days of the date of publication of this notice in the **Federal**

⁵⁵ The EGC Staff White Paper uses a lagging 18-month window to identify companies as EGCs. Please refer to the "Current Methodology" section in the Staff White Paper for details. Using an 18-month window enables staff to analyze the characteristics of a fuller population in the EGC Staff White Paper but may tend to result in a larger number of EGCs being included for purposes of the present EGC analysis than would alternative methodologies. For example, an estimate using a lagging 12-month window would exclude some EGCs that are delinquent in making periodic filings. An estimate as of the measurement date would exclude EGCs that have terminated their registration, or that have exceeded the eligibility or time limits. In the EGC Staff White paper, PCAOB staff identified 263 registered audit firms that issued audit reports for the 3,031 EGCs as of the November 15, 2022 measurement date. None of these 263 audit firms are among the 80 firms that failed to file annual reports and pay annual fees for reporting years 2022 and 2023.

⁵³ See Public Law 112–106 (Apr. 5, 2012). Section 103(a)(3)(C) of the Act, as added by Section 104 of the JOBS Act, also provides that any rules of the Board requiring (1) mandatory audit firm rotation or (2) a supplement to the auditor's report in which the auditor would be required to provide additional information about the audit and the financial statements of the issuer (auditor discussion and analysis) shall not apply to an audit of an EGC. The final rule amendment does not fall within either of these two categories.

⁵⁴ See PCAOB Office of Economic and Risk Analysis, *Characteristics of Emerging Growth Companies and Their Audit Firms at November 15, 2022* (Feb. 20, 2024) ("EGC Staff White Paper"), available at https://assets.pcaobus.org/pcaob-dev/docs/default-source/economicandriskanalysis/projectsother/documents/white-paper-on-characteristics-of-emerging-growth-companies-as-of-nov-15-2022.pdf?sfvrsn=a8294f3_4.

Register or within such longer period (i) as the Commission may designate up to 90 days of such date if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the Board consents, the Commission will:

(A) By order approve or disapprove such proposed rules; or

(B) Institute proceedings to determine whether the proposed rules 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 rules are consistent with the requirements of Title I of the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's internet comment form (<https://www.sec.gov/rules/pcaob>); or
- Send an email to rule-comments@sec.gov. Please include PCAOB-2024-05 on the subject line.

Paper Comments

- Send paper comments in triplicate to Vanessa A. Countryman, Secretary, Securities and Exchange Commission, 100 F Street NE, Washington, DC 20549-1090.

All submissions should refer to PCAOB-2024-05. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's internet website (<https://www.sec.gov/rules/pcaob>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rules that are filed with the Commission, and all written communications relating to the proposed rules between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street NE, Washington, DC 20549, on official business days between the hours of 10 a.m. and 3 p.m. Copies of such filing will also be available for inspection and copying at the principal office of the PCAOB. Do not include personal identifiable information in submissions; you should submit only information that you wish to make available publicly.

We may redact in part or withhold entirely from publication submitted material that is obscene or subject to copyright protection. All submissions should refer to PCAOB-2024-05 and should be submitted on or before December 12, 2024.

By the Commission.

Vanessa A. Countryman.

Secretary.

[FR Doc. 2024-27247 Filed 11-20-24; 8:45 am]

BILLING CODE 8011-01-P

SECURITIES AND EXCHANGE COMMISSION

[Investment Company Act Release No. 35387; File No. 812-15188]

Zscaler, Inc.

November 15, 2024.

AGENCY: Securities and Exchange Commission ("Commission").

ACTION: Notice.

Notice of application for an order under Section 3(b)(2) of the Investment Company Act of 1940 ("Act").

APPLICANT: Zscaler, Inc.

SUMMARY OF APPLICATION: Applicant seeks an order under Section 3(b)(2) of the Act declaring it to be primarily engaged in a business other than that of investing, reinvesting, owning, holding or trading in securities. Applicant states that it is in the business of providing, improving, and developing cloud security solutions to businesses.

FILING DATES: The application was filed on December 28, 2020, and amended on May 11, 2021, July 28, 2021, January 6, 2022, July 31, 2023, and September 13, 2024.

HEARING OR NOTIFICATION OF HEARING: An order granting the requested relief will be issued unless the Commission orders a hearing. Interested persons may request a hearing by emailing the Commission's Secretary at Secretarys-Office@sec.gov and serving applicants with a copy of the request, by email if an email address is listed for the relevant Applicant below, or personally or by mail, if a physical address is listed for the relevant Applicant below. Hearing requests should be received by the Commission by 5:30 p.m. on December 10, 2024, and should be accompanied by proof of service on the applicants, in the form of an affidavit, or for lawyers, a certificate of service. Pursuant to rule 0-5 under the Act, hearing requests should state the nature of the writer's interest, any facts bearing upon the desirability of a hearing on the matter, the reason for the request, and

the issues contested. Persons who wish to be notified of a hearing may request notification by emailing the Commission's Secretary at Secretarys-Office@sec.gov.

ADDRESSES: The Commission: Secretarys-Office@sec.gov. Applicant: Remo Canessa, Chief Financial Officer, and Robert Schlossman, Esq., Chief Legal Officer, Zscaler, Inc., at Treasury@zscaler.com; Kevin R. Bettsteller, Esq., at kbettsteller@gibsondunn.com.

FOR FURTHER INFORMATION CONTACT: Adam Lovell, Senior Counsel, or Terri G. Jordan, Branch Chief, at (202) 551-6825 (Division of Investment Management, Chief Counsel's Office).

SUPPLEMENTARY INFORMATION: The following is a summary of the application. For Applicant's representations, legal analysis, and conditions, please refer to Applicant's fifth amended and restated application, dated September 13, 2024, which may be obtained via the Commission's website by searching for the file number at the top of this document, or for an Applicant using the Company name search field, on the SEC's EDGAR system. The SEC's EDGAR system may be searched at <https://www.sec.gov/edgar/searchedgar/legacy/companysearch.html>. You may also call the SEC's Public Reference Room at (202) 551-8090.

Applicant's Representations

1. Applicant states that it is a Delaware corporation formed in 2007 that, directly and through its wholly-owned subsidiaries,¹ is engaged in the business of providing, improving, and developing cloud security solutions to businesses.

2. Applicant states that its business is highly capital intensive, requires R&D of new technologies, and does not involve the Applicant acquiring or retaining significant "hard" operating assets. Applicant states that it maintains significant cash reserves that it seeks to invest for purposes of conserving capital and providing liquidity until the funds are used in its cloud-based services and technology business. As described more fully in the application, Applicant states that it requires significant liquid capital primarily to: (i) fund R&D for new products and services, (ii) advance the commercialization of its business, (iii) otherwise fund its operations, and (iv) make other capital expenditures in keeping with the growth of the

¹ Applicant states that its 28 wholly-owned subsidiaries generally engage in sales and marketing or research and development ("R&D") activities in their respective jurisdictions.

Applicant's cloud-based services and technology business.

3. Applicant states that it has financed operations primarily through offerings of its debt and equity securities, but ultimately seeks to generate cash from its operations to support its business. Applicant states that it seeks to preserve capital and maintain liquidity, pending the use of such capital for its operations, by investing in "Capital Preservation Instruments."² Applicant states that it may in the future make strategic investments in "other investments" consistent with Rule 3a–8. Applicant states that such securities will not be acquired for speculative purposes.

Applicant's Legal Analysis

1. Applicant seeks an order under Section 3(b)(2) of the Act declaring that it is primarily engaged in a business other than that of investing, reinvesting, owning, holding or trading in securities and therefore is not an investment company as defined in the Act.

2. Section 3(a)(1)(A) of the Act defines the term "investment company" to include an issuer that is or holds itself out as being engaged primarily, or proposes to engage primarily, in the business of investing, reinvesting or trading in securities. Section 3(a)(1)(C) of the Act further defines an investment company as an issuer that is engaged or proposes to engage in the business of investing, reinvesting, owning, holding or trading in securities, and owns or proposes to acquire investment securities having a value in excess of 40% of the value of the issuer's total assets (exclusive of Government securities and cash items) on an unconsolidated basis. Section 3(a)(2) of the Act defines "investment securities" to include all securities except Government securities, securities issued by employees' securities companies, and securities issued by majority-owned subsidiaries of the owner which (a) are not investment companies and (b) are not relying on the exclusions from the definition of investment company in Section 3(c)(1) or Section 3(c)(7) of the Act. Applicant states that it has never been, is not now, and does not propose

to be, primarily engaged in the business of investing, reinvesting, owning, holding, or trading in securities. The Applicant states that it currently holds investment securities amounting to less than 40% of its total assets (exclusive of Government securities and cash items), but that its need for liquid capital to conduct its business means that it, in part, makes investments in certain securities exceeding 40% of the Company's total assets (exclusive of Government securities and cash items) on an unconsolidated basis. Applicant states that it therefore may be an "investment company" pursuant to Section 3(a)(1)(C) of the Act absent an exclusion or exemption.

3. Rule 3a–8 under the Act provides an exclusion from the definition of investment company if, among other factors, a company's R&D expenses are a substantial percentage of its total expenses for the last four fiscal quarters combined. While Applicant states that it believes that it complies with the conditions of Rule 3a–8, Applicant states that it has concerns over (a) whether compliance is practical in light of changes to the Company's overall expenses in connection with the increase of customer subscriptions and support services, and (b) whether R&D expenses, while substantial in absolute terms, may not always be considered substantial as a ratio of overall expenses. Although Applicant states that it anticipates R&D expenses to increase in absolute terms, such expenses are not anticipated to increase proportionately with Applicant's overall expenses, particularly given increases in expenses related to sales and marketing, the administration of a rapidly expanding employee base, and other administrative expenses. Applicant states that its R&D expenses have fluctuated between 21% and 25% of total expenses over the past six years, and Applicant expects R&D expenses to decrease relative to total expenses over time.

4. Section 3(b)(2) of the Act provides that, notwithstanding Section 3(a)(1)(C) of the Act, the Commission may issue an order declaring an issuer to be primarily engaged in a business other than that of investing, reinvesting, owning, holding, or trading in securities directly, through majority-owned subsidiaries, or controlled companies conducting similar types of businesses. Applicant requests an order under Section 3(b)(2) of the Act declaring that it is primarily engaged in a business other than that of investing, reinvesting, owning, holding or trading in securities, and therefore is not an investment company as defined in the Act.

5. In determining whether an issuer is "primarily engaged" in a non-investment company business under Section 3(b)(2) of the Act, the Commission considers the following factors: (a) the company's historical development, (b) its public representations of policy, (c) the activities of its officers and directors, (d) the nature of its present assets, and (e) the sources of its present income.³

6. Applicant submits that it satisfies the criteria for issuance of an order under Section 3(b)(2) of the Act because Applicant is primarily engaged in the business of providing, improving, and developing cloud security solutions to businesses and is not in the business of investing, reinvesting, owning, holding or trading in securities.

a. *Historical Development.* Applicant states that, since its inception in 2007, Applicant has actively engaged in the business of developing and providing cloud-based information security solutions. Applicant's business has focused on the development of new such products.

b. *Public Representations of Policy.* Applicant states that it has consistently represented that it is engaged in the business of providing a cloud-based suite of information security solutions. Applicant further states that it has never held and does not now hold itself out as an investment company within the meaning of the Act or as engaging in the business of investing, reinvesting, owning, holding, or trading in securities. Applicant submits that its public representations make clear that shareholders invest in the Applicant's securities with the expectation of realizing gains from Applicant's development and sale of its suite of cloud security solutions and not from returns on an investment portfolio.

c. *Activities of Officers and Directors.* Applicant represents that its officers and directors spend substantially all of their time overseeing the Applicant's business of providing its cloud platform to customers. Applicant states that its cash management activities are managed internally by its Chief Financial Officer and externally by an investment manager, whose activities are supervised by the Chief Financial Officer. Applicant states that none of its executive officers, other than the Chief Financial Officer, spend time monitoring cash balances and managing short-term investment securities. In addition, of the Applicant's 6,342 employees (as of October 31, 2023), Applicant states that fewer than five

² As used in Applicant's application, Capital Preservation Instruments refers collectively to any cash items and securities that are held for the purpose of conserving Applicant's capital and liquidity until they are used by Applicant to support its business (as such business is described in Applicant's application). Such holdings are liquid (i.e., can be readily sold), earn competitive market returns and present a low level of credit risk, including short-term investment grade securities, Government securities (as defined in Section 2(a)(16) of the Act), securities of money-market funds registered under the Act, and other cash items; but excluding investments in equity or speculative instruments.

³ *Tonopah Mining Company of Nevada*, 26 SEC 426, 427 (1947).

employees spend time on matters relating to the management of Applicant's investment securities. Applicant states that none of its officers, directors or employees spends or proposes to spend of his or her time to the management of Capital Preservation Instruments on behalf of Applicant.

d. *Nature of Assets.* Applicant states that, as of October 31, 2023, Applicant's investment securities constituted approximately 30.1% of its total assets (excluding Government securities and cash items) on an unconsolidated basis.⁴ Furthermore, Applicant states that as of October 31, 2023, 100% of its investment securities consist of Capital Preservation Instruments. Applicant states that it uses its Capital Preservation Instruments to finance its continued operations in connection with the development of the Company's software. Applicant states that it may in the future make strategic investments in "other investments" consistent with Rule 3a-8. Applicant states, however, that no more than 10% of its total assets (exclusive of Government securities and cash items, including securities issued by money market funds registered under the Act) will consist of investment securities other than Capital Preservation Instruments.⁵ Applicant states that it uses current assets, including its Capital Preservation Instruments, to finance its continued R&D program and operations in connection with the development of the Applicant's software.

e. *Sources of Income and Revenue.* Applicant represents that since its inception it has carried net operating losses. Applicant states that it does, however, derive income from its investment securities. Applicant states that a review of its current source of revenues provides a more accurate review of its operating company status, particularly, given the upward trend in recognizing substantially increased revenues due to sales of new subscriptions. Applicant states that it recognizes substantially all of its revenues from fees based on subscriptions and support. Applicant states that its revenues for the fiscal years ended July 31, 2020, 2021, 2022, and 2023 were \$431.3 million, \$673.1 million, \$1,090.9 million, and \$1,671 million, respectively, on an unconsolidated basis. By contrast, Applicant states that its net investment

income in its fiscal years of 2021, 2022, and 2023 was \$2.8 million, \$4.6 million, and \$60.5 million, respectively.

Applicant states that all such income was derived from Capital Preservation Instruments.⁶ Applicant states that if net investment income were compared to its revenue, it would be less than 4% of revenue for the fiscal year ended July 31, 2023, and equal to less than 0.5% of revenue for the fiscal year ended July 31, 2022.

For the fiscal three months ended October 31, 2023, Applicant states that it earned \$25.9 million of net investment income, an increase compared to \$7.9 million for the first three months ended October 31, 2022. Applicant states that this nonetheless represents less than 5.5% of revenue for the three months ended October 31, 2023. Applicant states that the increase in net investment income is due to the increase in interest rates in the fixed income markets.

7. Applicant asserts that its historical development, its public representations of policy, the activities of its officers and directors, the nature of its assets and its sources of revenue and income, as discussed in the application, demonstrate that it is engaged primarily in a business other than that of investing, reinvesting, owning, holding or trading securities. Applicant thus asserts that it satisfies the criteria for issuing an order under Section 3(b)(2) of the Act.

Applicant's Conditions

Applicant agrees that an order granted pursuant to the application will be subject to the following conditions:

1. Applicant will continue to use its accumulated cash and securities to support its primary business (as such business is described in this Application);
2. Applicant will refrain from investing or trading in securities for speculative purposes; and
3. No more than 10% of Applicant's total assets will consist of investment securities other than Capital Preservation Instruments (as such capitalized term is defined in Applicant's application). For purposes of this condition, total assets excludes cash items (including securities issued by money market funds registered under the Act) and Government securities (as defined in Section 2(a)(16) of the Act). This percentage is to be determined on an unconsolidated basis, except that Applicant should consolidate its

financial statements with the financial statements of any wholly-owned subsidiaries.

For the Commission, by the Division of Investment Management, under delegated authority.

J. Matthew DeLesDernier,
Deputy Secretary.

[FR Doc. 2024-27158 Filed 11-20-24; 8:45 am]

BILLING CODE 8011-01-P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-101645; File No. SR-FINRA-2024-007]

Self-Regulatory Organizations; Financial Industry Regulatory Authority, Inc.; Notice of Partial Amendment No. 1 to Proposed Rule Change To Adopt the FINRA Rule 6500 Series (Securities Lending and Transparency Engine (SLATE™))

November 15, 2024.

I. Introduction

On May 1, 2024, the Financial Industry Regulatory Authority, Inc. ("FINRA") filed with the Securities and Exchange Commission ("SEC" or "Commission"), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act" or "Exchange Act")¹ and Rule 19b-4 thereunder,² a proposed rule change (SR-FINRA-2024-007) to adopt the new FINRA Rule 6500 Series (Securities Lending and Transparency Engine (SLATE™)) to (1) require reporting of securities loans; and (2) provide for the public dissemination of loan information. The proposed rule change was published for comment in the **Federal Register** on May 7, 2024.³

On June 10, 2024, pursuant to Section 19(b)(2) of the Act,⁴ the Commission designated a longer period within which to approve the proposed rule change, disapprove the proposed rule change, or institute proceedings to determine whether to disapprove the proposed rule change.⁵ On August 5, 2024, the Commission instituted proceedings under Section 19(b)(2)(B) of the Act⁶ to

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ See Securities Exchange Act Release No. 100046 (May 1, 2024), 89 FR 38203 (May 7, 2024) ("Notice"). Comments received on the proposed rule change are available at: <https://www.sec.gov/comments/sr-finra-2024-007/srfinra2024007.htm>.

⁴ 15 U.S.C. 78s(b)(2).

⁵ See Securities Exchange Act Release No. 100305 (June 10, 2024), 89 FR 50644 (June 14, 2024). The Commission designated August 5, 2024, as the date by which the Commission shall approve or disapprove, or institute proceedings to determine whether to disapprove, the proposed rule change.

⁶ 15 U.S.C. 78s(b)(2)(B).

⁴ Applicant states that one of its subsidiaries holds investment securities.

⁵ Applicant states that it intends to calculate this percentage by consolidating its financial statements with the financial statements of its wholly-owned subsidiaries (but not with any majority-owned subsidiaries that may be acquired in the future).

⁶ Applicant states that it has not, and does not expect to, earn investment income from strategic investments.

determine whether to approve or disapprove the proposed rule change.⁷ On October 28, 2024, the Commission, pursuant to Section 19(b)(2) of the Act,⁸ designated January 2, 2025, as the date by which the Commission shall either approve or disapprove the proposed rule change.⁹ On November 14, 2024, FINRA responded to comments¹⁰ and filed a partial amendment to the proposed rule change in response to certain comments on the proposed rule change (“Partial Amendment No. 1”). Partial Amendment No. 1 is described in Item II below, which has been substantially prepared by FINRA.¹¹ The Commission is publishing this notice to solicit comments on Partial Amendment No. 1 from interested persons.¹²

II. Self-Regulatory Organization’s Statement of the Terms of Substance of the Proposed Partial Amendment

FINRA is proposing the following amendments to the filing:¹³

1. Reporting Intraday Loan Modifications and Changes to the Parties to a Loan

FINRA is proposing to amend the Original Proposal to delete the supplementary material regarding the reporting of intraday loans (Supplementary Material .01 (Intraday Loan Modifications)) and changes to the parties to a loan, including in the context of reallocating omnibus loans (Supplementary Material .02 (Changes to the Parties to a Covered Securities Loan)). As originally proposed, Rule 6530.01 provided that, if a covered securities loan¹⁴ is modified multiple

times throughout the day, a covered person must report each loan modification as set forth in proposed Rule 6530(b). Some commenters objected to Supplementary Material .01, stating that it was inconsistent with SEA Rule 10c–1a, that intraday reporting was not required and that only end-of-day reporting was mandated under the Commission’s rule.¹⁵ As originally proposed, Rule 6530.02 generally provided that, following the addition or removal of a party required to be identified pursuant to Rule 6530(a)(2)(O), a covered person must report the termination of the previously reported loan and report an initial loan reflecting the new parties to the loan, if known. One commenter asserted that proposed Rule 6530.02 contradicts a decision by the Commission not to treat reallocations among a pooled loan’s underlying constituents as a new covered securities loan or as a loan modification.¹⁶

In Partial Amendment No. 1, FINRA is proposing to amend the Original Proposal to delete both Supplementary Material .01 and .02. Proposed Rule 6530 is not intended to alter when loan events are required to be reported as loan modifications (including terminations) under SEA Rule 10c–1a or when new loans must be reported under SEA Rule 10c–1a. Thus, under FINRA’s proposed rule, covered persons must report modifications consistent with the Commission’s rule and as described in the SEA Rule 10c–1a adopting release.¹⁷ Similarly, covered persons must report reallocations of loans in a manner consistent with SEA Rule 10c–1a and the Adopting Release. To the extent a loan event is not reportable under SEA Rule 10c–1a, there would likewise be no SLATE reporting obligations.

2. Modifiers and Indicators

FINRA is proposing to amend the Original Proposal to delete the proposed modifier and indicator requirements. As originally proposed, covered persons would have been required to append specific modifiers and indicators when reporting initial covered securities loans and loan modifications to SLATE. Specifically, proposed Rule 6530(c) (Modifiers and Indicators) would have required a covered person to identify (1) exclusive arrangements, (2) loans to affiliates, (3) unsettled loans, (4)

terminated loans, (5) rate or fee adjustments, and (6) basket loans. FINRA originally proposed these modifiers and indicators to provide regulators and the public with important information, including where the reported rates may not reflect current market rates, and to enhance the disseminated data and its value to market participants and better inform the reported rates validation process.¹⁸ Industry commenters expressed a variety of concerns regarding the proposed modifiers and indicators, including that these items of information extended beyond the data elements specified in SEA Rule 10c–1a, increased the rule’s complexity and implementation burdens, and may raise information leakage concerns.¹⁹

In Partial Amendment No. 1, FINRA is proposing to amend the Original Proposal to delete the modifier and indicator requirements. Specifically, Partial Amendment No. 1 would delete Rule 6530(c) to remove the specific requirements related to modifiers and indicators to identify (1) exclusive arrangements, (2) loans to affiliates, (3) unsettled loans, (4) terminated loans,²⁰ (5) rate or fee adjustments, and (6) basket loans.²¹

FINRA also proposes to delete the requirements in proposed Rule 6530(a)(2)(Y) and proposed Rule 6530(b)(2)(I), which state that covered persons must report the modifiers and

¹⁸ See Notice, 89 FR 38203, 38208.

¹⁹ See Partial Amendment No. 1; *see also*, Response to Comments, SR–FINRA–2024–007.

²⁰ While FINRA is proposing to delete the requirement that covered persons append a “terminated loan” indicator, FINRA is retaining the requirement that covered persons populate a field with the termination date of the covered securities loan, which is expressly required to be reported to an RNSA under SEA Rule 10c–1a(c)(11). When reporting an initial covered securities loan to SLATE that is an open loan, a covered person would be required to leave the termination date field blank. When reporting an initial covered securities loan that is a term loan, a covered person would report the loan’s termination date in the termination date field. Upon the termination of either an open or a term loan, a covered person would be required to submit a loan modification report to terminate the covered securities loan, which would reflect a loan quantity of zero—allowing FINRA to identify that the loan has been terminated. *See generally*, Adopting Release, 88 FR 75644, 75672 n.426.

²¹ While Partial Amendment No. 1 removes several of the originally proposed fields and the proposed indicators and modifiers to facilitate a timely initial implementation of SLATE, the absence of these elements may impact the quality and completeness of the resultant SLATE data. After gaining experience with the operation of SLATE and the initial data set, FINRA will reevaluate whether any future enhancements to the SLATE reporting requirements are appropriate, including to improve the quality and completeness of SLATE data. Any such efforts would be subject to a separate proposed rule change with the Commission and subject to notice and comment.

⁷ See Securities Exchange Act Release No. 100655 (August 5, 2024), 89 FR 65441 (August 9, 2024).

⁸ 15 U.S.C. 78s(b)(2).

⁹ See Securities Exchange Act Release No. 101450 (October 28, 2024), 89 FR 87448 (November 1, 2024).

¹⁰ See Letter from Racquel L. Russell, Senior Vice President, Director of Capital Markets Policy, Office of General Counsel, FINRA, dated November 14, 2024 (responding to comments regarding File No. SR–FINRA–2024–007) (“Response to Comments, SR–FINRA–2024–007”).

¹¹ The Commission has reformatted FINRA’s presentation of its proposed modifications to, and descriptions of, the proposed rule change.

¹² Partial Amendment No. 1 is also available on FINRA’s website at <https://www.finra.org/rules-guidance/rule-filings/sr-finra-2024-007>.

¹³ In addition to the amendments described below, FINRA has made conforming changes to proposed Rule 6510 and proposed Rule 6540(d). FINRA has also made textual changes to better align with the language of SEA Rule 10c–1a.

¹⁴ See 17 CFR 240.10c–1a (“SEA Rule 10c–1a”) and proposed FINRA Rule 6510 for definitions of the terms “covered securities loan,” “covered person,” and “reporting agent” as used throughout Partial Amendment No. 1. *See* proposed FINRA Rule 6510 for definitions of the terms “initial covered securities loan” and “loan modification” as used throughout Partial Amendment No. 1.

¹⁵ See Partial Amendment No. 1; *see also*, Response to Comments, SR–FINRA–2024–007.

¹⁶ See Partial Amendment No. 1; *see also*, Response to Comments, SR–FINRA–2024–007.

¹⁷ Securities Exchange Act Release No. 98737 (October 13, 2023), 88 FR 75644 (November 3, 2023) (Reporting of Securities Loans) (“Adopting Release”).

indicators as required by either the Rule 6500 Series or the SLATE participant specification. Partial Amendment No. 1 also would amend proposed Rule 6510 (Definitions) to remove the definition of the term “affiliate,” as it is no longer needed given the deletion of the related indicator. FINRA believes it is appropriate, at this time, to delete these aspects of the Original Proposal to facilitate the achievement of the initial SLATE reporting requirements in a timely manner.²²

3. Settlement Date and Effective Date

FINRA is proposing to amend the Original Proposal to remove the requirements that covered persons report the settlement date and effective date in covered securities loan reports. As originally proposed, covered persons would have been required to report: (1) the expected settlement date for initial covered securities loans; (2) the expected settlement date for modifications to a loan’s amount, if different from the date of the modification; and (3) the effective date for all other modifications, if different from the date of the modification.²³ Industry commenters expressed a variety of concerns regarding these proposed fields, including that these items of information extended beyond the data elements specified in SEA Rule 10c–1a and increased the rule’s complexity and implementation burdens.²⁴

In Partial Amendment No. 1, FINRA is proposing to delete the originally proposed settlement date- and effective date-related requirements of proposed Rules 6530(a)(2)(E) and 6530(b)(2)(F).²⁵ FINRA believes it is appropriate, at this time, to delete these requirements to facilitate the achievement of the initial implementation of SLATE reporting requirements in a timely manner.

²² Firms may choose to append additional modifiers and indicators to their SLATE reports voluntarily, where available. FINRA would not disseminate these voluntarily provided data points to the public.

²³ See Notice, *supra* note 3.

²⁴ See Partial Amendment No. 1; *see also*, Response to Comments, SR–FINRA–2024–007.

²⁵ A covered person that agrees to a covered securities loan that ultimately does not settle would still be required to report the termination of that loan pursuant to proposed Rule 6530(b)(2) by submitting a loan modification to terminate a covered securities loan. However, because the securities were never transferred to the borrower, the loan modification termination report would not include a modification of the loan amount to zero (unlike in the case of a loan that was terminated because the shares were returned), which would allow FINRA to identify the loan as being terminated because it was unsettled as opposed to a return of shares. *See supra* note 20.

4. Rebate Rates, Lending Fees, and Other Fees or Charges

FINRA is proposing to amend the Original Proposal to provide covered persons with additional options regarding the manner in which they may report a rebate rate or lending fee or rate. As originally proposed, covered persons would have been required to report loan rates as a percentage when reporting to SLATE, even where such rate was based on a spread to a benchmark.²⁶ Under this framework, SEA Rule 10c–1a would require a covered person to report a modification to SLATE to update the loan’s rate where there is a change to the underlying benchmark rate.²⁷ Some commenters expressed concern that reporting modifications to a loan rate solely as a result of a change to the underlying benchmark rate would increase reporting costs and implementation burdens.²⁸

In Partial Amendment No. 1, FINRA is proposing to adopt Rule 6530(a)(4) (Reporting Loan Rates Based on a Spread to a Benchmark or Reference Rate.) to permit covered persons to—in addition to reporting the rebate rate or lending fee or rate for a covered securities loan—also report the spread and identity of the benchmark or reference rate for covered securities loans that are priced based on a spread to a benchmark or reference rate. Specifically, new proposed Rule 6530(a)(4)(B) provides that, where a rebate rate or lending fee or rate is determined based on a spread to a benchmark or reference rate, a covered person may report: (a) the rebate rate or lending fee or rate as of the date the covered securities loan was effected; (b) the spread; and (c) the identity of the benchmark or reference rate. Alternatively, a covered person may report only the rebate rate or lending fee or rate.

FINRA believes that these proposed amendments are appropriate to provide covered persons the flexibility to report to SLATE in a manner that is consistent with their preference for whether or not they must report modifications to the rebate rate or lending fee or rate described in SEA Rule 10c–1a(c)(8) or (9) due to changes to the underlying benchmark or reference rate.²⁹ This

²⁶ See Notice, *supra* note 3.

²⁷ See Adopting Release, 88 FR 75644, 75672 (explaining that how an RNSA chooses to structure the reporting of loan rates will determine whether a covered person is required to report a modification as a result of benchmark changes).

²⁸ See Partial Amendment No. 1; *see also*, Response to Comments, SR–FINRA–2024–007.

²⁹ A covered person would continue to be required to report a loan modification pursuant to

flexibility should address commenters’ concern that covered persons would be required to report loan rate modifications when the rebate rate changes solely as a result of a change to the underlying benchmark rate (where there is no change in the negotiated spread or identity of the benchmark).³⁰

Partial Amendment No. 1 would also amend the Original Proposal’s requirements to specify that other fees or charges need not be reported where the rebate rate or lending fee or rate field is populated. As originally proposed, covered persons would have been required to report: (1) for a covered securities loan collateralized by cash, the rebate rate; (2) for a covered securities loan not collateralized by cash, the securities lending fee; and (3) any other fees or charges.³¹ Some commenters expressed concern that the Original Proposal extended beyond the data elements specified in SEA Rule 10c–1a by requiring the reporting of other fees or charges (beyond a loan’s pricing).³²

Partial Amendment No. 1 would remove the separate requirement in proposed Rule 6530(a)(2)(K) to report any other fees or charges and amend the rebate rate and lending fee reporting requirements in proposed Rule 6530(a)(2)(I) and (J), respectively, to mirror the language in SEA Rule 10c–1a(c)(8) and (9), respectively. Thus, revised proposed Rule 6530(a)(2)(I) (renumbered as (a)(2)(H)) would require a covered person to report, “[f]or a covered securities loan collateralized by cash, the rebate rate or any other fee or charges;” and revised proposed Rule 6530(a)(2)(J) (renumbered as (a)(2)(I)) would require a covered person to report, “[f]or a covered securities loan not collateralized by cash, the securities lending fee or rate, or any other fee or charges.”

5. Covered Person Capacity and MPID

FINRA is proposing to amend the Original Proposal to delete the requirement that covered persons report whether the covered person is the lender, borrower or intermediary, which was intended to help FINRA perform data validations, in particular, when a

proposed Rule 6530(b)(2) in the event of a change to the negotiated spread or to the identity of the benchmark or reference rate. *See* Adopting Release, 88 FR 75644, 75672 (stating that if an RNSA chooses to allow covered persons to report based on a spread and a benchmark, then no modification would be required to be reported unless there were a change in the negotiated spread or benchmark).

³⁰ See Partial Amendment No. 1; *see also*, Response to Comments, SR–FINRA–2024–007.

³¹ See Notice, *supra* note 3.

³² See Partial Amendment No. 1; *see also*, Response to Comments, SR–FINRA–2024–007.

party other than the covered person submitted the SLATE report.³³ Some commenters expressed concern that this requirement extended beyond the data elements specified in SEA Rule 10c–1a and would increase the complexity of the reporting requirements and implementation burdens.³⁴

In Partial Amendment No. 1, FINRA is proposing to delete proposed Rules 6530(a)(2)(V) and 6530(b)(2)(G), which both required reporting of whether the covered person is the lender, borrower or intermediary. FINRA believes that this proposed amendment is appropriate in that it simplifies the initial reporting framework. FINRA believes that the file submission process would provide information sufficient to allow FINRA to identify the submitting party and therefore the ability to ascertain whether a SLATE report is being submitted by the covered person, a reporting agent, or another party.

FINRA is also proposing to make a conforming amendment to proposed Rule 6530(a)(2) to require a covered person to submit their market participant identifier (“MPID”), if known, when reporting an initial covered securities loan, consistent with the requirement in proposed Rule 6530(b)(2)(C) (renumbered as (b)(2)(B)) for loan modification reports, which will identify in the audit trail the party on whose behalf a SLATE report is submitted.

6. Internal Loan Identifiers

FINRA is proposing to amend the Original Proposal regarding the requirement that covered persons report unique internal loan identifiers. As originally proposed, Rules 6530(a)(2)(W) and 6530(b)(2)(A) would have required covered persons to report the unique internal identifier assigned to the covered securities loan. With respect to an allocation of an omnibus loan effected pursuant to an agency lending agreement, proposed Rules 6530(a)(2)(X) and 6530(b)(2)(B) would have required covered persons to report the unique internal identifier for the associated omnibus loan.³⁵

FINRA proposed Rules 6530(a)(2)(W) and 6530(b)(2)(A) to allow FINRA to link related loan reports where a FINRA identifier had not yet been assigned, thereby improving the completeness of audit trail data available to regulators and the usefulness of the information disseminated to the public. In the case of proposed Rules 6530(a)(2)(X) and

6530(b)(2)(B), FINRA intended to use the reported information to identify where multiple loan reports were related to a single omnibus loan, thereby providing additional clarity in the loan activity statistics disseminated to the public and to improve the completeness of the audit trail available to regulators. Some commenters expressed concerns that the required internal loan and omnibus loan identifiers extended beyond the data elements specified in SEA Rule 10c–1a and increased the rule’s complexity and implementation burdens.³⁶

In Partial Amendment No. 1, FINRA is proposing to amend Rule 6530(a)(2) to streamline the requirement that a unique identifier assigned by the covered person to the loan must be reported to SLATE. Specifically, revised proposed Rule 6530(a)(2)(W) (renumbered as (a)(2)(U)) would provide that, where a covered person’s daily submission includes two or more reports related to the same covered securities loan (e.g., an initial covered securities loan and a loan modification to terminate the covered securities loan), and FINRA has not yet assigned a unique identifier to the initial covered securities loan, the covered person must report a unique identifier assigned to the covered securities loan by the covered person responsible for reporting the loan to SLATE.³⁷

With this amendment, FINRA is narrowing the scope of the requirement from the Original Proposal such that, instead of applying to all initial covered securities loan reports, the requirement would be limited to instances where a covered person’s daily submission includes two or more T+0 reports related to the same covered securities loan—which is the circumstance that gives rise to the audit trail gap sought to be addressed by the requirement. Similarly, with respect to loan modifications, under the amendment, where a covered person’s daily submission includes two or more T+0 reports related to the same covered securities loan, the covered person must report the identifier that was provided with respect to the associated same-day report for that covered securities loan.

This amendment is necessary to allow FINRA to link same-day T+0 reports that relate to the same covered securities loan. Without a way to link such reports, FINRA would be unable to incorporate accurately modifications

into the daily loan statistics where FINRA cannot identify the amount of securities impacted by the modification. For example, FINRA would be unable to determine the information necessary to incorporate the modification into the volume information described in proposed Rule 6540(c)(1). Therefore, FINRA believes this amendment is appropriate and necessary in that it streamlines initial SLATE reporting requirements while continuing to allow FINRA to accurately record and disseminate information on transactions reported pursuant to SEA Rule 10c–1a.

FINRA is proposing to amend the Original Proposal to delete the requirements in proposed Rules 6530(a)(2)(X) and 6530(b)(2)(B) related to the provision of a unique internal identifier for an associated omnibus loan. FINRA believes this amendment is appropriate, at this time, to facilitate the achievement of the initial SLATE reporting requirements in a timely manner.

7. Reporting Deadline

FINRA is proposing to amend the Original Proposal to extend the deadline for reporting initial covered securities loans and loan modifications to SLATE. As originally proposed, covered persons would have been required to report loan information to SLATE by 8:00:00 p.m. Eastern Time (“ET”), with loans that were effected or modified after 7:45:00 p.m. ET or on a Saturday, a Sunday, a federal or religious holiday or other day on which SLATE is not open at any time during that day being reportable by 8:00:00 p.m. ET the next business day.³⁸ Some commenters expressed concern regarding the 7:45:00 p.m. ET loan cut-off time and 8:00:00 p.m. ET reporting deadline, including that closing SLATE at 8:00:00 p.m. ET would not capture certain end-of-day activity, and that a 15-minute turnaround time (between 7:45:00 p.m. ET and 8:00:00 p.m. ET) would make end-of-day processes challenging.³⁹

In Partial Amendment No. 1, FINRA is proposing to amend proposed Rule 6530(a)(1) and (b)(1) to extend the reporting deadline to 11:59:59 p.m. ET and to change the reporting cut-off time in proposed Rule 6530(a)(1) and (b)(1) to 7:00:00 p.m. ET. Partial Amendment No. 1 would also make a corresponding change to the definition of “SLATE system hours” in proposed Rule 6510(i) (renumbered as (h)) to specify that the SLATE system is open through 11:59:59 p.m. ET. FINRA believes that these

³⁶ See Partial Amendment No. 1; *see also*, Response to Comments, SR–FINRA–2024–007.

³⁷ A covered person may use an identifier that it previously assigned for internal use or one that the firm generated solely for the purpose of reporting the loan to SLATE.

³⁸ See Notice, *supra* note 3.

³⁹ See Partial Amendment No. 1; *see also*, Response to Comments, SR–FINRA–2024–007.

³³ See Notice, *supra* note 3.

³⁴ See Partial Amendment No. 1; *see also*, Response to Comments, SR–FINRA–2024–007.

³⁵ See Notice, *supra* note 3.

proposed amendments to extend SLATE system hours are appropriate to provide additional time to process SLATE submissions at the end of the day. FINRA believes that the proposed amendment to modify the loan cut-off time from 7:45:00 p.m. ET to 7:00:00 p.m. ET would provide additional time to report loans that are effected near the end of the day, including time to complete any necessary security set up in SLATE.

8. Reporting Agent Supervision

FINRA is proposing to amend the Original Proposal to delete proposed Rule 6530(d)(3). As originally proposed, Rule 6530(d)(3) would have specified that a member relying on a reporting agent to report covered securities loan information to SLATE has an obligation under FINRA Rule 3110 (Supervision) to take reasonable steps to ensure that the reporting agent is complying with SEA Rule 10c-1a and FINRA Rule 6530 on the member's behalf.⁴⁰ Two commenters expressed concern with this requirement,⁴¹ including that it shifts back to the covered person the reporting compliance burden established by SEA Rule 10c-1a and would create a reconciliation obligation that would be time consuming, costly, and operationally intensive.⁴²

In Partial Amendment No. 1, FINRA is deleting proposed Rule 6530(d)(3). In its oversight of member compliance with SEA Rule 10c-1a, in addition to reviewing whether members have complied with the requirements of SEA Rule 10c-1a(a)(2) with respect to the use of reporting agents, FINRA also will review the timeliness and accuracy of SLATE reports submitted by reporting agents in light of a reporting agent's obligations under SEA Rule 10c-1a(b) and the underlying requirements of SEA Rule 10c-1a. After gaining experience with the SLATE program, FINRA will reevaluate whether any additional measures are appropriate.

9. Loan Transaction Activity and Rate Distribution Data

FINRA is proposing to amend the Original Proposal to remove the subcategories of volume data from the aggregate loan transaction activity to be disseminated. Under the Original Proposal, in addition to the total aggregate volume of securities subject to an initial covered securities loan or modification to the amount of reportable securities loaned reported on the prior

business day, Rule 6540(c)(1) paragraphs (A) through (E) would have provided that FINRA would disseminate, by the morning of the next business day, aggregate loan transaction activity, including information broken down into several subcategories (e.g., by borrower type or whether a loan is an open or term loan).⁴³ Some commenters expressed concern regarding the Original Proposal, including that the level of data granularity exceeds the discretion provided by the Commission with respect to aggregate data, and that bucketing data by borrower type, in particular, may permit market participants to discern individual loan amounts that are subject to delayed dissemination under SEA Rule 10c-1a.⁴⁴

In Partial Amendment No. 1, FINRA is proposing to amend paragraph (c)(1)(A) to provide that FINRA will disseminate the aggregate volume of securities subject to an initial covered securities loan or modification to the amount of reportable securities loaned, reported on the prior business day. FINRA is proposing to delete paragraphs (c)(1)(B) through (E). FINRA believes it is appropriate, at this time, to revise the Original Proposal as described and to revisit the possibility of enhancing the aggregate loan transaction activity in the future after gaining experience with the impact of disseminating volume data and analyzing what additional information could be useful while continuing to be sensitive to potential information leakage concerns. Any future amendments to the dissemination provisions would be subject to a separate proposed rule change with the Commission and subject to notice and comment.

FINRA is also proposing to amend proposed Rules 6540(a) and (b) to clarify that FINRA will disseminate, as part of the individual loan transaction data, the unique identifier assigned by FINRA to the covered securities loan for a loan modification "if reported to SLATE or otherwise identified by FINRA." This amendment is appropriate because a covered person may be unable to report a FINRA identifier for a loan modification if the FINRA identifier was not yet assigned by FINRA—e.g., in the case of a same-day return or partial return of shares, where the initial covered securities loan and the modification to the same loan are reported to SLATE on T+0.

In addition, FINRA is proposing to amend proposed Rule 6540(c)(2)(A) to

provide that the loan rate distribution statistics for loans collateralized by cash will be bucketed by U.S. currency and non-U.S. currency, as applicable. In the Original Proposal, Rule 6540(c)(2)(A) would have provided that FINRA would disseminate the highest rebate rate, lowest rebate rate, and volume weighted average of the rebate rates reported for initial covered securities loans collateralized by cash and for loan modifications collateralized by cash (where the loan modification involved a change to the rebate rate).⁴⁵ The proposed amendment is appropriate because the currency used as collateral will impact the rebate rate reported to SLATE and, therefore, separating the rate information by U.S. currency collateral and non-U.S. currency collateral will make the disseminated information more useful.

10. De Minimis Loan Transaction Activity

FINRA is proposing to amend the Original Proposal to clarify the operation of the *de minimis* exception for aggregate loan transaction activity and increase the *de minimis* threshold. As originally proposed, Supplementary Material .01 to proposed Rule 6540 (De Minimis Loan Transaction Activity) would have provided that FINRA may omit from the aggregate loan activity volume information for reportable securities for which there were three or fewer types of initial covered securities loan and loan modification events reported to SLATE in total on the prior business day.⁴⁶ Some commenters expressed concern regarding the *de minimis* provision, including that the threshold of three or fewer loan or loan modification events is insufficient to effectively prevent information leakage and that the application of the *de minimis* exception should be mandatory rather than discretionary.⁴⁷

In Partial Amendment No. 1, FINRA is proposing to amend Supplementary Material .01 to clarify the operation of the *de minimis* provision and increase the threshold. Specifically, FINRA is proposing to amend proposed Rule 6540.01 to clarify that FINRA's application of the *de minimis* threshold will be non-discretionary and to provide that FINRA will not include aggregate volume information for a security unless there were reports submitted to SLATE on the prior business day for at least 10 distinct covered securities loans in the reportable security (represented by

⁴⁰ See Notice, *supra* note 3.

⁴¹ See Partial Amendment No. 1; *see also*, Response to Comments, SR-FINRA-2024-007.

⁴² See Partial Amendment No. 1; *see also*, Response to Comments, SR-FINRA-2024-007.

⁴³ See Notice, *supra* note 3.

⁴⁴ See Partial Amendment No. 1; *see also*, Response to Comments, SR-FINRA-2024-007.

⁴⁵ See Notice, *supra* note 3.

⁴⁶ See Notice, *supra* note 3.

⁴⁷ See Partial Amendment No. 1; *see also*, Response to Comments, SR-FINRA-2024-007.

different FINRA-assigned unique loan identifiers).⁴⁸ Therefore, under paragraph (c)(1), FINRA would not disseminate aggregate volume information in a reportable security unless there were at least 10 unique loans reported to SLATE in the security on the prior business day.⁴⁹

Following are the changes proposed in Partial Amendment No. 1, with the proposed changes in the original filing shown as if adopted. Proposed new language in Partial Amendment No. 1 is italicized; proposed deletions in Partial Amendment No. 1 are in brackets:

6000. Quotation, Order, and Transaction Reporting Facilities

* * * * *

6500. Securities Lending and Transparency Engine (Slate)

6510. Definitions

For the purposes of this Rule 6500 Series, the following terms have the following meaning:

[(a) “Affiliate” means an entity that controls, is controlled by or is under common control with a Covered Person. For the purposes of this definition, “control,” along with any derivative thereof, means legal, beneficial, or equitable ownership, directly or indirectly, of 25 percent or more of the capital stock (or other ownership interest, if not a corporation) of any entity ordinarily having voting rights. The term “common control” means the same natural person or entity controls two or more entities.]

(a)[(b)] “Confidential Data Element” means an item of information that a Covered Person must report under SEA Rule 10c–1a(e) and FINRA Rule 6530(a)(2)(M)[(O)] through (U)[(X)].

(b)[(c)] “Custodian” means a Broker or Bank that is providing safekeeping or custody services as described in Exchange Act Section 3(a)(4)(B)(viii)(I)(aa) or (bb) in connection with the Covered Securities Loan.

(c)[(d)] “Data Element” means an item of information that a Covered Person must report under SEA Rule 10c–1a(c) and FINRA Rule 6530(a)(2)(A) through (L)[(N) and (Y)].

(d)[(e)] “Initial Covered Securities Loan” means a new Covered Securities Loan not previously reported to SLATE.

(e)[(f)] “Loan Modification” means a change to any Data Element with respect to a Covered Securities Loan (irrespective of whether such Covered Securities Loan was previously reported to SLATE).

⁴⁸ FINRA will not have insight into all of the relevant loan details necessary to generate the statistics described in proposed Rule 6540(c) with respect to modifications to loans for which reporting was not required pursuant to SEA Rule 10c–1a(c) at the time the loan was agreed to or last modified (*i.e.*, modifications reported to SLATE pursuant to SEA Rule 10c–1a(d)(2)). Therefore, the daily loan statistics that FINRA will publish will only reflect modifications to covered securities loans that were previously reported to SLATE.

⁴⁹ This proposed provision is intended to address potential information leakage in circumstances where there are multiple reported events associated with the same loan on a given day.

(f)[(g)] “Securities Lending and Transparency Engine” or “SLATE” means the automated system developed by FINRA that, among other things, accommodates reporting and dissemination of loan reports where applicable in Covered Securities Loans.

(g)[(h)] “SLATE Participant” means any person that reports securities loan information to SLATE, directly or indirectly.

(h)[(i)] “SLATE System Hours” means the hours SLATE is open, which are 6:00:00 a.m. Eastern Time through 11:59:59[7:59:59] p.m. Eastern Time on a business day, unless otherwise announced by FINRA.

(i)[(j)] The following terms shall have the meanings set forth in Exchange Act Section 3(a): “Bank,” “Broker,” “Dealer,” and “Clearing Agency.”

(j)[(k)] The following terms shall have the meanings set forth in SEA Rule 10c–1a: “Covered Person,” “Covered Securities Loan,” “Reporting Agent,” and “Reportable Security.”

6520. Participation in SLATE

(a) No Change.

(b) Reporting Agents

A SLATE Participant acting as a Reporting Agent shall provide FINRA with a list naming each Covered Person on whose behalf the Reporting Agent is providing information to SLATE and shall provide FINRA with any *updates*[changes] to the list of such persons by the end of the day on which any such change occurs, in the form and manner specified by FINRA.

(c) No Change.

6530. Reporting Securities Loan Information

(a) Initial Covered Securities Loans

(1) When and How Initial Covered Securities Loans Are Reported

For Initial Covered Securities Loans, Covered Persons must report the information specified in paragraph [Rule 6530](a)(2) of this Rule to SLATE, as provided in this paragraph (a)(1):

(A) An Initial Covered Securities Loan effected on a business day at or after 12:00:00 a.m. Eastern Time through 7:00:00[7:45:00] p.m. Eastern Time must be reported the same day [before 8:00:00]by 11:59:59 p.m. Eastern Time;

(B) An Initial Covered Securities Loan effected on a business day after 7:00:00[7:45:00] p.m. Eastern Time must be reported no later than the next business day (T+1) [before 8:00:00]by 11:59:59 p.m. Eastern Time; or

(C) An Initial Covered Securities Loan effected on a Saturday, a Sunday, a federal or religious holiday or other day on which SLATE is not open at any time during that day (determined using Eastern Time) must be reported the next business day (T+1) [before 8:00:00]by 11:59:59 p.m. Eastern Time.

(2) Loan Information To Be Reported

For Initial Covered Securities Loans, each SLATE report shall contain the following information:

(A) No Change.

(B) Security symbol, CUSIP, ISIN, or FIGI, or other security identifier[if any];

(C) through (D) No Change.

[(E) The expected settlement date of the Covered Securities Loan;]

(E)[(F)] The name of the platform or venue where the Covered Securities Loan was effected;

(F)[(G)] The amount of the Reportable Securities loaned;

(G)[(H)] The type of collateral used to secure the Covered Securities Loan;

(H)[(I)] For a Covered Securities Loan collateralized by cash, the rebate rate or any other fee or charges;

(I)[(J)] For a Covered Securities Loan not collateralized by cash, the securities lending fee or rate, or any other fee or charges;

[(K) Any other fees or charges;]

(J)[(L)] The percentage of collateral to value of Reportable Securities loaned required to secure such Covered Securities Loan;

(K)[(M)] [For a Covered Securities Loan with a specified term, t]The termination date of the Covered Securities Loan;

(L)[(N)] Whether the borrower is a Broker or Dealer, a customer (if the person lending securities is a Broker or Dealer), a Clearing Agency, a Bank, a Custodian, or other person;

(M) If known, the MPID of the Covered Person;

(N)[(O)] If known, the legal name of each party to the Covered Securities Loan (other than the customer from whom a Broker or Dealer borrows fully paid or excess margin securities pursuant to SEA Rule 15c3–3(b)(3));

(O)[(P)] If known, the CRD Number or Investment Adviser Registration Depository Number of each party to the Covered Securities Loan[, if applicable];

(P)[(Q)] If known, the MPID of each party to the Covered Securities Loan;

(Q)[(R)] If known, the LEI of each party to the Covered Securities Loan;

(R)[(S)] If known, whether each party to the Covered Securities Loan is the lender, the borrower, or an intermediary between the lender and the borrower;

(S)[(T)] If the person lending securities is a Broker or Dealer and the borrower is its customer, whether the security is loaned from the Broker's or Dealer's securities inventory to a[the] customer of such Broker or Dealer;

(T)[(U)] If known, whether the Covered Securities Loan is being used to close out a fail to deliver pursuant to Rule 204 of SEC Regulation SHO or to close out a fail to deliver outside of Regulation SHO; and

[(V) Whether the Covered Person is the lender, borrower or intermediary;]

(U)[(W)] Where a Covered Person's daily submission includes two or more reports related to the same Covered Securities Loan (e.g., an Initial Covered Securities Loan and a Loan Modification to terminate the Covered Securities Loan) and FINRA has not yet assigned a unique identifier to the Initial Covered Securities Loan, a [The] unique [internal] identifier assigned to the Covered Securities Loan by the Covered Person responsible for reporting the loan to SLATE.[:]

[(X) If the Covered Securities Loan is an allocation of an omnibus loan effected pursuant to an agency lending agreement, the unique internal identifier for the associated omnibus loan assigned by the Covered Person responsible for reporting the Covered Securities Loan to SLATE; and]

[(Y) Such modifiers and indicators as required by either the Rule 6500 Series or the SLATE Participant specification.]

(3) No Change.

(4) *Reporting Loan Rates Based on a Spread to a Benchmark or Reference Rate*
(A) Report the rebate rate or lending fee or rate; or

(B) Report:

(i) the rebate rate or lending fee or rate as of the date the Covered Securities Loan was effected;

(ii) the spread; and

(iii) the identity of the benchmark or reference rate.

(b) Covered Securities Loan Modifications

(1) When and How Loan Modifications Are Reported

For Loan Modifications, Covered Persons must report the information specified in paragraph (b)(2) of this Rule to SLATE, as provided in this paragraph (b)(1):

(A) A Loan Modification effected on a business day at or after 12:00:00 a.m. Eastern Time through 7:00:00[7:45:00] p.m. Eastern Time must be reported the same day [before 8:00:00]by 11:59:59 p.m. Eastern Time;

(B) A Loan Modification effected on a business day after 7:00:00[7:45:00] p.m. Eastern Time must be reported no later than the next business day (T+1) [before 8:00:00]by 11:59:59 p.m. Eastern Time; or

(C) A Loan Modification effected on a Saturday, a Sunday, a federal or religious holiday or other day on which SLATE is not open at any time during that day (determined using Eastern Time) must be reported the next business day (T+1) [before 8:00:00]by 11:59:59 p.m. Eastern Time.

(2) Loan Modifications—Information To Be Reported

For Loan Modifications, each SLATE report shall contain the following information:

(A) The unique identifier assigned by FINRA to the Initial Covered Securities Loan, or, if *where a Covered Person's daily submission includes two or more reports related to the same Covered Securities Loan and FINRA* [a unique identifier] has not yet [been] assigned a *unique identifier to the Covered Securities Loan*[by FINRA], the [unique internal] identifier *reported pursuant to paragraph (a)(2)(U) of this Rule* [assigned to the Covered Securities Loan by the Covered Person responsible for reporting the loan to SLATE];

[(B) If the Covered Securities Loan is an allocation of an omnibus loan effected pursuant to an agency lending agreement, the unique internal identifier for the associated omnibus loan assigned by the Covered Person responsible for reporting the Covered Securities Loan to SLATE;]

(B)[(C)] *If known*, [(T)]he MPID of the Covered Person;

(C)[(D)] The date of the Loan Modification;

(D)[(E)] The time of the Loan Modification; and

[(F) The expected settlement date for modifications to the loan amount (if the expected settlement date is a date other than the date of the Loan Modification), or the effective date for all other Loan Modifications (if effective date is a date other than the date of the Loan Modification);]

[(G) Whether the Covered Person is the lender, borrower or intermediary;]

(E)[(H)] *If the Loan Modification occurs after the Data Elements for such Covered Securities Loan are reported to SLATE, and results in a change to information previously required to be reported to SLATE, the specific modification and the specific Data Elements being modified, or*

(ii) *If the Loan Modification is to a Covered Securities Loan for which reporting to SLATE was not required on the date the loan was agreed to or last modified and results in a change to any of the Data Elements, all Data Elements as of the date of modification and an identifier described in paragraph (a)(2)(U) of this Rule.*[The modified Data Elements for a Loan Modification to a Covered Securities Loan previously reported to SLATE or all Data Elements for a Loan Modification to a Covered Securities Loan that was not previously required to be reported to SLATE; and]

[(I) Such modifiers and indicators as required by either the Rule 6500 Series or the SLATE Participant specification.]

[(c) Modifiers and Indicators]

[Append the applicable modifiers or indicators as specified by FINRA to all SLATE reports.]

[(1) Exclusive Arrangement

If the Covered Securities Loan is made pursuant to an exclusive arrangement with the borrower or intermediary, select the appropriate indicator.]

[(2) Loan to Affiliate

If the Covered Securities Loan is made to an Affiliate of the lender or intermediary, select the appropriate indicator.]

[(3) Unsettled Loan

If an Initial Covered Securities Loan or a modification to the amount of Reportable Securities loaned did not settle by the close of SLATE System Hours on the expected settlement date, select the appropriate indicator.]

[(4) Terminated Loan

If a Covered Securities Loan has been terminated, select the appropriate indicator.]

[(5) Rate or Fee Adjustment

(A) If a loan rebate rate or lending fee accounts for a billing adjustment or correction to amounts previously rebated or charged, select the appropriate modifier; or

(B) If a loan rebate rate or lending fee accounts for the value of a distribution or other economic benefit associated with the Reportable Security, e.g., a corporate action, select the appropriate modifier.]

[(6) Basket Loan

If a loan rebate rate or lending fee reflects a rate or fee involving a basket of at least 10 unique Reportable Securities for a single agreed rate or fee for the entire basket, select the appropriate modifier.]

(c)[(d)] Compliance With Reporting Obligations

(1) No Change.

(2) No Change.

[(3) A member relying on a Reporting Agent to report Covered Securities Loan information to SLATE has an obligation under FINRA Rule 3110 to take reasonable steps to ensure that the Reporting Agent is complying with SEA Rule 10c-1a and FINRA Rule 6530 on its behalf.]

(3)[(4)] If a Covered Person makes a good faith determination that it has a reporting obligation under SEA Rule 10c-1a [and this Rule 6500 Series], the Covered Person or Reporting Agent, as applicable, must report the Covered Securities Loan as provided in this Rule, and if the Reportable Security is not entered into the SLATE system, the Covered Person or Reporting Agent, as applicable, must promptly notify and provide FINRA Operations, in the form and manner required by FINRA, the information specified in Rule 6530(a)(2)(A) and (B), along with such other information as FINRA deems necessary to enter the Reportable Security for reporting through SLATE.

[• • • Supplementary Material: -----]

[.01 Intraday Loan Modifications. If a Covered Securities Loan previously reported to SLATE or a Covered Securities Loan not previously reported to SLATE is modified multiple times throughout the day, a Covered Person must report each Loan Modification as set forth in Rule 6530(b).]

[.02 Changes to the Parties to a Covered Securities Loan. With respect to a previously reported Covered Securities Loan, following the addition or removal of a party required to be identified pursuant to Rule 6530(a)(2)(O), a Covered Person must: (a) report the termination of the previously reported Covered Securities Loan as a Loan Modification pursuant to Rule 6530(b) that reflects the date and time the party was added or removed and select the Terminated Loan indicator; and (b) report an Initial Covered Securities Loan pursuant to Rule 6530(a) that reflects the new parties to the loan, if known (other than the customer from whom a Broker or Dealer borrows fully paid or excess margin securities pursuant to SEA Rule 15c3-3(b)(3)).]

6540. Dissemination of Loan Information

(a) Next Day Dissemination

For each Initial Covered Securities Loan and Loan Modification reported to SLATE on a given business day, no later than the morning of the next business day, FINRA will make publicly available:

(1) *for an Initial Covered Securities Loan*, the unique identifier assigned by FINRA to the Covered Securities Loan;

(2) *for a Loan Modification*, the unique identifier assigned by FINRA to the Covered Securities Loan if reported to SLATE or otherwise identified by FINRA;

(3)[(2)] the security identifier(s) specified in Rule 6530(a)(2)(A) or (B) that FINRA determines is appropriate to disseminate; and

(4)[(3)](A) for each Initial Covered Securities Loan, all other Data Elements reported to SLATE, except the amount of Reportable Securities loaned [and as otherwise provided for in paragraph (d) of this Rule]; or

(B) for each Loan Modification *reported pursuant to Rule 6530(b)(2)(E)(i)* [to a Covered Securities Loan], the modified Data Elements reported to SLATE, except the amount of Reportable Securities loaned [and as otherwise provided for in paragraph (d) of this Rule]; or

(C) for each Loan Modification *reported pursuant to Rule 6530(b)(2)(E)(ii)* [to a Covered Securities Loan that was not

previously required to be reported to SLATE], all other Data Elements reported to SLATE, except the amount of Reportable Securities loaned [and as otherwise provided for in paragraph (d) of this Rule].

(b) Delayed Dissemination

For each Initial Covered Securities Loan and Loan Modification reported to SLATE, 20 business days after the date on which the Initial Covered Securities Loan was effected or the loan [amount] was modified, FINRA will make publicly available:

(1) for an Initial Covered Securities Loan, the unique identifier assigned by FINRA to the Covered Securities Loan;

(2) for a Loan Modification, the unique identifier assigned by FINRA to the Covered Securities Loan if reported to SLATE or otherwise identified by FINRA;

(3)[(2)] the security identifier(s) specified in Rule 6530(a)(2)(A) or (B) that FINRA determines is appropriate to disseminate; and

(4)[(3)] the amount of Reportable Securities loaned reported to SLATE.

(c) Daily Loan Statistics

(1) Aggregate Loan Transaction Activity

For each Reportable Security for which an Initial Covered Securities Loan or Loan Modification is reported to SLATE on a given business day, no later than the morning of the next business day, FINRA will disseminate the security identifier specified in Rule 6530(a)(2)(A) or (B) that FINRA determines is appropriate to disseminate and the [aggregate loan activity in the Reportable Security, including the:

(A) [aggregate volume of securities [(both in total and by collateral type)] subject to an Initial Covered Securities Loan or modification to the amount of Reportable Securities loaned, reported on the prior business day.];

[(B) aggregate volume of securities (both in total and by collateral type) subject to a rebate rate or fee modification, reported on the prior business day;]

[(C) aggregate volume of securities subject to an Initial Covered Securities Loan or modification to the amount of Reportable Securities loaned with a specified term, and subject to an Initial Covered Securities Loan or modification to the amount of Reportable Securities loaned without a specified term, reported on the prior business day;]

[(D) aggregate volume of securities subject to an Initial Covered Securities Loan or modification to the amount of Reportable Securities loaned to one or more borrower types specified in Rule 6530(a)(2)(N) reported on the prior business day; and]

[(E) the total number of Initial Covered Securities Loans and terminated Covered Security Loans (both in total and by collateral type) reported on the prior business day.]

(2) Loan Rate Distribution Data

For each Reportable Security for which an Initial Covered Securities Loan or Loan Modification is reported to SLATE on a given business day, no later than the morning of the next business day, FINRA will disseminate the security identifier specified in Rule 6530(a)(2)(A) or (B) that FINRA determines is appropriate to identify the relevant Reportable Security and information pertaining to the distribution of loan rebate rates and lending fees *or rates*, as applicable, including:

(A) the highest rebate rate, lowest rebate rate, and volume weighted average of the rebate rates *by U.S. currency and non-U.S. currency, as applicable*, reported for Initial Covered Securities Loans collateralized by cash and for Loan Modifications collateralized by cash (where the Loan Modification involved a change to the rebate rate); and

(B) the highest lending fee *or rate*, lowest lending fee *or rate*, and volume weighted average of the lending fees *or rates* reported for Initial Covered Securities Loans not collateralized by cash and for Loan Modifications not collateralized by cash (where the Loan Modification involved a change to the lending fee *or rate*).

(d) Loan Transaction Information Not Disseminated

FINRA will not disseminate[:

(1)] any Confidential Data Elements reported to SLATE[; and

(2) any modifier or indicator required by either the Rule 6500 Series or the SLATE Participant specification that FINRA determines shall not be publicly disseminated

• • • Supplementary Material: -----

.01 De Minimis Loan Transaction Activity. Notwithstanding paragraph (c)(1) of this Rule, FINRA *will not include* [may omit from the aggregate loan activity] *aggregate* volume information for a Reportable Security[ies] [for] *unless* [which] *there were reports submitted to SLATE on the prior business day for at least ten distinct Covered Securities Loans in the Reportable Security (represented by different FINRA-assigned unique loan identifiers)* [there were three or fewer types of Initial Covered Securities Loan and Loan Modification events reported to SLATE in total on the prior business day].

.02 No Change.

6550. Emergency Authority

No Change.

* * * * *

III. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change, as amended by Partial 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 (<https://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include file number SR-FINRA-2024-007 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-FINRA-2024-007. This file

number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's internet website (<https://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street NE, Washington, DC 20549, on official business days between the hours of 10 a.m. and 3 p.m. Copies of the filing also will be available for inspection and copying at the principal office of FINRA. Do not include personal identifiable information in submissions; you should submit only information that you wish to make available publicly. We may redact in part or withhold entirely from publication submitted material that is obscene or subject to copyright protection. All submissions should refer to File Number SR-FINRA-2024-007 and should be submitted on or before December 6, 2024.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.⁵⁰

Stephanie J. Fouse,

Assistant Secretary.

[FR Doc. 2024-27223 Filed 11-20-24; 8:45 am]

BILLING CODE 8011-01-P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-101634; File No. SR-CBOE-2024-050]

Self-Regulatory Organizations; Cboe Exchange, Inc.; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Amend Its Fees Schedule

November 15, 2024.

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 November 1, 2024, Cboe Exchange, Inc. (the

⁵⁰ 17 CFR 200.30-3(a)(12).

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

“Exchange” or “Cboe Options”) 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 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 Fees Schedule. 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.

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 Fees Schedule, effective November 1, 2024.

The Exchange first proposes to amend a fee related to transactions in Mini-SPX Index (“XSP”) options, as set forth in the Rate Table for All Products Excluding Underlying Symbol List A. Specifically, the proposed rule change amends fee code MY, appended to all Market-Maker (capacity “M”) in XSP contra to non-customers that remove liquidity and that are executed electronically and assesses a fee of \$0.30 per contract, to assess a fee of \$0.50 per contract.

Next, the Exchange proposes clarifying changes to fees related to

certain orders and auction responses executed in S&P 500 Index (“SPX”), SPX Weekly (“SPXW”), S&P 500 ESG Index (“SPESG”) and Cboe Volatility Index (“VIX”) options in the Automated Improvement Mechanism (“AIM”) Auction.

By way of background, AIM includes functionality in which a Trading Permit Holder (“TPH”) (an “Initiating TPH”) may electronically submit for execution an order it represents as agent on behalf of a customer,³ broker dealer, or any other person or entity (“Agency Order”) against any other order it represents as agent, as well as against principal interest in AIM (an “Initiating Order”), provided it submits the Agency Order for electronic execution into an AIM Auction.⁴ The Exchange may designate any class of options traded on Cboe Options as eligible for AIM. The Exchange notes that all Users, other than the Initiating TPH, may submit responses to an Auction (“AIM Responses”). AIM Auctions take into account AIM Responses to the applicable Auction as well as contra interest resting on the Cboe Options Book at the conclusion of the Auction (“unrelated orders”), regardless of whether such unrelated orders were already present on the Book when the Agency Order was received by the Exchange or were received after the Exchange commenced the applicable Auction. If contracts remain from one or more unrelated orders at the time the Auction ends, they are considered for participation in the AIM order allocation process.

Certain AIM-related surcharges under the Rate Table for Underlying Symbol List A apply when the Exchange is operating in a hybrid environment (*i.e.*, the trading floor is operable). Specifically, the SPX AIM Hybrid Surcharge of \$0.50 per contract applies to all Joint Back-Office (capacity “J”), Market-Maker (capacity “M”), Broker-Dealer (capacity “B”), Non-TPH Market-Maker (capacity “N”) and Professional (capacity “U”) (collectively, “Non-Customers”) orders in SPX/SPXW options executed in AIM, while the SPX AIM Hybrid Surcharge of \$0.39 per contract applies to all Clearing TPHs (capacity “F”) and for Non-Clearing TPH Affiliates (capacity “L”) (collectively, “Firms”) orders in SPX/SPXW options executed in AIM. The SPX AIM Hybrid Originator Surcharge of \$0.10 per contract applies to all SPX/

SPXW Agency/Primary orders. Footnote 26 is appended to the aforementioned surcharges and provides that the SPX AIM Hybrid Surcharges, including the Originator Surcharge, apply only to SPX/SPXW orders executed in AIM and C-AIM during Regular Trading Hours (“RTH”) when the Exchange is operating in a hybrid environment (*i.e.*, the trading floor is operable). Footnote 26 further provides the SPX AIM Hybrid Surcharge will apply to all SPX/SPXW AIM Agency/Primary, Contra and Response orders; and the SPX AIM Hybrid Originator Surcharge will apply to all SPX/SPXW Agency/Primary orders and such fee will be invoiced to the executing TPH.⁵

In contrast, the Exchange notes that the Rate Table for Underlying Symbol List A includes the following fees, which apply when the Exchange trading floor is inoperable: AIM Response Surcharge Fee (for SPX/SPXW and SPESG) of \$0.05 per contract, AIM Contra Surcharge Fee (for SPX/SPXW and SPESG) of \$0.10 per contract, and AIM Agency/Primary Surcharge Fee (for SPX/SPXW) of \$0.10 per contract and (for VIX) of \$0.04 per contract.⁶

Each of the aforementioned fees has appended to it Footnote 12, which governs pricing changes in the event the Exchange trading floor becomes inoperable. Particularly, in the event the trading floor becomes inoperable, the Exchange will continue to operate in a screen-based only environment using a floorless configuration of the System that is operational while the trading floor facility is inoperable. The Exchange will operate using that configuration only until the Exchange’s trading floor facility becomes operational. Open outcry trading will not be available in the event the trading floor becomes inoperable.

The Exchange proposes to amend the titles of the AIM Response Surcharge Fee, the AIM Contra Surcharge Fee, and the AIM Agency/Primary Surcharge Fee to include “(Trading Floor Inoperable)”, to further distinguish between when the

⁵ See Securities Exchange Act Release No. 91252 (March 3, 2021), 86 FR 13598 (March 9, 2021) (SR-CBOE-2021-021[sic]), wherein the Exchange adopted these surcharges.

⁶ See Securities Exchange Act Release No. 88883 (May 15, 2020), 85 FR 31012 (May 21, 2020) (SR-CBOE-2020-045), wherein the Exchange adopted the AIM Contra Surcharge and the AIM Response Surcharge. See also Securities Exchange Act Release No. 88426 (March 19, 2020), 85 FR 16978 (March 25, 2020) (SR-CBOE-2020-021), wherein the Exchange adopted the AIM Execution Surcharge for SPX/SPXW/VIX AIM Agency/Primary Orders (later re-named the AIM Agency/Primary Surcharge Fee).

³ The term “customer” means a Public Customer or a broker-dealer. The term “Public Customer” means a person that is not a broker-dealer. See Rule 1.1.

⁴ See Rule 5.37 (AIM); Rule 5.38 (Complex AIM); and Rule 5.73 (FLEX AIM).

various surcharges would be applicable.⁷

The Exchange also proposes to amend Footnote 12, to provide clarity as to when such changes would apply. As noted above, in the event the trading floor becomes inoperable, the Exchange will continue to operate in a screen-based only environment using a floorless configuration of the System that is operational while the trading floor facility is inoperable. To avoid confusion, since the Exchange also operates a screen-based only environment during its Global Trading Hours (“GTH”) trading session, the Exchange propose to amend Footnote 12 to specify that the Exchange will apply the pricing changes in the event the Cboe Options trading floor becomes inoperable and the Exchange operates in a screen-based only environment during RTH, for the duration of the time the Exchange operates in a screen-based only environment during RTH (as well as for the Curb session immediately following a RTH trading session in which the Cboe Options trading floor is inoperable and the Exchange operates in a screen-based only environment). The Exchange also propose to add references throughout the footnote to note that such pricing changes apply when the Exchange operates in a screen-based only environment during RTH.

The Exchange also proposes to amend Footnote 26 to specify that the SPX AIM Hybrid Surcharges, including the Originator Surcharge, apply only to SPX/SPXW Orders executed in AIM (and C-AIM) during RTH and Curb when the Exchange is operating in a hybrid environment (*i.e.*, the trading floor is operable).

Finally, the Exchange also proposes to rename certain fees under the Clearing Trading Permit Holder Fee Cap section of the Fees Schedule. Specifically, the Exchange proposes to rename “AIM Facilitation Contra Order” to “AIM Contra Order” and to rename “AIM Solicitation Contra Order” to “SAM Contra Order”, to more accurately reflect terminology used by the Exchange throughout the Fees Schedule and within the Rulebook.

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. The Exchange also believes the proposed rule change is consistent with Section 6(b)(4) of the Act,¹¹ which requires that Exchange rules provide for the equitable allocation of reasonable dues, fees, and other charges among its TPHs and other persons using its facilities.

The Exchange believes that the proposed fee change for Market-Maker orders in XSP that are contra to non-customers that remove liquidity and that are executed electronically is reasonable, equitable and not unfairly discriminatory. Specifically, the Exchange believes the proposed change to the fee for Market-Maker orders in XSP contra to non-customers that remove liquidity and that are executed electronically is reasonable. The proposed fee, in general, aligns with current fees for other types of orders in XSP, namely Clearing Trading Permit Holder Proprietary XSP orders contra to non-customers that remove liquidity and are executed electronically (which yield fee code XB). The Exchange believes that the changes are reasonable and that the fee, even as amended, will continue to incentivize TPHs to send additional Market-Maker orders to the Exchange.

The Exchange believes that the proposed fee change to the fee for Market-Maker orders in XSP contra to non-customers that remove liquidity and that are executed electronically is equitable and not unfairly discriminatory because the proposed fee will apply automatically and uniformly

to all applicable Market-Maker orders in XSP which yield fee code MY.

Additionally, the Exchange believes the clarifying changes to the Fees Schedule will remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, will protect investors and the public interest. Specifically, by amending the names of fees related to certain orders and auction responses executed in SPX/SPXW, SPESG and VIX via AIM to better describe when such fees are applicable, the proposed change is designed to add clarity within the Fees Schedule. Similarly, by renaming certain fees under the Clearing Trading Permit Holder Fee Cap section of the Fees Schedule to more accurately reflect terminology used by the Exchange throughout the Fees Schedule and within the Rulebook, the proposed change is designed to mitigate any potential confusion resulting from outdated terminology. Overall, the changes are intended to add clarity to the Fees Schedule, thereby mitigating any potential confusing, to the benefit of investors. The Exchange notes that the proposed clarifying changes do not change the fees (or applicability of such fees).

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 related to XSP fee code MY will impose any burden on intramarket competition that is not necessary or appropriate in furtherance of the purposes of the Act because the proposed fees will apply automatically and uniformly to all applicable Market-Maker orders in XSP which yield fee code MY. The Exchange does not believe the proposed clarifying rule changes will impose any burden on intramarket competition that is not necessary or appropriate in furtherance of the purposes of the Act, as the changes will not result in any practical changes to the fees, but rather are being added to eliminate potential confusion.

The Exchange does not believe that the proposed rule changes will impose any burden on intermarket competition that is not necessary or appropriate in furtherance of the purposes of the Act because the proposed rule change related to a XSP fee code applies to Exchange proprietary products, which are traded exclusively on the Exchange. To the extent that the proposed changes

⁷ As part of the proposed rule change, the Exchange proposes to move the AIM-related surcharges applicable when the Exchange trading floor is inoperable to be listed below the AIM-related surcharges applicable when the Exchange is operating in its normal hybrid environment.

⁸ 15 U.S.C. 78f(b).

⁹ 15 U.S.C. 78f(b)(5).

¹⁰ *Id.*

¹¹ 15 U.S.C. 78f(b)(4).

make Cboe Options a more attractive marketplace for market participants at other exchanges, such market participants are welcome to become Cboe Options market participants. The clarifying rule changes are not intended to have any impact on competition, as they make no substantive change to the Fees Schedule and will have no impact on trading on the Exchange.

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

The foregoing rule change has become effective pursuant to Section 19(b)(3)(A) of the Act¹² and paragraph (f) of Rule 19b-4¹³ thereunder. 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 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 (<https://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include file number SR-CBOE-2024-050 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-2024-050. This file number should be included on the subject line if email is used. To help the

Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's internet website (<https://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street NE, Washington, DC 20549, on official business days between the hours of 10 a.m. and 3 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. Do not include personal identifiable information in submissions; you should submit only information that you wish to make available publicly. We may redact in part or withhold entirely from publication submitted material that is obscene or subject to copyright protection. All submissions should refer to file number SR-CBOE-2024-050 and should be submitted on or before December 12, 2024.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.¹⁴

Stephanie J. Fouse,
Assistant Secretary.

[FR Doc. 2024-27215 Filed 11-20-24; 8:45 am]

BILLING CODE 8011-01-P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-101640; File No. 4-443]

Joint Industry Plan; Notice of Filing of Proposed Amendment To Add Paragraph (c) to Section 6 of the Plan for the Purpose of Developing and Implementing Procedures Designed To Facilitate the Listing and Trading of Standardized Options Authorizing the OLPP Sponsors To Act Jointly To Discuss Quote Mitigation Issues and Potential Solutions

November 15, 2024.

Pursuant to Section 11A of the Securities Exchange Act of 1934 ("Act")¹ and Rule 608 thereunder,²

notice is hereby given that on October 31, 2024, Cboe BZX Exchange, Inc., Cboe C2 Exchange, Inc., Cboe EDGX Exchange, Inc., and Cboe Exchange, Inc., on behalf of the Sponsors³ of the Plan for the Purpose of Developing and Implementing Procedures Designed to Facilitate the Listing and Trading of Standardized Options Submitted Pursuant to Section 11A(a)(3)(B) of the Securities Exchange Act of 1934 ("Options Listing Procedures Plan," "Plan," or "OLPP"),⁴ filed with the Securities and Exchange Commission ("Commission") a proposed amendment to the OLPP. The amendment proposes to add a provision to the OLPP authorizing the OLPP Sponsors to act jointly to discuss both quote mitigation issues and potential solutions to address any issues identified, including, but not limited to, discussing potential new options strike listing methodologies and rules, in order to determine whether the Sponsors might propose one or more amendments to the Plan for Commission approval or whether the individual Sponsors might seek to amend their own rules.

The Commission is publishing this notice to solicit comments from interested persons on the proposed amendment. Set forth below in Section I, which is being published substantially as filed by the Sponsors, is the statement of the purpose and summary of the amendment, along with information pursuant to Rule 608(a) under the Act.

I. Requirements Pursuant to Rule 608(a)

1. Text of Amendment

This [a]mendment proposes to add paragraph (c) to Section 6 of the OLPP. The text of the proposed amendment is in Exhibit I, which is set forth in Section II, below.

2. Purpose of Amendment

For many years, as the options industry has expanded and become more complex, industry participants have raised so-called "quote mitigation"

³ The Sponsors of the OLPP are: BOX Exchange LLC; Cboe BZX Exchange, Inc.; Cboe C2 Exchange, Inc.; Cboe EDGX Exchange, Inc.; Cboe Exchange, Inc.; MEMX LLC; Miami International Securities Exchange LLC; MIAX Emerald, LLC; MIAX Pearl, LLC; MIAX Sapphire LLC; Nasdaq BX, Inc.; Nasdaq GEMX, LLC; Nasdaq ISE, LLC; Nasdaq MRX, LLC; Nasdaq PHLX LLC; The Nasdaq Stock Market LLC; NYSE American LLC; NYSE Arca, Inc.; and The Options Clearing Corporations.

⁴ OLPP is a national market system plan approved by the Commission pursuant to Section 11A of the Act and Rule 608 thereunder. See Securities Exchange Act Release No. 44521 (July 6, 2001), 66 FR 36809 (July 13, 2001). The full text of the OLPP is available at https://www.theocc.com/getmedia/198bfc93-5d51-443c-9e5b-fd575a0a7d0f/options_listing_procedures_plan.pdf.

¹² 15 U.S.C. 78s(b)(3)(A).

¹³ 17 CFR 240.19b-4(f).

¹⁴ 17 CFR 200.30-3(a)(12).

¹⁵ 15 U.S.C. 78k-1.

² 17 CFR 242.608.

concerns, including concerns about proliferation of listed options strike prices and the resulting potential negative effects on investors and on the market makers that are obligated to quote in all of the listed series. Such concerns have been raised at various times in discussions involving one or more of the OLPP Sponsors, market maker members of the national securities exchanges who are obligated to provide quotes in all of the listed option series, the staff of the Securities and Exchange Commission, and the members of various industry working groups (such as the Listed Options Market Structure Working Group).

For example, industry participants have voiced concerns about how to balance the need to provide investors with a sufficient number of strikes to meet their investment purposes, while also ensuring that the number of listed strikes does not become so large that the market makers, who are required to quote continuously in a significant number of existing strikes, are not unduly burdened by having to expend significant amounts of their finite capital to continuously quote strikes in thinly traded and illiquid series. Indeed, although investors need to have a choice of appropriately granular strikes to satisfy their investment needs, some industry participants also have questioned whether the increase in the number of strikes might harm investors, particularly in less liquid series, because investors could become confused about the properties of the various strikes and might be unable to close out positions in illiquid series in an effective manner. Finally, industry participants also have questioned whether the proliferation of strikes might harm overall market quality and widen spreads because market makers are forced to deploy their limited capital in a less efficient manner as a result of their obligation to continuously quote strikes in thinly traded series.

Over the years, there have been a number of amendments to both the OLPP and to the rules of the OLPP Sponsors that were designed to address some of the issues summarized above. For example, in 2009, the OLPP Sponsors proposed a “quote mitigation strategy” amendment to the OLPP, with a goal of reducing the amount of quote traffic that had resulted from the Penny Pilot Program. *See* Joint Industry Plan; Notice of Filing of Amendment No. 3 to the Plan for the Purpose of Developing and Implementing Procedures Designed To Facilitate the Listing and Trading of Standardized Options, Release No. 34–60362, 74 FR 37266 (July 22, 2009). When proposing that amendment, the

Plan Sponsors represented that the Penny Pilot Program resulted “in an explosion of quote traffic” and that the proposed “uniform listing standards to the range of options series exercise (or strike) prices available for trading” was a quote mitigation strategy designed to “reduce the number of options series available for trading, which will in turn lessen the rate of increase in quote traffic.” *Id.*, 74 FR at 37266 and n.4.

When it approved the 2009 amendment to the OLPP, the Commission concluded that the amendment “should reduce the number of options series available for trading, and thus should reduce increases in the options quote message traffic because market participants will not be submitting quotes in those series.” *See* Joint Industry Plan, Order Approving Amendment No. 3 to the Plan for the Purpose of Developing and Implementing Procedures Designed To Facilitate the Listing and Trading of Standardized Options, Release No. 34–60531, entered on August 19, 2009, 74 FR 43173, 43174 (Aug. 26, 2009).

As another example, in 2020, Nasdaq BX, Inc. (“BX”) proposed a rule that sought to limit “Short Term Options Series” intervals between strikes which are available for quoting and trading on that exchange. *See* Self-Regulatory Organizations; Nasdaq BX, Inc.; Notice of Filing of Proposed Rule Change To Amend Options 4, Section 5, To Limit Short Term Options Series Intervals Between Strikes Which are Available for Quoting and Trading on BX, Release No. 34–90384, 85 FR 73113 (Nov. 9, 2020). In its filing, BX noted that its proposal “to reduce the number of strikes in the furthest weeklies, where there exist wider markets and therefore lower market quality” was an “initial attempt at reducing strikes and [that BX] anticipates filing additional proposals to continue reducing strikes.” *Id.*, 85 FR at 73117 and n.23. BX also noted that reducing the number of listed weekly options would encourage market makers to deploy their capital more efficiently and improve displayed market quality. *Id.* at 73119. Finally, BX represented that (1) its proposal was a reaction to comments that it received from industry members “with respect to the increasing number of strikes that are required to be quoted by market makers in the options industry” and (2) reducing the number of strikes would “allow Lead Market Makers and Market Makers to expend their capital in the options market in a more efficient manner” because, as the number of strikes listed across options exchanges increases, market makers “must expend [more] capital to ensure that they have the appropriate

infrastructure to meet their quoting obligations on all options markets in which they are assigned in options series.” *Id.*

When approving BX’s 2020 rule filing, the Commission noted that it had received several comments expressing support for the proposed rule change. *See* Self-Regulatory Organizations; Nasdaq BX, Inc.; Notice of Filing of Amendment No. 1 and Order Granting Accelerated Approval of Proposed Rule Change, as Modified by Amendment No. 1, To Amend Options4, Section 5, To Limit Short Term Options Series Intervals Between Strikes That Are Available for Quoting and Trading on BX, Release No. 34–91125, entered February 12, 2021, 86 FR 10375, 10376 (Feb. 19, 2021). The Commission also found that:

More efficient and better calibrated strike increment rules can have a positive impact on options markets, as it can provide certainty, minimize confusion, and promote more efficient use of resources among market makers that are obligated to continuously quote such series, all while still offering customers the choice to meet their investment needs.

Id., 86 FR at 10377. Finally, the Commission also noted that the approved rule “may serve as a starting point to a broader initiative to revisit, harmonize, and update the panoply of strike listing rules more broadly.” *Id.*

Following the Commission’s approval of BX’s 2020 rule filing, other exchanges, including Cboe Exchange, Inc. (“Cboe”), promulgated similar amendments to their rules. *See, e.g.*, Self-Regulatory Organizations; Cboe Exchange, Inc.; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Amend Rule 4.5 (Series of Option Contracts Open for Trading) in Connection With Limiting the Number of Strikes Listed for Short Term Option Series Which Are Available for Quoting and Trading on the Exchange, Release No. 34–91456, 86 FR 18090 (April 1, 2021). In its filing, Cboe noted that limiting the number of weekly strikes in which market makers are required to quote would allow those market makers to expend their capital in the options market in a more efficient manner, which could improve overall market quality, while still providing market participants with access to sufficient strike intervals to meet their investment objectives. *Id.*, 86 FR at 18093–94. Cboe also noted that the removal of strikes found in clusters whose characteristics closely resemble one another would protect the investors and the general public by removing unnecessary choices of an options

series, which could result in improved market quality. *Id.* at 18094.

Recently, one of the OLPP Sponsors, Cboe, compiled statistics comparing the increase in the average number of multiple listed options series listed per day in the months of June 2020 and June 2024. Cboe also examined the reduction in the average percentage of series traded per day during those two months and the reduction in average percentage of series with open interest per day. That analysis suggests that there are still significant quote mitigation issues in the options markets.

Specifically, Cboe's analysis revealed that the average series listed per day increased by 27% in June 2024, when compared to June 2020, with an average of 1,406,632 series listed per day in 2024 and 1,107,980 series listed per day in June 2020. Cboe's analysis also revealed, however, that the average percentage of series that traded per day decreased from 18% in June 2020 to 10% in June 2024 and that the average percentage of series with open interest per day decreased from 53% to 47% during those same comparison months. In other words, as the average number of series listed per day continues to increase, more series appear to be thinly traded and therefore less liquid—a dynamic that the OLPP Sponsors believe may worsen quote quality because market makers are required to expend their capital to quote in the expanding number of series that are listed.

As a result of the concerns outlined above, the OLPP Sponsors believe that the options industry would benefit from the OLPP being amended to explicitly authorize the Sponsors to act jointly to discuss quote mitigation issues, including reaching out to other industry participants to solicit their views, with a goal of identifying specific issues and potential solutions to those issues. Such an amendment would be consistent with Rule 608(a)(3)(A) of Regulation National Market System, which authorizes self-regulatory organizations (like the OLPP Sponsors) to act jointly in preparing and filing any amendment to a national market system plan. 17 CFR 242.608(a)(3)(A). In addition, if the Sponsors determine that it is appropriate to address a quote mitigation issue by proposing a further amendment to the OLPP, such an amendment would be submitted to the Commission for approval pursuant to Rule 608(b) of Regulation NMS. 17 CFR 608(b). Similarly, if the Sponsors determine to address any identified issues with new options strike listing methodologies and rules, they may seek to do so through submission of rule

filings pursuant to Section 19(b) of the Exchange Act. 15 U.S.C. 78s(b).

3. Manner of Implementation of Amendment

The proposed amendment will be added to the OLPP following Commission approval of the amendment pursuant to Rule 608(b)(1) and (b)(2) of Regulation NMS.

4. Phases of Development and Implementation

Not applicable.

5. Impact on Competition

The Sponsors believe that the proposed amendment will impose no burdens on competition that are not justified in light of the purposes of the Act.

6. Written Understandings or Agreements Among Plan Members

Not applicable.

7. Approval of Proposed Amendment

Each Sponsor approved the submission of the [a]mendment and has executed a signed copy of the [a]mendment.

8. Exhibits

I. Proposed amendments to Section 6 of the OLPP.

9. Description of Operation of Facility Contemplated by the Proposed Amendment

Not applicable.

10. Terms and Conditions of Access

Not applicable.

11. Method of Determination and Imposition, and Amount of, Fees and Charges

Not applicable.

12. Method and Frequency of Processor Evaluation

Not applicable.

13. Dispute Resolution

The Plan does not include provisions regarding the method by which disputes arising in connection with the operation of the plan will be resolved.

II. Text of the Proposed Amendment to the OLPP (Exhibit I)

Language proposed to be added to Section 6 of the OLPP as new Section 6(c):

(c) The Plan Sponsors are authorized to act jointly to discuss both quote mitigation issues and potential solutions to address any issues identified, including, but not limited to, discussing potential new options strike listing

methodologies and rules, in order to determine whether the Sponsors might propose one or more amendments to the Plan for Commission approval or whether the individual Sponsors might seek to amend their own rules.

III. Solicitation of Comments

The Commission seeks comment on the amendment. Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the proposed 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. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's internet comment form (<https://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include file number 4–443 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 submission should refer to file number 4–443. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's internet website (<https://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street NE, Washington, DC 20549, on official business days between the hours of 10 a.m. and 3 p.m. Copies of the filing also will be available for inspection and copying at the principal offices of the Sponsors. Do not include personal identifiable information in submissions; you should submit only information that you wish to make available

publicly. We may redact in part or withhold entirely from publication submitted material that is obscene or subject to copyright protection. All submissions should refer to file number 4–443 and should be submitted on or before December 12, 2024.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.⁵

Stephanie J. Fouse,
Assistant Secretary.

[FR Doc. 2024–27220 Filed 11–20–24; 8:45 am]

BILLING CODE 8011–01–P

SECURITIES AND EXCHANGE COMMISSION

[Investment Company Act Release No. 35388; File No. 812–15654]

Figure Certificate Company (“Applicant”)

November 15, 2024.

AGENCY: Securities and Exchange Commission (“Commission” or “SEC”).

ACTION: Notice.

Notice of application for an order under section 28(c) of the Investment Company Act of 1940 (the “Act”).

SUMMARY OF APPLICATION: Applicant seeks an order pursuant to section 28(c) of the Act approving certain proposed custodial arrangements.

APPLICANTS: Figure Certificate Company.

FILING DATES: The application was filed on November 7, 2024 and amended and restated on November 13, 2024.

HEARING OR NOTIFICATION OF HEARING:

An order granting the requested relief will be issued unless the Commission orders a hearing. Interested persons may request a hearing on any application by emailing the SEC’s Secretary at Secretarys-Office@sec.gov and serving the Applicant with a copy of the request by email, if an email address is listed for the Applicant below, or personally or by mail, if a physical address is listed for the Applicant below. Hearing requests should be received by the Commission by 5:30 p.m. on December 11, 2024 and should be accompanied by proof of service on the Applicant, in the form of an affidavit or, for lawyers, a certificate of service. Pursuant to rule 0–5 under the Act, hearing requests should state the nature of the writer’s interest, any facts bearing upon the desirability of a hearing on the matter, the reason for the request, and the issues contested. Persons who wish to be notified of a hearing may request notification by

emailing the Commission’s Secretary at Secretarys-Office@sec.gov.

ADDRESSES: The Commission: Secretarys-Office@sec.gov. Applicant: susan.gault-brown@aoshearnman.com.

FOR FURTHER INFORMATION CONTACT:

Taylor Evenson, Senior Counsel, or Robert S. Shapiro, Assistant Director, at (202) 551–6825 (Division of Investment Management, Chief Counsel’s Office).

SUPPLEMENTARY INFORMATION: The following is a summary of the application. For Applicant’s representations, legal analysis, and conditions, please refer to Applicant’s amended and restated application, dated November 13, 2024, which may be obtained via the Commission’s website by searching for the file number at the top of this document, or for the Applicant using the Company name search field, on the SEC’s EDGAR system. The SEC’s EDGAR system may be searched at, <http://www.sec.gov/edgar/searchedgar/legacy/companysearch.html>. You may also call the SEC’s Public Reference Room at (202) 551–8090.

Applicant’s Representations

1. Applicant, a Delaware corporation, intends to register under the Act as a face-amount certificate company and operate as a registered face-amount certificate company. Applicant currently intends to offer two types of face-amount certificates registered under the Securities Act of 1933, face-amount certificates of the installment type (the “Installment Certificates”) and fully-paid certificates (the “Transferrable Certificates” and, together with the Installment Certificates, the “Certificates”). Applicant states that it does not contemplate, or seek approval for, custodial arrangements under which Applicant would deposit and maintain reserves associated with any face-amount certificates other than the Installment Certificates and Transferrable Certificates. Applicant represents that both types of Certificates will be issued and the fully-paid Certificates will be transferable using blockchain technology and, as a result, both types of Certificates will be “digital assets.” Applicant further represents that, although the Certificates will be digital assets, Applicant will not accept or hold any assets that are digital assets other than as necessary to destroy Certificates that have been surrendered.

2. The Certificates are interest-bearing debt securities. The Certificates entitle the Certificate holder to receive, at maturity, the face-amount of the Certificate and interest credited thereon,

less applicable expenses or fees. To meet its payment obligations, Applicant is required to maintain a minimum amount of reserves in “qualified investments” as defined in Section 28(b) of the Act (“Reserves”).

3. Applicant proposes to enter into custodial arrangements, from time to time, with one or more banks as defined in Section 2(a)(5) of the Act, that possess the qualifications required by Section 26(a) of the Act for trustees of unit investment trusts (“Custodians”). Applicant seeks an order approving the Applicant’s proposed custodial arrangements under which the Applicant will (i) deposit and maintain, with one or more Custodians, the Reserves associated with the Certificates, pursuant to Section 28(c) of the Act, and (ii) enter into custody agreements (“Custodial Agreements”), the substantive portions of which will not vary in any material respects from those contained in the form of agreement attached to the application as Attachment 1 (the “Form of Agreement”). Under the requested order, Applicant would be free to employ or terminate the Custodians from time to time in its sole discretion.

4. Under the proposed custodial arrangements, one or more of the Custodians would be responsible for maintaining the safekeeping of all of Applicant’s assets, including the aggregate amount that Applicant must maintain as Reserves pursuant to Section 28(a) of the Act. The Custodian would (i) maintain Applicant’s Assets in compliance with Section 17(f) of the Act and the rules thereunder as though Section 17(f) and the rules thereunder were applicable to a face-amount certificate company and (ii) maintain Applicant’s Reserves to ensure the Applicant meets its payment obligations under the terms and conditions of any outstanding Certificate. If the Applicant were to default on any obligation under a Certificate, the Custodian would be authorized to cure such default by liquidating so much of the assets held by it as necessary to discharge Applicant’s obligations. The Custodian also would perform the duties and functions typically performed by a custodian, such as securities registration and delivery, income collection, periodic reporting, payment of monies, and other safekeeping and processing functions.

Applicant’s Legal Analysis

1. Section 28(c) provides that “[t]he Commission shall by rule, regulation, or order, in the public interest or for the protection of investors, require a registered face-amount certificate

⁵ 17 CFR 200.30–3(a)(85).

company to deposit and maintain, upon such terms and conditions as the Commission shall prescribe and as are appropriate for the protection of investors, with one or more institutions having the qualifications of paragraph (1) of Section 26(a) for a trustee of a unit investment trust, all or any part of the investments maintained by such company as certificate reserve requirements under the provisions of subsection (b) hereof.”

2. Applicant states that the Form of Agreement contains numerous provisions designed to maintain and safeguard its assets, including provisions governing the (i) holding, segregation, registration, depositing, and delivery of securities and (ii) the payment of monies and maintenance of bank accounts, as well as (iii) provisions establishing procedures to cure any defaults by the Applicant on its obligations under the Certificates and procedures for periodic reporting and inspection of the assets. Applicant further states that, although tailored for the specific activities of a face-amount certificate company, these provisions are similar to those contained in custody agreements between registered open-end management investment companies and their custodians.

3. Application asserts that its discretion to employ and terminate the Custodians is consistent with the protection of investors and the public interest. Applicant states that it may add or change the Custodians for many reasons, including, but not limited to: (i) the availability of superior or specialized services through other Custodians, (ii) dissatisfaction with the quality of a Custodian's services, (iii) fee increases or the availability of comparable services from other Custodians at more competitive rates, (iv) changes in a Custodian's management, location, financial condition, or methods of operation, (v) regulatory developments or actions affecting the ability or qualification of a Custodian to serve as such, or (vi) a determination by a Custodian to cease offering its services.

4. Applicant also asserts that the process by which it will select and retain the Custodians is consistent with the protection of investors and the public interest. Applicant represents that, before entering into a Custodial Agreement, Applicant will request and consider relevant information regarding the Custodian, including, without limitation, information about its ability to provide the services required by Applicant's operations and the Act, its experience in providing such or similar services to other investment companies,

the resources it intends to make available to Applicant in providing such services, the fees it intends to charge Applicant for such services, its internal controls, its ability to protect the assets entrusted to it, and its financial condition.

Applicant's Conditions

Applicant agrees that any order granted by the Commission pursuant to the application will be subject to the following conditions:

1. Before entering into a Custodial Agreement with a qualified custodian, Applicant will request and consider relevant information regarding the Custodian. Applicant's officers and/or investment advisers, as appropriate, will perform the above inquiry and will present their findings to the Board (as defined below).

2. Applicant shall only enter into a Custodial Agreement if (1) its substantive portions do not vary in any material respects from those contained in the Form of Agreement; and (2) that Custodial Agreement is approved by its board of directors (“Board”), including a majority of directors who are not an “interested persons” as defined in Section 2(a)(19) of the Act (“Disinterested Directors”).

3. The continuance of a Custodial Agreement shall be subject to annual review and reapproval by the Board, including a majority of the Disinterested Directors, to determine whether the quality of services provided by the Custodian remains satisfactory and the fees are reasonably competitive.

4. Each Custodial Agreement shall contain provisions to maintain and safeguard Applicant's Assets, including provisions governing the (i) holding, segregation, depositing, and delivery of securities, (ii) the payment of monies, and (iii) establishing of procedures to cure any defaults by Applicant on its obligations under the Certificates and procedures for periodic reporting and inspection of the Assets.

5. Applicant shall establish and maintain procedures to cure any defaults by Applicant on its obligations under the Certificates and procedures for periodic reporting and inspection of Applicant's Assets.

6. Applicant shall comply with Section 17(f) of the Act and the rules thereunder as if it were a registered management investment company.

7. Applicant shall obtain an amended order from the SEC prior to entry into a Custodial Agreement containing substantive provisions that vary in any material respects from those contained in the Form of Agreement.

8. Applicant shall comply with the Bank Secrecy Act (31 U.S.C §§ 5311 et seq) and the rules thereunder, including 31 CFR 1024.210, 31 CFR 1024.220 and 31 CFR 1010.230, as if it were a registered open-end management investment company.

9. Any advisory agreement entered into between Applicant and an adviser shall provide that the adviser will provide quarterly reports to the Board stating, as of the last day of the preceding quarter:

(a) the aggregate value of assets on deposit with the Custodian,

(b) the aggregate value of assets identified by Applicant as qualifying investments on deposit with the Custodian, and

(c) the aggregate amount of reserves, as governed by Section 28(a)(2) of the Act, required to be maintained by Applicant in respect of all outstanding Certificates.

The first quarterly report every year shall be made and certified by an independent public accountant and the others shall be verified by the adviser's chief compliance officer or his or her delegate.

10. Any advisory agreement entered into between the Applicant and an adviser shall provide that the adviser's compliance program shall include procedures for generating monthly reports of:

(a) the aggregate value of Applicant's assets on deposit with the Custodian;

(b) the aggregate value of assets identified by Applicant as qualifying investments on deposit with the Custodian; and

(c) the aggregate amount of reserves, as governed by Section 28(a)(2) of the Act, required to be maintained by Applicant in respect of all outstanding Certificates; and for the review of such monthly reports by the adviser's chief compliance officer or his or her delegate.

11. Any advisory agreement entered into between Applicant and an adviser shall provide that if, at any time, it is determined by the adviser's chief compliance officer or his or her delegate that the amount of Applicant's qualified investments on deposit with the Custodian is less than the required reserves, as governed by Section 28(a)(2) of the Act, the adviser and/or Applicant shall notify the SEC in writing of such deficiency promptly upon ascertaining such fact.

12. In the event Applicant were to default on any obligation under a Certificate, Custodian would be authorized, at the instruction of the Board or a court of competent jurisdiction, to cure the default as

necessary to discharge Applicant's obligations. In connection with any such default, the Applicant shall notify the SEC in writing of such default promptly upon ascertaining that a default has occurred.

For the Commission, by the Division of Investment Management, under delegated authority.

J. Matthew DeLesDernier,
Deputy Secretary.

[FR Doc. 2024-27229 Filed 11-20-24; 8:45 am]

BILLING CODE 8011-01-P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-101636; File No. SR-NYSEARCA-2024-94]

Self-Regulatory Organizations; NYSE Arca, Inc.; Notice of Filing and Immediate Effectiveness of Proposed Rule Change To Establish Fees for the NYSE Arca Aggregated Lite Data Feed

November 15, 2024.

Pursuant to Section 19(b)(1)¹ of the Securities Exchange Act of 1934 ("Act")² and Rule 19b-4 thereunder,³ notice is hereby given that, on November 4, 2024, 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 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 establish fees for the NYSE Arca Aggregated Lite data feed. 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 amend the NYSE Arca Equities Proprietary Market Data Fees Schedule ("Fee Schedule") and establish fees for the NYSE Arca Aggregated Lite ("NYSE Arca Agg Lite") data feed,⁴ effective November 4, 2024.⁵

In summary, the NYSE Arca Agg Lite is a NYSE Arca-only frequency-based depth of book market data feed of the NYSE Arca's limit order book for up to ten (10) price levels on both the bid and offer sides of the order book for securities traded on the Exchange and for which the Exchange reports quotes and trades under the Consolidated Tape Association ("CTA") Plan or the Nasdaq/UTP Plan. The NYSE Arca Agg Lite is a compilation of limit order data that the Exchange provides to vendors and subscribers. The NYSE Arca Agg Lite includes partial depth of book order data as well as security status messages. The security status message informs subscribers of changes in the status of a specific security, such as trading halts, short sale restriction, etc. In addition, the NYSE Arca Agg Lite includes order imbalance information prior to the opening and closing of trading.

Background

The Exchange operates in a highly competitive market. The Commission has repeatedly expressed its preference for competition over regulatory intervention in determining prices, products, and services in the securities markets. In Regulation NMS, the Commission highlighted the importance of market forces in determining prices and SRO revenues and, also, recognized that current regulation of the market

system "has been remarkably successful in promoting market competition in its broader forms that are most important to investors and listed companies."⁶

While Regulation NMS has enhanced competition, it has also fostered a "fragmented" market structure where trading in a single stock can occur across multiple trading centers. When multiple trading centers compete for order flow in the same stock, the Commission has recognized that "such competition can lead to the fragmentation of order flow in that stock."⁷ Indeed, cash equity trading is currently dispersed across 16 exchanges,⁸ numerous alternative trading systems,⁹ and broker-dealer internalizers and wholesalers, all competing for order flow. Based on publicly-available information, no single exchange currently has more than 20% market share (whether including or excluding auction volume).¹⁰

Proposed NYSE Arca Agg Lite Data Feed Fees

The Exchange proposes to establish the fees listed below for the NYSE Arca Agg Lite data feed. The Exchange proposes to charge fees for the same categories of market data use as its affiliated exchanges (namely, NYSE, NYSE American and NYSE National) currently charge. The Exchange believes that adopting the same fee structure as its affiliated exchanges would reduce administrative burdens on market data subscribers that also currently subscribe to market data feeds from the Exchange's affiliates.

1. *Access Fee.* For the receipt of access to the NYSE Arca Agg Lite data feed, the Exchange proposes to charge \$1,500 per month. This proposed Access Fee would be charged to any data recipient that receives the NYSE Arca Agg Lite data feed. Data recipients that only use display devices to view NYSE Arca Agg Lite market data and do

⁶ See Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496, 37499 (June 29, 2005) (File No. S7-10-04) (Final Rule) ("Regulation NMS").

⁷ See Securities Exchange Act Release No. 61358, 75 FR 3594, 3597 (January 21, 2010) (File No. S7-02-10) (Concept Release on Equity Market Structure).

⁸ See Cboe U.S. Equities Market Volume Summary, available at https://markets.cboe.com/us/equities/market_share. See generally <https://www.sec.gov/fastanswers/divisionsmarketregmrexchangeshtml>.

⁹ See FINRA ATS Transparency Data, available at <https://otctransparency.finra.org/otctransparency/AtsIssueData>. A list of alternative trading systems registered with the Commission is available at <https://www.sec.gov/foia/docs/atstlist.htm>.

¹⁰ See Cboe Global Markets, U.S. Equities Market Volume Summary, available at http://markets.cboe.com/us/equities/market_share/.

¹ 15 U.S.C. 78s(b)(1).

² 15 U.S.C. 78a.

³ 17 CFR 240.19b-4.

⁴ The proposed rule change establishing the NYSE Arca Agg Lite data feed was immediately effective on February 27, 2024. See Securities Exchange Act Release No. 99713 (March 12, 2024), 89 FR 19381 (March 18, 2024) (SR-NYSEARCA-2024-22) (Notice of Filing and Immediate Effectiveness of Proposed Rule Change To Establish the NYSE Arca Aggregated Lite Market Data Feed).

⁵ The Exchange originally filed to amend the Fee Schedule on May 13, 2024 (SR-NYSEARCA-2024-39). On July 11, 2024, the Exchange withdrew SR-NYSEARCA-2024-39 and replaced it with SR-NYSEARCA-2024-60. On September 6, the Exchange withdrew SR-NYSEARCA-2024-60 and replaced it with SR-NYSEARCA-2024-75. On November 4, 2024, the Exchange withdrew SR-NYSEARCA-2024-75 and replaced it with this filing.

not separately receive a data feed would not be charged an Access Fee. The proposed Access Fee would be charged only once per firm.

2. *User Fees.* The Exchange proposes to charge a Professional User Fee (Per User) of \$30 per month and a Non-Professional User Fee (Per User) of \$4 per month. These user fees would apply to each display device that has access to the NYSE Arca Agg Lite data feed.

3. *Redistribution Fee.* For redistribution of the NYSE Arca Agg Lite data feed, the Exchange proposes to establish a fee of \$250 per month. The proposed Redistribution Fee would be charged to any Redistributor of the NYSE Arca Agg Lite data feed, which is defined to mean a vendor or any person that provides a real-time NYSE Arca market data product externally to a data recipient that is not its affiliate or wholly-owned subsidiary, or to any system that an external data recipient uses, irrespective of the means of transmission or access. The proposed Redistribution Fee would be charged only once per Redistributor account. As an incentive to potential Redistributors to subscribe to the NYSE Arca Agg Lite data feed, the Exchange proposes to waive the Access Fee and Redistribution Fee for a Redistributor if the Redistributor provides NYSE Arca Agg Lite externally to at least one data feed recipient and reports such data feed recipient or recipients to the Exchange. For example, a Redistributor that subscribes to the NYSE Arca Agg Lite data feed will have the Access Fee and Redistribution Fee waived if such Redistributor provides NYSE Arca Agg Lite externally to at least one data feed recipient and reports such data feed recipient to the Exchange.

By targeting this proposed fee waiver to Redistributors that provide external distribution of NYSE Arca Agg Lite, the Exchange believes that this would provide an incentive for Redistributors to make the NYSE Arca Agg Lite market data product available to its customers. Specifically, if a data recipient is interested in subscribing to NYSE Arca Agg Lite and relies on a Redistributor to obtain market data products from the Exchange, that data recipient would need its Redistributor to subscribe to and redistribute NYSE Arca Agg Lite. The Exchange believes that this proposed fee waiver for Redistributors of NYSE Arca Agg Lite would provide an incentive for Redistributors to make NYSE Arca Agg Lite available to their customers, which will increase the availability of the Exchange's market data products to a larger potential population of data recipients.

Further, the Exchange proposes to adopt a credit that would be applicable to Redistributors that provide external distribution of NYSE Arca Agg Lite to Professional and Non-Professional Users. As proposed, such Redistributors would receive a credit equal to the amount of the monthly Professional User and Non-Professional User Fees for such external distribution, up to a maximum of the combination of the Access Fee and Redistribution Fee for NYSE Arca Agg Lite that the Redistributor would otherwise be required to pay to the Exchange. For example, a Redistributor that reports external Professional Users and Non-Professional Users in a month totaling \$1,750 or more would receive a maximum credit of \$1,750 for that month, which could effectively reduce its monthly fee for access and redistribution to zero. If that same Redistributor were to report external User quantities in a month totaling \$600 of monthly usage, that Redistributor would receive a credit of \$600. The Exchange believes the proposed credit would provide Redistributors with an incentive to increase their redistribution of NYSE Arca Agg Lite because the credit they would be eligible to receive would increase if they report additional external User quantities.

4. *Enterprise Fees.*

The Exchange proposes to establish an enterprise license that will reduce Exchange fees and administrative costs for subscribers that disseminate NYSE Arca Agg Lite. Subscribers that are broker-dealers will be able to distribute the NYSE Arca Agg Lite data feed for display usage to an unlimited number of non-professional users for a monthly fee of \$35,000, with an opportunity to lower that fee to \$31,500 per month if they contract for twelve months of service in advance. Alternatively, subscribers that are broker-dealers will be able to distribute the NYSE Arca Agg Lite data feed for display usage to an unlimited number of recipients (professional users and non-professional users) for a monthly fee of \$110,000, with an opportunity to lower that fee to \$99,000 per month if they contract for twelve months of service in advance.

As proposed, the NYSE Arca Agg Lite data feed may be distributed pursuant to the proposed market data enterprise license only for display usage and in the context of a brokerage relationship with a broker-dealer through such broker-dealer's own devices. Purchase of an enterprise license would eliminate per User subscriber fees for NYSE Arca Agg Lite. Further, the Exchange proposes to waive the Access Fee and the Redistribution Fee for NYSE Arca Agg

Lite for Redistributors that pay either the Non-Professional Enterprise Fee or the Professional and Non-Professional Enterprise Fee. The Exchange believes the proposed fee waiver would provide an incentive for Redistributors to subscribe to the NYSE Arca Agg Lite market data product at the enterprise level to reduce the fees it would pay to the Exchange and without having to report the number of users that receive the data feed from the Redistributor.

Subscribers that intend to purchase a market data enterprise license for at least twelve months may elect to purchase this product in advance for a monthly fee of \$31,500 for distribution of NYSE Arca Agg Lite to an unlimited number of non-professional users, or \$99,000 per month for distribution to an unlimited number of professional users and non-professional users. This feature is intended to simplify cost projections and budgeting for both subscribers and the Exchange. Subscribers that elect not to purchase this particular feature will nevertheless be able to obtain all of the market data information offered by NYSE Arca Agg Lite by paying the standard fee of \$35,000 per month for distribution of NYSE Arca Agg Lite to an unlimited number of non-professional users, or \$110,000 per month for distribution to an unlimited number of professional users and non-professional users. Subscribers that elect to pay the monthly fee will be able to switch to the annual fee at any time, and those that elect to purchase the annual contract would be able to change to the monthly contract, with notice, at the end of the twelve-month period.

The Exchange believes that the proposed market data enterprise license will reduce exchange fees, lower administrative costs for subscribers, and help expand the availability of market information to investors, and thereby increase participation in financial markets.

5. *Non-Display Use Fees.*

The Exchange proposes to establish non-display fees¹¹ for the NYSE Arca Agg Lite data feed that are based on the non-display use categories charged by NYSE, NYSE American, NYSE National, the CTA, and the UTP Plan for non-display use.¹² Non-display use would

¹¹ See *infra*, note 15.

¹² See Endnote 1 to the NYSE Proprietary Market Data Fees, available here: https://www.nyse.com/publicdocs/nyse/data/NYSE_Market_Data_Fee_Schedule.pdf; Endnote 1 to the NYSE American LLC Equities Proprietary Market Data Fees, available here: https://www.nyse.com/publicdocs/nyse/data/NYSE_American_Equities_Market_Data_Fee_Schedule.pdf; Endnote 1 to the NYSE National Equities Proprietary Market Data Fees, available here: https://www.nyse.com/publicdocs/nyse/data/NYSE_National_Market_Data_Fee_Schedule.pdf;

mean accessing, processing, or consuming the NYSE Arca Agg Lite data feed delivered directly or through a Redistributor, for a purpose other than in support of a data recipient's display or further internal or external redistribution ("Non-Display Use"). Non-Display Use would include trading uses such as high frequency or algorithmic trading as well as any trading in any asset class, automated order or quote generation and/or order pegging, price referencing for algorithmic trading or smart order routing, operations control programs, investment analysis, order verification, surveillance programs, risk management, compliance, and portfolio management.

Under the proposal, for Non-Display Use of NYSE Arca Agg Lite, there would be three categories of, and fees applicable, to data recipients. One, two, or three categories of Non-Display Use may apply to a data recipient.

- As proposed, the Category 1 Fee would be \$4,500 per month and would apply when a data recipient's Non-Display Use of the NYSE Arca Agg Lite data feed is on its own behalf, not on behalf of its clients.

- As proposed, Category 2 Fees would be \$4,500 per month and would apply to a data recipient's Non-Display Use of the NYSE Arca Agg Lite data feed on behalf of its clients.

- As proposed, Category 3 Fees would be \$4,500 per month and would apply to a data recipient's Non-Display Use of the NYSE Arca Agg Lite data feed for the purpose of internally matching buy and sell orders within an organization, including matching customer orders for a data recipient's own behalf and/or on behalf of its clients. This category would apply to Non-Display Use in trading platforms, such as, but not restricted to, alternative trading systems ("ATs"), broker crossing networks, broker crossing systems not filed as ATs, dark pools, multilateral trading facilities, exchanges and systematic internalization systems. A data recipient will be charged \$4,500 per month for each platform on which it uses the Non-Display data internally

to match buy and sell orders, up to a cap of \$13,500 per month; even if the data recipient uses the NYSE Arca Agg Lite data feed for more than three platforms, it will not pay more than \$13,500 for such Category 3 use per month.

The description of the three non-display use categories is set forth in the Fee Schedule in endnote 1 and that endnote would be referenced in the NYSE Arca Agg Lite data feed fees on the Fee Schedule. The text in the endnote would remain unchanged.

Data recipients that receive the NYSE Arca Agg Lite data feed for Non-Display Use would be required to complete and submit a Non-Display Use Declaration before they would be authorized to receive the feed. A firm subject to Category 3 Fees would be required to identify each platform that uses the NYSE Arca Agg Lite data feed for a Category 3 Non-Display Use basis, such as ATs and broker crossing systems not registered as ATs, as part of the Non-Display Use Declaration.

6. Non-Display Use Declaration Late Fee. Data recipients that receive the NYSE Arca Agg Lite data feed for Non-Display Use would be required to complete and submit a Non-Display Use Declaration before they would be authorized to receive the feed. Beginning in 2025, NYSE Arca Agg Lite data feed recipients would be required to submit, by January 31 of each year, the Non-Display Use Declaration. The requirement to submit a Non-Display Use Declaration applies to all real-time NYSE Arca data feed product recipients. The Exchange proposes to charge a Non-Display Use Declaration Late Fee of \$1,000 per month to any data recipient that pays an Access Fee for the NYSE Arca Agg Lite data feed that has failed to timely complete and submit a Non-Display Use Declaration. Specifically, with respect to the Non-Display Use Declaration due by January 31 of each year, the Non-Display Use Declaration Late Fee would apply to data recipients that fail to complete and submit the Non-Display Use Declaration by the January 31 due date, and would apply beginning February 1 and for each month thereafter until the data recipient has completed and submitted the annual Non-Display Use Declaration.

The proposed Non-Display Use Declaration Late Fee applicable to NYSE Arca Agg Lite data feed would be set forth in endnote 2 on the Fee Schedule. As proposed, endnote 2 would be amended with the proposed addition of the following new text: "The Non-Display Declaration Late Fee will apply, beginning in 2025, to NYSE Arca Aggregated Lite data recipients that fail to complete and submit the annual Non-

Display Use Declaration by the January 31st due date, and applies beginning February 1st and for each month thereafter until the data recipient has completed and submitted the annual Non-Display use Declaration."

In addition, if a data recipient's use of the NYSE Arca Agg Lite data feed changes at any time after the data recipient submits a Non-Display Use Declaration, the data recipient must inform the Exchange of the change by completing and submitting at the time of the change an updated declaration reflecting the change of use.

7. Multiple Data Feed Fee. The Exchange proposes to establish a monthly fee, the "Multiple Data Feed Fee," that would apply to data recipients that take a data feed for a market data product in more than two locations. Data recipients taking the NYSE Arca Agg Lite data feed in more than two locations would be charged \$200 per additional location per month. No new reporting would be required.¹³

8. Three-Month Fee Waiver. The Exchange currently provides a one-month free trial to any firm that subscribes to a particular NYSE Arca market data product for the first time. Under the current one-month trial, a first-time subscriber is not charged the Access Fee, Non-Display Fee, any applicable Professional and Non-Professional User Fee and Redistribution Fee for one calendar month.¹⁴ The Exchange now proposes an additional three-month fee waiver for any Redistributor that subscribes to a particular NYSE Arca market data product for the first time for external redistribution. As proposed, a first-time Redistributor would be any firm that has not previously subscribed to and externally redistributed a particular NYSE Arca market data product listed on the Fee Schedule. As proposed, a first-time Redistributor that subscribes to a particular NYSE Arca market data product would not be charged the Access Fee and the Redistribution Fee for that product for three calendar months. Any other fees, including but not limited to, Non-Display Fee, any applicable Professional and Non-Professional User Fee, and Enterprise Fee would be billable after the first calendar month after a first-time

Endnote 8 to the Schedule of Market Data Charges for the CTA, available here: <https://www.ctaplan.com/publicdocs/ctaplan/notifications/trader-update/Schedule%20Of%20Market%20Data%20Charges%20-%20January%201,%202015.pdf>; and Non-Display Usage Fees as set forth in the UTP Plan Fee Schedule and Non-Display Policy, available here: <http://utpplan.com/DOC/Datapolicies.pdf>. See, e.g., Securities Exchange Act Release Nos. 69315 (April 5, 2013), 78 FR 21668 (April 11, 2013) (SR-NYSEArca-2013-37) and 73011 (September 5, 2014), 79 FR 54315 (September 11, 2014) (SR-NYSEARCA-2014-93).

¹³ Data vendors currently report a unique Vendor Account Number for each location at which they provide a data feed to a data recipient. The Exchange considers each Vendor Account Number a location. For example, if a data recipient has five Vendor Account Numbers, representing five locations, for the receipt of the NYSE Arca Agg Lite data feed, that data recipient will pay the Multiple Data Feed fee with respect to three of the five locations.

¹⁴ See Fee Schedule.

Redistributor subscribes to a particular NYSE Arca market data product. For example, a first-time Redistributor that chooses to subscribe to NYSE Arca Agg Lite on September 24, 2024 would not be charged the Access Fee and the Redistribution Fee for the months of October, November, and December 2024. The proposed fee waiver would be for the three calendar months following the date a Redistributor is approved to receive access to the particular NYSE Arca market data product. The Exchange would provide the three-month fee waiver for each particular product to each Redistributor once.

The Exchange believes that providing a three-month fee waiver to NYSE Arca market data products listed on the Fee Schedule would enable potential Redistributors to determine whether a particular NYSE Arca market data product is useful to their business models before fully committing to expend development and implementation costs related to the receipt of that product, and is intended to encourage increased use of the Exchange's market data products by defraying some of the development and implementation costs Redistributors would ordinarily have to expend before using a product. The proposed three-month fee waiver would also provide Redistributors with time to begin onboarding new clients prior to being liable to the Access Fee and the Redistribution Fee, allowing time to choose how to allocate costs and increase revenues to defray costs associated with providing a new feed to its customers.

Application of Proposed Fees

The Exchange is not required to make the NYSE Arca Agg Lite data feed available or to offer any specific pricing alternatives to any customers, nor is any firm required to purchase the NYSE Arca Agg Lite data feed. Firms that choose to purchase the NYSE Arca Agg Lite data feed do so for the primary goals of using it to increase their revenues, reduce their expenses, and in some instances to compete directly with the Exchange (including for order flow). Those firms are able to determine for themselves whether or not the NYSE Arca Agg Lite data feed or any other similar products are attractively priced.

The Exchange believes the proposed rule change would provide an incentive both for data subscribers to subscribe to NYSE Arca Agg Lite and for Redistributors to subscribe to the product for purposes of providing external distribution of NYSE Arca Agg Lite. The Exchange believes that this proposed rule change also has the

potential to attract new Redistributors for NYSE Arca Agg Lite.

The proposed fee structure is not novel as it is based on the fee structure currently in place for the NYSE ArcaBook feed. The Exchange is proposing fees for the NYSE Arca Agg Lite data feed that are based on the existing fee structure and rates that data recipients already pay for the NYSE ArcaBook feed. Specifically, the fees for the NYSE ArcaBook feed—which like the NYSE Arca Agg Lite data feed, includes depth of book, auction imbalances, and security status messages—consist of an Access Fee of \$2,000 per month, a Professional User Fee (Per User) of \$60 per month, a Non-Professional User Fee (Per User) that ranges between \$3 per month to \$10 per month, Non-Display Fees¹⁵ of \$6,000 per month for each of Categories 1, 2 and 3, and a Redistribution Fee of \$2,000 per month. The Exchange also charges a Non-Display Use Declaration Late Fee of \$1,000 per month and a Multiple Data Feed Fee of \$200 per month for NYSE ArcaBook.¹⁶

2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with the provisions of Section 6 of the Act,¹⁷ in general, and Sections 6(b)(4) and 6(b)(5) of the Act,¹⁸ in particular, in that it provides an equitable allocation of reasonable fees among users and recipients of the data and is not designed to permit unfair discrimination among customers, issuers, and brokers.

The Proposed Rule Change Is Reasonable

In adopting Regulation NMS, the Commission granted SROs and broker-dealers increased authority and flexibility to offer new and unique market data to the public. The Commission has repeatedly expressed its preference for competition over regulatory intervention in determining prices, products, and services in the securities markets. Specifically, in Regulation NMS, the Commission highlighted the importance of market forces in determining prices and SRO

revenues, and also recognized that current regulation of the market system “has been remarkably successful in promoting market competition in its broader forms that are most important to investors and listed companies.”¹⁹

With respect to market data, the decision of the United States Court of Appeals for the District of Columbia Circuit in *NetCoalition v. SEC* upheld the Commission's reliance on the existence of competitive market mechanisms to evaluate the reasonableness and fairness of fees for proprietary market data:

In fact, the legislative history indicates that the Congress intended that the market system “evolve through the interplay of competitive forces as unnecessary regulatory restrictions are removed” and that the SEC wield its regulatory power “in those situations where competition may not be sufficient,” such as in the creation of a “consolidated transactional reporting system.”²⁰

The court agreed with the Commission's conclusion that “Congress intended that ‘competitive forces should dictate the services and practices that constitute the U.S. national market system for trading equity securities.’”²¹

More recently, the Commission confirmed that it applies a “market-based” test in its assessment of market data fees, and that under that test:

the Commission considers whether the exchange was subject to significant competitive forces in setting the terms of its proposal for [market data], including the level of any fees. If an exchange meets this burden, the Commission will find that its fee rule is consistent with the Act unless there is a substantial countervailing basis to find that the terms of the rule violate the Act or the rules thereunder.²²

As discussed below, the Exchange believes that its proposed fees are constrained by competitive forces.

As the D.C. Circuit recognized in *NetCoalition I*, “[n]o one disputes that competition for order flow is fierce.”²³ The court further noted that “no exchange possesses a monopoly, regulatory or otherwise, in the execution of order flow from broker dealers,” and

¹⁹ See Regulation NMS Adopting Release, 70 FR 37495, at 37499.

²⁰ *NetCoalition v. SEC*, 615 F.3d 525, 535 (D.C. Cir. 2010) (“*NetCoalition I*”) (quoting H.R. Rep. No. 94–229 at 92 (1975), as reprinted in 1975 U.S.C.A.N. 323).

²¹ *Id.* at 535.

²² See Securities Exchange Act Release No. 34–90217 (October 16, 2020), 85 FR 67392 (October 22, 2020) (SR–NYSENAT–2020–05) (“National IF Approval Order”) (internal quotation marks omitted), quoting Securities Exchange Act Release No. 59039 (December 2, 2008), 73 FR 74770, 74781 (December 9, 2008).

²³ *NetCoalition I*, 615 F.3d at 544 (internal quotation omitted).

¹⁵ The Exchange does not anticipate that data recipients would use NYSE Arca Agg Lite for non-display purpose. However, the Exchange is adopting Non-Display use fees so that the proposed fees for NYSE Arca Agg Lite are consistent with the Exchange's fee structure for its other proprietary market data products.

¹⁶ See NYSE Arca Equities Proprietary Market Data Fees at https://www.nyse.com/publicdocs/nyse/data/NYSE_Arca_Equities_Proprietary_Data_Fee_Schedule.pdf.

¹⁷ 15 U.S.C. 78f(b).

¹⁸ 15 U.S.C. 78f(b)(4), (5).

that an exchange “must compete vigorously for order flow to maintain its share of trading volume.”²⁴

As noted above, while Regulation NMS has enhanced competition, it has also fostered a “fragmented” market structure where trading in a single stock can occur across multiple trading centers. When multiple trading centers compete for order flow in the same stock, the Commission has recognized that “such competition can lead to the fragmentation of order flow in that stock.”²⁵ Indeed, today, equity trading is currently dispersed across 16 exchanges,²⁶ numerous alternative trading systems,²⁷ broker-dealer internalizers and wholesalers, all competing for order flow. Based on publicly-available information, no single exchange currently has more than 20% market share.²⁸

Further, low barriers to entry mean that new exchanges may rapidly and inexpensively enter the market to compete with the Exchange. For example, since 2020, three new ones have entered the market: Long Term Stock Exchange (LTSE), which began operations as an exchange on August 28, 2020;²⁹ Members Exchange (MEMX), which began operations as an exchange on September 29, 2020;³⁰ and Miami International Holdings (MIAX), which began operations of its first equities exchange on September 29, 2020.³¹

More specifically, in setting fees for the NYSE Arca Agg Lite data feed, the Exchange is constrained by the fact that,

if its pricing is unattractive to customers, customers have their pick of alternatives to purchase similar data from instead of purchasing it from the Exchange. The existence of alternatives to the Exchange’s data product ensures that the Exchange cannot set unreasonable market data fees without suffering the negative effects of that decision in the competitive market for non-latency-sensitive proprietary partial depth of book market data.

The Exchange notes that the NYSE Arca Agg Lite is entirely optional. The Exchange is not required to make the NYSE Arca Agg Lite available to any customers, nor is any customer required to purchase the NYSE Arca Agg Lite market data feed. Unlike some other data products (e.g., the consolidated quotation and last-sale information feeds) that firms are required to purchase in order to fulfil regulatory obligations,³² a customer’s decision whether to purchase the NYSE Arca Agg Lite is entirely discretionary. The Exchange believes NYSE Arca Agg Lite would provide high-quality, comprehensive partial depth of book data that an anticipated end user might use for purposes of identifying an indicative price of Tape A, B and C securities without having to purchase consolidated data and thus it would not be a latency-sensitive product. The Exchange does not anticipate that an end user would, or could, use NYSE Arca Agg Lite data for purposes of making order-routing or trading decisions. Firms that choose to subscribe to NYSE Arca Agg Lite are able to determine for themselves whether the NYSE Arca Agg Lite data feed is necessary for their business needs, and if so, whether or not it is attractively priced. If the NYSE Arca Agg Lite data feed does not provide sufficient benefit to firms based on the uses those firms may have for it, such firms may simply choose to conduct their business operations in ways that do not use the NYSE Arca Agg Lite data feed.

In setting the proposed fees for the NYSE Arca Agg Lite data feed, the Exchange considered the competitiveness of the market for non-latency-sensitive proprietary partial

depth of book data and all of the implications of that competition. The Exchange believes that it has considered all relevant factors and has not considered irrelevant factors in order to establish reasonable fees. The proposed fees are therefore reasonable because in setting them, the Exchange is constrained by the availability of substitute partial depth of book market data products. The Commission has been clear that substitute products need not be identical, but only substantially similar to the product at hand.³³

The NYSE Arca Aggregated Lite market data feed is subject to significant competitive forces that constrain its pricing. Specifically, the NYSE Arca Agg Lite data feed competes head-to-head with similar market data products currently offered by the four U.S. equities exchanges operated by Cboe Exchange, Inc.—Cboe BZX Exchange, Inc. (“BZX”), Cboe BYX Exchange, Inc. (“BYX”), Cboe EDGA Exchange, Inc. (“EDGA”), and Cboe EDGX Exchange, Inc. (“EDGX”), each of which offers a market data product called BZX Summary Depth, BYX Summary Depth, EDGA Summary Depth and EDGX Summary Depth, respectively (collectively, the “Cboe Summary Depth”).³⁴ Similar to Cboe Summary Depth, NYSE Arca Agg Lite can be utilized by vendors and subscribers to quickly access and distribute aggregated order book data. As noted above, NYSE Arca Agg Lite, similar to Cboe Summary Depth, would provide aggregated depth per security, including the bid, ask and share quantity for orders received by NYSE Arca, except unlike Cboe Summary Depth, which provides aggregated depth per security for up to five price levels, NYSE Arca Agg Lite would provide aggregated depth per security for up to ten price levels on both the bid and offer sides of the NYSE

²⁴ *Id.*

²⁵ See Securities Exchange Act Release No. 61358, 75 FR 3594, 3597 (January 21, 2010) (File No. S7-02-10) (Concept Release on Equity Market Structure).

²⁶ See Cboe Global Markets, U.S. Equities Market Volume Summary, available at http://markets.cboe.com/us/equities/market_share/.

²⁷ See FINRA ATS Transparency Data, available at <https://otctransparency.finra.org/otctransparency/AtsIssueData>. A list of alternative trading systems registered with the Commission is available at <https://www.sec.gov/foia/docs/atlist.htm>.

²⁸ See Cboe Global Markets, U.S. Equities Market Volume Summary, available at http://markets.cboe.com/us/equities/market_share/.

²⁹ See LTSE Market Announcement: MA-2020-020, dated August 14, 2020, announcing LTSE production securities phase-in planned for August 28, available here: https://assets-global.website-files.com/6462417e8db99f8baa06952c/6462417e8db99f8baa0698e7_MA-2020-020_Production_Securities_Launching_August_28_-_Google_Docs.pdf and LTSE Market Announcement: MA-2020-025, available here: https://assets-global.website-files.com/6462417e8db99f8baa06952c/6462417e8db99f8baa069873_MA-2020-025.pdf.

³⁰ As of October 29, 2020, MEMX is trading all NMS symbols. See <https://info.memxtrading.com/trader-alert-20-10-memx-trading-symbols-update/>.

³¹ See MIAX Pearl Press release, dated September 29, 2020, available here: https://www.miaxoptions.com/sites/default/files/alert-files/MIAX_Press_Release_09292020.pdf.

³² The Exchange notes that broker-dealers are not required to purchase proprietary market data to comply with their best execution obligations. See *In the Matter of the Application of Securities Industry and Financial Markets Association for Review of Actions Taken by Self-Regulatory Organizations*, Release Nos. 34-72182; AP-3-15350; AP-3-15351 (May 16, 2014). Similarly, there is no requirement in Regulation NMS or any other rule that proprietary data be utilized for order routing decisions, and some broker-dealers and ATSs have chosen not to do so.

³³ For example, in the National IF Approval Order, the Commission recognized that for some customers, the best bid and offer information from consolidated data feeds may function as a substitute for the NYSE National Integrated Feed product, which contains order by order information. See National IF Approval Order, *supra* note 22, at 67397 [release p. 21] (“[I]nformation provided by NYSE National demonstrates that a number of executing broker-dealers do not subscribe to the NYSE National Integrated Feed and executing broker-dealers can otherwise obtain NYSE National best bid and offer information from the consolidated data feeds.” (internal quotations omitted)).

³⁴ See BZX Rule 11.22(m) BZX Summary Depth; BYX Rule 11.22(k) BYX Summary Depth; EDGA Rule 13.8(f) EDGA Summary Depth; and EDGX Rule 13.8(f) EDGX Summary Depth. The Cboe Summary Depth offered by BZX, BYX, EDGA and EDGX are each a data feed that offers aggregated two-sided quotations for all displayed orders for up to five (5) price levels and contains the individual last sale information, market status, trading status and trade break messages.

Arca limit order book as well as auction imbalance data.

The specific fees that the Exchange proposes for the NYSE Arca Agg Lite data feed are reasonable for the following additional reasons.

Overall. The Exchange believes that the proposed fees for the NYSE Arca Agg Lite data feed are reasonable because they would provide vendors and subscribers with the option to subscribe to a market data product that integrates a subset of data from existing products and where such aggregated data is published at a pre-defined interval, thus lowering bandwidth, infrastructure and operational requirements.

The Exchange believes the proposed fees for the NYSE Arca Agg Lite data feed are also reasonable when compared to fees for comparable products, such as the Cboe Summary Depth.³⁵ Additionally, the Exchange is proposing fees for the NYSE Arca Agg Lite data feed that are based on the existing fee structure that data recipients already pay for the NYSE Arca's other market data products. The Exchange believes that adopting the same fee structure would reduce administrative burdens on NYSE Arca data subscribers that also currently subscribe to market data feeds from NYSE Arca.

Access Fee. The Exchange believes that the proposed monthly Access Fee of \$1,500 for the NYSE Arca Aggregated Lite data feed is reasonable because it is lower than the fees charged by BZX, BYX, EDGA, and EDGX, each of which charges between \$2,500 per month to \$5,000 per month for both Internal Distribution and External Distribution of the Cboe Summary Depth market data product.³⁶

User Fees. The Exchange believes that having separate Professional and Non-Professional User fees for the NYSE Arca Agg Lite data feed is reasonable because it will make the product more affordable and result in greater availability to Professional and Non-Professional Users. Setting a modest Non-Professional User fee is reasonable because it provides an additional method for Non-Professional Users to access the NYSE Arca Agg Lite data feed by providing the same data that is available to Professional Users. The proposed monthly Professional User Fee (Per User) of \$30 and monthly Non-Professional User Fee (Per User) of \$4 are reasonable because they are comparable to user fees generally

charged by exchanges. For example, NYSE Arca charges a monthly Professional User Fee (Per User) of \$60 and a monthly Non-Professional User Fee (Per User) of up to \$10 for the NYSE ArcaBook feed.³⁷ Although the proposed User Fees for Professional and Non-Professional Users are higher than those charged by BZX, BYX, EDGA and EDGX, the Exchange notes that User fees are only a subset of the total fees that vendors and subscribers pay and the lower fees proposed to access and redistribute NYSE Arca Agg Lite would provide such market data recipients with a more affordable alternative to existing substitutes offered by the Exchange and its competitors.

Redistribution Fees. The Exchange believes that charging a Redistribution Fee is reasonable because the vendors that would be charged such a fee profit by re-transmitting the Exchange's market data to their customers. This fee would be charged only once per month to each vendor account that redistributes the NYSE Arca Agg Lite data feed, regardless of the number of customers to which that vendor redistributes the data. The Exchange believes the proposed monthly Redistribution Fee of \$250 for the NYSE Arca Agg Lite data feed is reasonable because it is nominal and lower than the fees charged by BZX, BYX, EDGA and EDGX, each of which charges considerably more for both Internal Distribution and External Distribution of the Cboe Summary Depth market data feed.³⁸

Enterprise Fees. The Exchange believes the proposed enterprise license is reasonable because it would reduce exchange fees, lower administrative costs for subscribers that are broker-dealers and help expand the availability of market information to investors, and thereby increase participation in financial markets. Subscribers that are broker-dealers would be able to disseminate the NYSE Arca Agg Lite data feed for display usage to an unlimited number of non-professional users for a monthly fee of \$35,000, or \$31,500 if they contract for twelve months of service in advance. Alternatively, subscribers that are broker-dealers would be able to disseminate the NYSE Arca Agg Lite data feed for display usage to an unlimited number of professional users and non-professional users for a monthly fee of \$110,000, or \$99,000 if they contract for twelve months of service in advance. The proposed enterprise license would result in lower

fees for subscribers able to reach the largest audience of investors, including retail investors. Discounts for broader dissemination of market data information have routinely been adopted by exchanges and permitted by the Commission as equitable allocations of reasonable dues, fees and charges.³⁹

*Non-Display Use Fees.*⁴⁰ Non-display data can be used by data recipients for a wide variety of uses, including proprietary and agency trading and smart order routing, as well as by data recipients that operate order matching and execution platforms. Non-display data also can be used for a variety of non-trading purposes that indirectly support trading, such as risk management and compliance. Although some of these non-trading uses do not directly generate revenues, they can nonetheless substantially reduce a recipient's costs by automating such functions so that they can be carried out in a more efficient and accurate manner and reduce errors and labor costs, thereby benefiting recipients. The Exchange believes that charging for non-trading uses is reasonable because data recipients can derive substantial benefit from such uses, for example, by automating tasks so that they can be performed more quickly and accurately and less expensively than if they were performed manually.

The Exchange believes that the proposed fees of \$4,500 per month for each of Categories 1, 2, and 3 is reasonable. These fees are comparable to non-display use fees generally charged by exchanges. For example, the fees for Non-Display Use of NYSE ArcaBook for Categories 1, 2 and 3 is \$6,000 per month.⁴¹ The Exchange believes that it is reasonable to cap non-display use fees for Category 3 at \$13,500 per month per data recipient, because a higher monthly fee may potentially dissuade subscribers from buying the NYSE Arca Agg Lite data feed.

The proposed Non-Display Use fees for the NYSE Arca Agg Lite data feed are also reasonable because they take into account the usefulness of receiving the data for Non-Display Use on an integrated basis.

Non-Display Use Declaration Late Fee. The Exchange believes that it is reasonable to require annual submissions of the Non-Display Use

³⁹ For example, the Commission has permitted pricing discounts for market data under Nasdaq Rules 7023(c) and 7047(b). *See also* Securities Exchange Act Release No. 82182 (November 30, 2017), 82 FR 57627 (December 6, 2017) (SR-NYSE-2017-60) (changing an enterprise fee for NYSE BBO and NYSE Trades).

⁴⁰ *See supra*, note 15.

⁴¹ *See* Fee Schedule.

³⁵ *See* https://cdn.cboe.com/resources/membership/US_Market_Data_Product_Price_List.pdf.

³⁶ *Id.*

³⁷ *See* Fee Schedule.

³⁸ *See supra*, note 35.

Declaration so that the Exchange will have current and accurate information about the use of the NYSE Arca Agg Lite data feed and can correctly assess fees for the uses of the NYSE Arca Agg Lite data feed. Requiring annual submissions of such declarations is reasonable because it also allows users to re-assess their own usage each year.

The Exchange believes that it is reasonable to impose a late fee in connection with the submission of the Non-Display Use Declaration. In order to correctly assess fees for the non-display use of the NYSE Arca Agg Lite data feed, the Exchange needs to have current and accurate information about the use of the NYSE Arca Agg Lite data feed. The failure of data recipients to submit the Non-Display Use Declaration on time leads to potentially incorrect billing and administrative burdens, including tracking and obtaining late Non-Display Use Declarations and correcting and following up on payments owed in connection with late Non-Display Use Declarations. The purpose of the late fee is to incent data recipients to submit the Non-Display Use Declaration promptly to avoid the administrative burdens associated with the late submission of Non-Display Use Declarations.

Multiple Data Feed Fee. The Exchange believes that it is reasonable to require data recipients to pay a modest fee for taking a data feed for a market data product in more than two locations. In addition, there are administrative burdens associated with tracking each location at which a data recipient receives the product. The Multiple Data Feed Fee is designed to encourage data recipients to better manage their requests for additional data feeds and to monitor their usage of data feeds. The proposed fee is designed to apply to data feeds received in more than two locations so that each data recipient can have one primary and one backup data location before having to pay a multiple data feed fee.

Three-Month Fee Waiver. The Exchange believes the proposal to waive the Access Fee and the Redistribution Fee for the NYSE Arca Agg Lite data feed to new Redistributors for three calendar months is reasonable because it would enable potential Redistributors to determine whether a particular NYSE Arca market data product is useful to their business models before fully committing to expend development and implementation costs related to the receipt of that product, and is intended to encourage increased use of the Exchange's market data products by defraying some of the development and implementation costs Redistributors

would ordinarily have to expend before using a product. The proposed fee waiver would also allow Redistributors to become familiar with the feed and determine whether it suits their needs without incurring fees. Making a new market data product available without charging a fee for three months is consistent with offerings of other exchanges. For example, BZX offers subscribers of BZX Summary Depth a three-month credit for external distribution, which is akin to the three-month fee waiver proposed by the Exchange.⁴²

For all of the foregoing reasons, the Exchange believes that the proposed fees for the NYSE Arca Agg Lite data feed are reasonable.

The Proposed Fees Are Equitably Allocated

The Exchange believes the proposed fees for the NYSE Arca Agg Lite data feed are allocated fairly and equitably among the various categories of users of the feed, and any differences among categories of users are justified.

Overall. The Exchange believes that the proposed fees are equitably allocated because they will apply to all data recipients that choose to subscribe to the NYSE Arca Agg Lite data feed. Any subscriber or vendor that chooses to subscribe to the NYSE Arca Agg Lite data feed is subject to the same Fee Schedule, regardless of what type of business they operate or the use they plan to make of the data feed. Subscribers and vendors are not required to purchase the NYSE Arca Agg Lite data feed and may choose to receive the data on the NYSE Arca Agg Lite data feed regardless of what type of business they operate or the use they plan to make of the data feed.

Access Fee. The Exchange believes the proposed monthly Access Fee of \$1,500 for the NYSE Arca Agg Lite data feed is equitably allocated because it would be charged on an equal basis to all data recipients that receive a data feed of the NYSE Arca Agg Lite data feed, regardless of what type of business they operate or the use they plan to make of the data feed.

User Fees. The Exchange believes that the fee structure differentiating Professional User fees (\$30 per month per user) from Non-Professional User fees (\$4 per month per user) for display device access to the NYSE Arca Agg Lite data feed is equitable. This structure has

long been used by the Exchange to reduce the price of data to Non-Professional Users and make it more broadly available.⁴³ Offering the NYSE Arca Agg Lite data feed to Non-Professional Users with the same data as is available to Professional Users results in greater equity among data recipients. These user fees would be charged uniformly to all display devices that have access to the NYSE Arca Agg Lite data feed.

Redistribution Fees. The Exchange believes the proposed monthly fee of \$250 for redistributing the NYSE Arca Agg Lite data feed is equitably allocated because it would be charged on an equal basis to those Redistributors that choose to redistribute the feed.

Enterprise Fees. The Exchange believes the proposed enterprise license is equitably allocated because it would be available on an equal basis to all subscribers that are broker-dealers, each of whom would benefit from reduced exchange fees and from lower administrative costs. Moreover, the specific feature of the proposed enterprise license that will allow subscribers to lower fees by subscribing to a twelve-month contract is also an equitable allocation because all subscribers will have the same option of choosing between the stability of a fixed, lower rate, and the more flexible option of maintaining the ability to change market data products after a month of service. Subscribers will be free to move from the monthly to the annual rate at any time, or from annual to a monthly fee, with notice, at the expiration of the twelve-month period.

Non-Display Use Fees. The Exchange believes the proposed Non-Display Use fees are equitably allocated because they would require subscribers to pay fees only for the uses they actually make of the data. As noted above, non-display data can be used by data recipients for a wide variety of purposes (including trading, risk management, and compliance) as well as purposes that reduce the recipient's costs by automating certain functions. The Exchange believes that it is equitable to charge non-display data subscribers a \$4,500 fee for each category of use they make of such data—namely, using the data on their own behalf (Category 1), on behalf of their clients (Category 2),

⁴² See e.g., Securities Exchange Act Release No. 94432 (March 16, 2022), 87 FR 16277 (March 22, 2022) (SR-ChoeBZX-2022-015) (Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Amend the Fees Applicable to Various Market Data Products).

⁴³ See, e.g., Securities Exchange Act Release No. 72560 (July 8, 2014), 79 FR 40801 (July 14, 2014) (SR-NYSEARCA-2014-72) (establishing tiered Non-Professional User Fees (Per User) for NYSE ArcaBook); Securities Exchange Act Release No. 20002, File No. S7-433 (July 22, 1983), 48 FR 34552 (July 29, 1983) (establishing Non-Professional fees for CTA data); NASDAQ BX Equity 7 Pricing Schedule, Section 123.

and to internally match buy and sell orders within an organization (Category 3)—because this fee structure results in subscribers with greater uses of the data paying higher fees, and subscribers with fewer uses of the data paying lower fees. This segmented fee structure is also equitable because no subscriber of non-display data would be charged a fee for a category of use in which it did not actually engage.

The Exchange believes that it is equitable to cap non-display use fees for Category 3 at \$13,500 per month per data recipient, because a higher monthly fee may potentially dissuade subscribers from buying the NYSE Arca Agg Lite data feed.

Non-Display Use Declaration Late Fee. The Exchange believes that the proposed fee of \$1,000 per month for a late Non-Display Use Declaration is equitably allocated because it applies to any data recipient that pays an Access Fee for the NYSE Arca Agg Lite data feed but has failed to complete and submit a Non-Display Use Declaration. In addition, the Exchange believes that it is equitable to charge a late fee to subscribers who fail to timely submit their Non-Display Use Declarations because their failure to do so leads to potentially incorrect billing and administrative burdens on the part of the Exchange. The Exchange believes it is equitable to defray these administrative costs by imposing a late fee only on subscribers' whose declarations were late, as opposed to all subscribers.

Multiple Data Feed Fee. The Exchange believes that the \$200 per month per location fee to data recipients taking the NYSE Arca Agg Lite data feed in more than two locations is equitable because it would apply to all such customers, regardless of what type of business they operate or the use they make of the data feed. In addition, the Exchange believes that it is equitable to charge a fee to subscribers for taking a data feed in more than two locations because there are administrative burdens on the part of the Exchange associated with tracking each location at which a data recipient receives the product. The Exchange believes that it is equitable for it to defray these administrative costs by imposing a modest fee only on subscribers who seek to take the feed in more than two locations, as opposed to all subscribers.

Three-Month Fee Waiver. The Exchange believes the proposal to waive the Access Fee and the Redistribution Fee for the NYSE Arca Agg Lite data feed to new Redistributors for three calendar months is equitable because it would apply to any first-time

Redistributor, regardless of the use they plan to make of the feed. As proposed, any first-time Redistributor of the NYSE Arca Agg Lite data feed would not be charged the Access Fee and the Redistribution Fee for three calendar months. The Exchange believes it is equitable to restrict the availability of this three-month fee waiver to Redistributors that have not previously subscribed to and redistributed the NYSE Arca Agg Lite data feed, since customers who are current or previous subscribers of the feed are already familiar with it and are able to determine whether it suits their needs.

For all of the foregoing reasons, the Exchange believes that the proposed fees for the NYSE Arca Agg Lite data feed are equitably allocated.

The Proposed Fees Are Not Unfairly Discriminatory

The Exchange believes the proposed fees for the NYSE Arca Agg Lite data feed are not unfairly discriminatory because any differences in the application of the fees are based on meaningful distinctions between customers, and those meaningful distinctions are not unfairly discriminatory between customers.

Overall. The Exchange believes that the proposed fees are not unfairly discriminatory because they would apply to all data recipients that choose to subscribe to the NYSE Arca Agg Lite data feed. Any subscriber, including Redistributor, that chooses to subscribe to the NYSE Arca Agg Lite data feed is subject to the same Fee Schedule, regardless of what type of business they operate or the use they plan to make of the data feed. Subscribers, including Redistributors, may choose to receive the data on the NYSE Arca Agg Lite data feed regardless of what type of business they operate or the use they plan to make of the data feed.

Access Fee. The Exchange believes the proposed monthly Access Fee of \$1,500 for the NYSE Arca Agg Lite data feed is not unfairly discriminatory because it would be charged on an equal basis to all data recipients that receive a data feed of the NYSE Arca Agg Lite, regardless of what type of business they operate or the use they plan to make of the data feed.

User Fees. The Exchange believes that the fee structure differentiating Professional User fees (\$30 per month per user) from Non-Professional User fees (\$4 per month per user) for display device access to the NYSE Arca Agg Lite data feed is not unfairly discriminatory. This structure has long been used by the Exchange to reduce the price of data to Non-Professional Users and make it

more broadly available.⁴⁴ Offering the NYSE Arca Agg Lite data feed to Non-Professional Users with the same data as is available to Professional Users results in greater equity among data recipients. These user fees would be charged uniformly to all display devices that have access to the NYSE Arca Agg Lite data feed.

Redistribution Fees. The Exchange believes the proposed monthly fee of \$250 for redistributing the NYSE Arca Agg Lite data feed is not unfairly discriminatory because it would be charged on an equal basis to those Redistributors that choose to redistribute the feed.

Enterprise Fees. The Exchange believes the proposed enterprise license will not unfairly discriminate between customers, issuers, brokers or dealers. The Act does not prohibit all distinctions among customers, but only discrimination that is unfair, and it is not unfair discrimination to charge those subscribers that are able to reach the largest audiences of investors, including retail investors, a lower fee for incremental investors in order to encourage the widespread distribution of market data. This principle has been repeatedly endorsed by the Commission, as evidenced by the approval of enterprise licenses for other market data products.⁴⁵ Moreover, the proposed enterprise license will be subject to significant competition, and that competition will ensure that there is no unfair discrimination. Each subscriber will be able to accept or reject the license depending on whether it will or will not lower costs for that particular subscriber, and, if the license is not sufficiently competitive, the Exchange may lose market share. The proposed enterprise license will compete with other enterprise licenses of the Exchange, underlying fee schedules promulgated by the Exchange, and enterprise licenses and fee structures implemented by other exchanges. As such, it is a voluntary product for which market participants can readily find substitutes. Accordingly, the Exchange is constrained from introducing a fee that would be inequitable or unfairly discriminatory.

⁴⁴ *Id.*

⁴⁵ See e.g., Securities Exchange Act Release No. 83751 (July 31, 2018), 83 FR 38428 (August 6, 2018) (SR-NASDAQ-2018-058) (Notice of Filing and Immediate Effectiveness of Proposed Rule Change To Lower Fees and Administrative Costs for Distributors of Nasdaq Basic, Nasdaq Last Sale, NLS Plus and the Nasdaq Depth-of-Book Products Through a Consolidated Enterprise License).

*Non-Display Use Fees.*⁴⁶ The Exchange believes the proposed Non-Display Use fees are not unfairly discriminatory because they would require subscribers for non-display use to pay fees only for the categories of use they actually make of the data. As noted above, non-display data can be used by data recipients for a wide variety of purposes (including trading, risk management, and compliance) as well as purposes that reduce the recipient's costs by automating certain functions. The Exchange believes that it is not unfairly discriminatory to charge non-display data subscribers a \$4,500 per month fee for each category of use they make of such data—namely, using the data on their own behalf (Category 1), on behalf of their clients (Category 2), and to internally match buy and sell orders within an organization (Category 3)—because this fee structure results in subscribers with greater uses for the data paying higher fees, while subscribers with fewer uses of the data pay lower fees. This segmented fee structure is not unfairly discriminatory because no subscriber of non-display data would be charged a fee for a category of use in which it did not actually engage.

The Exchange believes that it is not unreasonably discriminatory to cap non-display use fees for Category 3 at \$13,500 per month per data recipient, because a higher monthly fee may potentially dissuade subscribers from buying the NYSE Arca Agg Lite data feed.

Non-Display Use Declaration Late Fee. The Exchange believes that the proposed fee of \$1,000 per month for a late Non-Display Use Declaration is not unfairly discriminatory because it applies to any data recipient that pays an Access Fee for the NYSE Arca Agg Lite data feed but has failed to complete and submit a Non-Display Use Declaration. In addition, the Exchange believes that it is not unfairly discriminatory to charge a late fee to subscribers who fail to timely submit their Non-Display Use Declarations because their failure to do so leads to potentially incorrect billing and administrative burdens on the part of the Exchange. Nor is it unfairly discriminatory for the Exchange to defray these administrative costs by imposing a late fee only on subscribers' whose declarations were late, as opposed to all subscribers.

Multiple Data Feed Fee. The Exchange believes that the \$200 per month per location fee to data recipients taking the NYSE Arca Agg Lite data feed in more

than two locations is not unfairly discriminatory because it would apply to all such customers, regardless of what type of business they operate or the use they make of the data feed. In addition, the Exchange believes that it is not unfairly discriminatory to charge a fee to subscribers for taking a data feed in more than two locations because there are administrative burdens on the part of the Exchange associated with tracking each location at which a data recipient receives the product. The Exchange believes that it is not unfairly discriminatory for it to defray these administrative costs by imposing a modest fee only on subscribers who seek to take the feed in more than two locations, as opposed to all subscribers.

Three-Month Fee Waiver. The Exchange believes the proposal to waive the Access Fee and the Redistribution Fee for the NYSE Arca Agg Lite data feed to new Redistributors for three months is not unfairly discriminatory because it would apply to any first-time Redistributor, regardless of the use they plan to make of the feed. As proposed, any first-time Redistributor of the NYSE Arca Agg Lite data feed would not be charged the Access Fee and the Redistribution Fee for three calendar months. The Exchange believes it is not unfairly discriminatory to restrict the availability of this three-month fee waiver to Redistributors that have not previously subscribed to the NYSE Arca Agg Lite data feed, since Redistributors who are current or previous subscribers of the feed are already familiar with it and are able to determine whether it suits their needs.

For all of the foregoing reasons, the Exchange believes that the proposed fees for the NYSE Arca Agg Lite data feed are not unfairly discriminatory.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed fees will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act.

Intramarket Competition. The Exchange believes that the proposed fees do not put any market participants at a relative disadvantage compared to other market participants. As noted above, the proposed fees would apply to all subscribers, including Redistributors, of the NYSE Arca Agg Lite data feed, and customers may choose whether to subscribe to the feed at all. The Exchange also believes that the proposed fees neither favor nor penalize one or more categories of market participants in a manner that would impose an undue burden on

competition. As shown above, to the extent that particular proposed fees apply to only a subset of subscribers (e.g., Category 2 fees apply only to those making non-display use on behalf of clients; late fees apply only to customers who fail to timely submit their declarations), those distinctions are not unfairly discriminatory and do not unfairly burden one set of customers over another. To the contrary, by tailoring the proposed fees in this manner, the Exchange believes that it has eliminated the potential burden on competition that might result from unfairly asking subscribers to pay fees for services they did not use, or late fees they did not actually incur.

Intermarket Competition. The Exchange believes that the proposed fees do not impose a burden on competition or on other SROs that is not necessary or appropriate. In setting the proposed fees, the Exchange is constrained by the availability of substitute partial depth of book market data products and by the fact that if its pricing is unattractive, customers will have their pick of alternative non-latency-sensitive partial depth of book market data products to purchase instead of purchasing the Exchange's products.

Specifically, the Exchange believes that the proposed fees do not impose a burden on competition or on other exchanges that is not necessary or appropriate because of the availability of substitute partial depth of book market data products. As noted above, BZX, BYX, EDGA, and EDGX each offers a proprietary data feed like the NYSE Arca Agg Lite data feed, supplying partial depth of book order data, security status updates, stock summary messages, and the exchange's best bid and offer at any given time, on a real-time basis. Because market data users can find suitable substitute feeds, an exchange that overprices its market data products stands a high risk that users may purchase another market's market data product. These competitive pressures ensure that no one exchange's market data fees can impose an unnecessary burden on competition, and the Exchange's proposed fees do not do so here.

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.

⁴⁶ See *supra*, note 15.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The foregoing rule change is effective upon filing pursuant to Section 19(b)(3)(A) ⁴⁷ of the Act and subparagraph (f)(2) of Rule 19b-4 ⁴⁸ thereunder, because it establishes a due, fee, or other charge imposed by the Exchange.

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) ⁴⁹ 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 (<https://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include file number SR-NYSEARCA-2024-94 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-2024-94. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's internet website (<https://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the

proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street NE, Washington, DC 20549, on official business days between the hours of 10 a.m. and 3 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. Do not include personal identifiable information in submissions; you should submit only information that you wish to make available publicly. We may redact in part or withhold entirely from publication submitted material that is obscene or subject to copyright protection. All submissions should refer to file number SR-NYSEARCA-2024-94 and should be submitted on or before December 12, 2024.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.⁵⁰

Stephanie J. Fouse,

Assistant Secretary.

[FR Doc. 2024-27217 Filed 11-20-24; 8:45 am]

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-101641; File No. SR-NYSEARCA-2024-27]

Self-Regulatory Organizations; NYSE Arca, Inc.; Notice of Filing of Amendment No. 4 and Order Granting Accelerated Approval of a Proposed Rule Change, as Modified by Amendment No. 4, To List and Trade Shares of the 7RCC Spot Bitcoin and Carbon Credit Futures ETF Under NYSE Arca Rule 8.500-E (Trust Units)

November 15, 2024.

I. Introduction

On March 13, 2024, NYSE Arca, Inc. ("NYSE Arca" or "Exchange") filed with the Securities and Exchange Commission ("Commission"), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act" or "Exchange Act") ¹ and Rule 19b-4 thereunder,² a proposed rule change to list and trade shares of the 7RCC Spot Bitcoin and Carbon Credit Futures ETF under NYSE Arca Rule 8.500-E (Trust Units). The proposed rule change was

published for comment in the **Federal Register** on March 26, 2024.³

On May 2, 2024, pursuant to Section 19(b)(2) of the Act,⁴ the Commission designated a longer period within which to approve the proposed rule change, disapprove the proposed rule change, or institute proceedings to determine whether to disapprove the proposed rule change.⁵ On June 20, 2024, the Commission instituted proceedings pursuant to Section 19(b)(2)(B) of the Act⁶ to determine whether to approve or disapprove the proposed rule change.⁷ On September 3, 2024, pursuant to Section 19(b)(2) of the Act,⁸ the Commission designated a longer period for Commission action on the proposed rule change.⁹

On September 30, 2024, the Exchange filed Amendment No. 1 to the proposed rule change, which amended and replaced the proposed rule change in its entirety as originally filed.¹⁰ On October 3, 2024, the Exchange filed Partial Amendment No. 2, which amended the proposed rule change, as modified by Amendment No. 1.¹¹ On October 18, 2024, the Exchange filed Amendment No. 3 to the proposed rule change, which amended and replaced the proposed rule change in its entirety, as modified by Amendment No. 1 and Partial Amendment No. 2.¹² On October 24, 2024, the Exchange filed Amendment No. 4 to the proposed rule change, which amended and replaced

³ See Securities Exchange Act Release No. 99801 (Mar. 20, 2024), 89 FR 21104. The Commission received only one comment on the proposed rule change, which is available at: <https://www.sec.gov/comments/sr-nysearca-2024-27/srnysearca202427.htm>. The comment letter was not germane to the proposed rule change and instead concerned voluntary carbon markets more broadly. See Letter from James D. Milas (Mar. 27, 2024). As stated below, the Exchange represents that the Fund will not provide exposure to voluntary carbon markets.

⁴ 15 U.S.C. 78s(b)(2).

⁵ See Securities Exchange Act Release No. 100050, 89 FR 38932 (May 8, 2024).

⁶ 15 U.S.C. 78s(b)(2)(B).

⁷ See Securities Exchange Act Release No. 100390, 89 FR 53466 (June 26, 2024).

⁸ 15 U.S.C. 78s(b)(2).

⁹ See Securities Exchange Act Release No. 100896, 89 FR 73135 (Sept. 9, 2024). The Commission, pursuant to Section 19(b)(2) of the Act, designated Nov. 21, 2024 as the date by which the Commission shall either approve or disapprove the proposed rule change.

¹⁰ Amendment No. 1 is available on the Commission's website at: <https://www.sec.gov/comments/sr-nysearca-2024-27/srnysearca202427-527675-1515782.pdf>.

¹¹ Partial Amendment No. 2 is available on the Commission's website at: <https://www.sec.gov/comments/sr-nysearca-2024-27/srnysearca202427-527695-1515782.pdf>.

¹² Amendment No. 3 is available on the Commission's website at: <https://www.sec.gov/comments/sr-nysearca-2024-27/srnysearca202427-530955-1525482.pdf>.

⁴⁷ 15 U.S.C. 78s(b)(3)(A).

⁴⁸ 17 CFR 240.19b-4(f)(2).

⁴⁹ 15 U.S.C. 78s(b)(2)(B).

⁵⁰ 17 CFR 200.30-3(a)(12).

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

the proposed rule change in its entirety, as modified by Amendment No. 3.¹³

The Commission is publishing this notice to solicit comments on Amendment No. 4 to the proposed rule change from interested persons, and is approving the proposed rule change, as modified by Amendment No. 4, on an accelerated basis.

II. The Exchange's Description of the Proposal, as Modified by Amendment No. 4

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 list and trade shares ("Shares") of the 7RCC Spot Bitcoin and Carbon Credit Futures ETF (the "Fund") under NYSE Arca Rule 8.500–E.¹⁴

The Fund is a series of the Tidal Commodities Trust I (the "Trust"), a Delaware statutory trust organized on February 10, 2023.¹⁵ The Trust has no fixed termination date. The Trust will not be registered as an investment company under the Investment Company Act of 1940, as amended,¹⁶ and is not required to register under such act.

The sponsor of the Trust is Tidal Investments LLC (the "Sponsor"). The Sponsor is registered as a commodity pool operator and a commodity trading adviser with the Commodity Futures Trading Commission (the "CFTC") and is a member of the National Futures Association.

The administrator of the Fund is Tidal ETF Services (the "Administrator"). The custodian of the Fund's bitcoin holdings is Gemini Trust Company, LLC (the "Bitcoin Custodian"). The Sponsor will appoint a non-digital custodian (the "Non-Digital Custodian" and, together with the Bitcoin Custodian, the "Custodians"), who will serve as the Fund's custodian with respect to its cash and cash equivalents,¹⁷ as well as any investments in connection with its exposure to Carbon Credit Futures, as defined below.

The Fund's Investment Objective and Strategy

According to the Registration Statement, the Fund's investment objective is to reflect the daily changes of the price of bitcoin and the value of carbon credit futures contracts ("Carbon Credit Futures"), as represented by the Vinter Bitcoin Carbon Credits Index (the "Index"), less expenses from the Fund's operations.

The Fund will pursue its investment objective by investing 80% of its assets in bitcoin and the remaining 20% of its assets in Carbon Credit Futures that provide exposure to Carbon Credit Futures represented by the Index. The Index seeks to provide exposure to both bitcoin and Carbon Credit Futures and is designed to track the performance of investing in a portfolio comprised of 80% of bitcoin and 20% Carbon Credit Futures. The Index's Carbon Credit Futures are linked to the value of emissions allowances issued under the following "cap-and-trade" regimes: the European Union Emissions Trading System ("EU ETS"), the California Carbon Allowance ("CCA"), and the Regional Greenhouse Gas Initiative ("RGGI"). The Fund will gain exposure to these Carbon Credit Futures only by investing directly in only such futures

contracts. The Fund does not intend to invest in Carbon Credit Futures specifically linked to bitcoin mining or other related processes. As further discussed below, the Fund will not provide exposure to voluntary carbon markets.

Carbon Credit Futures

According to the Registration Statement, Carbon Credit Futures are futures contracts on emissions allowances issued by various "cap-and-trade" regulatory regimes that seek to reduce greenhouse gases over time. A cap-and-trade regime typically involves a regulator setting a limit on the total amount of specific greenhouse gases ("GHG") (such as carbon dioxide ("CO₂")) that can be emitted by regulated entities. Capping and reducing the cap on GHGs is viewed as a key policy tool in reaching climate change objectives. The regime is designed to promote sustainable development by putting a price on carbon emissions. The regulator will then issue or sell "emissions allowances" to regulated entities, which in turn may buy or sell the emissions allowances to the open market. To the extent that the regulator may then reduce the cap on emission allowances, regulated entities are incentivized to reduce their emissions; otherwise, they must purchase additional emission allowances on the open market, where the price of such allowances will likely be increasing as a result of demand, and regulated entities that reduce their emissions will be able to sell unneeded emission allowances for profit. An emission allowance or carbon credit is a unit of emissions (typically one ton of CO₂) that the owner of the allowance or credit is permitted to emit. Futures contracts linked to the value of emission allowances are known as carbon credit futures.

Overview of the Bitcoin Industry and Market

Bitcoin

According to the Registration Statement, bitcoin is the digital asset that is native to, and created and transmitted through the operations of, the peer-to-peer "Bitcoin Network," a decentralized network of computers that operates on cryptographic protocols. No single entity owns or operates the Bitcoin Network, the infrastructure of which is collectively maintained by a decentralized user base. The Bitcoin Network allows people to exchange tokens of value, called bitcoin, which are recorded on a public transaction ledger known as the Blockchain. Bitcoin

¹³ Amendment No. 4 is available on the Commission's website at: <https://www.sec.gov/comments/sr-nysearca-2024-27/srnysearca202427-534335-1532242.pdf>.

¹⁴ NYSE Arca Rule 8.500–E governs the listing and trading of Trust Units, which are securities issued by a trust or other similar entity that is constituted as a commodity pool that holds investments comprising or otherwise based on any combination of futures contracts, options on futures contracts, forward contracts, swap contracts, commodities, and/or securities.

¹⁵ On December 18, 2023, the Trust filed with the Commission a registration statement on Form S-1 (File No. 333-276125) (the "Registration Statement") under the Securities Act of 1933 (15 U.S.C. 77a) (the "Securities Act"). On October 7, 2024, the Trust filed Amendment No. 1 to the Registration Statement. The description of the operation of the Fund herein is based, in part, on the Registration Statement. The Registration Statement is not yet effective and the Shares will not trade on the Exchange until such time that the Registration Statement is effective.

¹⁶ 15 U.S.C. 80a-1.

¹⁷ "Cash Equivalents" shall mean such investments that, in the view of the Sponsor, are of high credit quality and liquidity and can be converted to cash quickly. Such investments shall include: (a) cash; (b) debt securities issued or directly or indirectly fully guaranteed or insured by the United States or any agency or instrumentality thereof (such as U.S. Treasury Bills); (c) commercial paper or finance company paper of sufficient credit quality in the view of the Sponsor; or (d) money market mutual funds. Additionally, the Fund will implement foreign exchange dollarization using spot market or foreign exchange forwards and customary foreign exchange hedging instruments.

can be used to pay for goods and services, or it can be converted to fiat currencies, such as the U.S. dollar, at rates determined on digital asset trading platforms or in individual end-user-to-end-user transactions under a barter system. Although nascent in use, bitcoin may be used as a medium of exchange, unit of account or store of value.

The Bitcoin Network is decentralized and does not require governmental authorities or financial institution intermediaries to create, transmit, or determine the value of bitcoin. In addition, no party may easily censor transactions on the Bitcoin Network. As a result, the Bitcoin Network is often referred to as decentralized and censorship resistant.

The value of bitcoin is determined by the supply of and demand for bitcoin. New bitcoin are created and rewarded to the parties providing the Bitcoin Network's infrastructure ("miners") in exchange for their expending computational power to verifying transactions and add them to the "Blockchain." The Blockchain is effectively a decentralized database that includes all blocks that have been solved by miners and it is updated to include new blocks as they are solved. Each bitcoin transaction is broadcast to the Bitcoin Network and, when included in a block, recorded in the Blockchain. As each new block records outstanding bitcoin transactions, and outstanding transactions are settled and validated through such recording, the Blockchain represents a complete, transparent, and unbroken history of all transactions of the Bitcoin Network.

Bitcoin Network

Bitcoin was first described in a white paper released in 2008 and published under the pseudonym "Satoshi Nakamoto." The protocol underlying Bitcoin was subsequently released in 2009 as open-source software and currently operates on a worldwide network of computers. The Bitcoin Network and its software have been under active development since that time by a group of computer engineers known as "core developers," each of whom operates under a volunteer basis and without strict hierarchical administration.

The Bitcoin Network utilizes a digital asset known as "bitcoin," which can be transferred among parties via the internet. Unlike other means of electronic payments such as credit card transactions, one of the advantages of bitcoin is that it can be transferred without the use of a central administrator or clearing agency. As a central party is not necessary to

administer bitcoin transactions or maintain the bitcoin ledger, the term decentralized is often used in descriptions of bitcoin. Unless it is using a third-party service provider, a party transacting in bitcoin is generally not afforded some of the protections that may be offered by intermediaries.

The first step in directly using the Bitcoin Network for transactions is to download specialized software referred to as a "bitcoin wallet." A user's bitcoin wallet can run on a computer or smartphone and can be used both to send and to receive bitcoin. Within a bitcoin wallet, a user can generate one or more unique "bitcoin addresses," which are conceptually similar to bank account numbers. After establishing a bitcoin address, a user can send or receive bitcoin from his or her bitcoin address to or from another user's bitcoin address. Sending bitcoin from one bitcoin address to another is similar in concept to sending a bank wire from one person's bank account to another person's bank account; however, such transactions are not managed by an intermediary and erroneous transactions generally may not be reversed or remedied once sent.

The amount of bitcoin associated with each bitcoin address, as well as each bitcoin transaction to or from such bitcoin address, is transparently reflected in the Blockchain and can be viewed by websites that operate as "blockchain explorers." Copies of the Blockchain exist on thousands of computers on the Bitcoin Network throughout the internet. A user's bitcoin wallet will either contain a copy of the blockchain or be able to connect with another computer that holds a copy of the blockchain. The innovative design of the Bitcoin Network protocol allows each Bitcoin user to trust that their copy of the Blockchain will generally be updated consistent with each other user's copy.

When a Bitcoin user wishes to transfer bitcoin to another user, the sender must first request a Bitcoin address from the recipient. The sender then uses his or her Bitcoin wallet software to create a proposed transaction that is confirmed and settled when included in the Blockchain. The transaction would reduce the amount of bitcoin allocated to the sender's bitcoin address and increase the amount allocated to the recipient's bitcoin address, in each case by the amount of bitcoin desired to be transferred. The transaction is completely digital in nature, similar to a file on a computer, and it can be sent to other computers participating in the Bitcoin Network; however, the use of cryptographic

verification is believed to prevent the ability to duplicate or counterfeit bitcoin.

Bitcoin Protocol

The Bitcoin protocol is built using open-source software, meaning any developer can review the underlying code and suggest changes. There is no official company or group that is responsible for making modifications to Bitcoin. There are, however, a number of individual developers that regularly contribute to a specific distribution of Bitcoin software known as the "Bitcoin Core," which is maintained in an open-source repository on the website Github. There are many other compatible versions of Bitcoin software, but Bitcoin Core provides the de-facto standard for the Bitcoin protocol, also known as the "reference software." The core developers for Bitcoin Core operate under a volunteer basis and without strict hierarchical administration.

Significant changes to the Bitcoin protocol are typically accomplished through a so-called "Bitcoin Improvement Proposal" or "BIP." Such proposals are generally posted on websites, and the proposals explain technical requirements for the protocol change as well as reasons why the change should be accepted. Upon its inclusion in the most recent version of Bitcoin Core, a new BIP becomes part of the reference software's Bitcoin protocol. Several BIPs have been implemented since 2011 and have provided various new features and scaling improvements.

Because Bitcoin has no central authority, updating the reference software's Bitcoin protocol will not immediately change the Bitcoin Network's operations. Instead, the implementation of a change is achieved by users and transaction validators (known as miners) downloading and running updated versions of Bitcoin Core or other Bitcoin software that abides by the new Bitcoin protocol. Users and miners must accept any changes made to the Bitcoin source code by downloading a version of their Bitcoin software that incorporates the proposed modification of the Bitcoin Network's source code. A modification of the Bitcoin Network's source code is only effective with respect to those Bitcoin users and miners who download it. If an incompatible modification is accepted by a less than overwhelming percentage of users and miners, a division in the Bitcoin Network will occur such that one network will run the pre-modification source code and the other network will run the modified

source code. Such a division is known as a “fork” in the Bitcoin Network.

Such a fork in the Bitcoin Network occurred on August 1, 2017, when a group of developers and miners accepted certain changes to the Bitcoin Network software intended to increase transaction capacity. Blocks mined on this network now diverge from blocks mined on the Bitcoin Network, which has resulted in the creation of a new blockchain whose digital asset is referred to as “bitcoin cash.” Bitcoin and bitcoin cash now operate as separate, independent networks, and have distinct related assets (bitcoin and bitcoin cash). Additional forks have followed the bitcoin cash fork, and it is possible that additional “forks” will occur in the future.¹⁸

Bitcoin Transactions

A bitcoin transaction is similar in concept to an irreversible digital check. The transaction contains the sender’s bitcoin address, the recipient’s bitcoin address, the amount of bitcoin to be sent, a transaction fee and the sender’s digital signature. Bitcoin transactions are secured by cryptography known as public-private key cryptography, represented by the bitcoin addresses and digital signature in a transaction’s data file. Each Bitcoin Network address,

or “wallet,” is associated with a unique “public key” and “private key” pair, both of which are lengthy alphanumeric codes, derived together and possessing a unique relationship.

The use of key pairs is a cornerstone of the Bitcoin Network technology. This is because the use of a private key is the only mechanism by which a bitcoin transaction can be signed. If a private key is lost, the corresponding bitcoin is thereafter permanently non-transferable. Moreover, the theft of a private key provides the thief immediate and unfettered access to the corresponding bitcoin. Bitcoin users must therefore understand that in this regard, bitcoin is similar to cash: that is, the person or entity in control of the private key corresponding to a particular quantity of bitcoin has de facto control of the bitcoin. For large quantities of bitcoin, holders often embrace sophisticated security measures.

The public key is visible to the public and analogous to the Bitcoin Network address. The private key is a secret and is used to digitally sign a transaction in a way that proves the transaction has been signed by the holder of the public-private key pair, without having to reveal the private key. A user’s private key must be kept safe in accordance with appropriate controls and procedures to ensure it is used only for legitimate and intended transactions. If an unauthorized third person learns of a user’s private key, that third person could apply the user’s digital signature without authorization and send the user’s bitcoin to their or another bitcoin address, thereby stealing the user’s bitcoin. Similarly, if a user loses his private key and cannot restore such access (e.g., through a backup), the user may permanently lose access to the bitcoin associated with that private key and bitcoin address.

To prevent the possibility of double-spending bitcoin, each validated transaction is recorded, time stamped and publicly displayed in a “block” in the Blockchain, which is publicly

available. Thus, the Bitcoin Network provides confirmation against double-spending by memorializing every transaction in the Blockchain, which is publicly accessible and downloaded in part or in whole by all users of the Bitcoin Network software program. Any user may validate, through their Bitcoin wallet or a blockchain explorer, that each transaction in the Bitcoin Network was authorized by the holder of the applicable private key, and Bitcoin Network mining software consistent with reference software requirements validates each such transaction before including it in the Blockchain. This cryptographic security ensures that bitcoin transactions may not generally be counterfeited, although it does not protect against the “real world” theft or coercion of use of a Bitcoin user’s private key, including the hacking of a Bitcoin user’s computer or a service provider’s systems.

A Bitcoin transaction between two parties is recorded if such transaction is included in a valid block added to the Blockchain. A block is accepted as valid through consensus formation among Bitcoin Network participants. Validation of a block is achieved by confirming the cryptographic hash value included in the block’s data and by the block’s addition to the longest confirmed blockchain on the Bitcoin Network. For a transaction, inclusion in a block on the Blockchain constitutes a “confirmation” of validity. As each block contains a reference to the immediately preceding block, additional blocks appended to and incorporated into the Blockchain constitute additional confirmations of the transactions in such prior blocks, and a transaction included in a block for the first time is confirmed once against double-spending. This layered confirmation process makes changing historical blocks (and reversing transactions) exponentially more difficult the further back one goes in the Blockchain.

¹⁸ The Fund may from time to time come into possession of Incidental Rights and/or IR Virtual Currency by virtue of its ownership of bitcoin, generally through a fork in the Blockchain, an airdrop offered to holders of bitcoin or other similar event. “Incidental Rights” are rights to acquire, or otherwise establish dominion and control over, any virtual currency or other asset or right, which rights are incident to the Fund’s ownership of bitcoin and arise without any action of the Fund, or of the Sponsor on behalf of the Fund. “IR Virtual Currency” is any virtual currency tokens, or other asset or right, acquired by the Fund through the exercise of any Incidental Right. Although the Fund may be permitted to take certain actions with respect to Incidental Rights and IR Virtual Currency, at this time the Fund will prospectively irrevocably abandon any Incidental Rights and IR Virtual Currency. In the event the Fund seeks to change this position, the Exchange would file a subsequent proposed rule change with the Commission.

Bitcoin Mining—Creation of New Bitcoins

The process by which bitcoin are created and bitcoin transactions are verified is called “mining.” To begin mining, a user, or miner, can download and run a mining “client,” which, like regular Bitcoin Network software programs, turns the user’s computer into a “node” on the Bitcoin Network that validates blocks, and, in this case, gives such user the ability to validate transactions and add new blocks of transactions to the Blockchain.

Miners, through the use of the bitcoin software program, engage in a set of prescribed complex mathematical calculations in order to verify transactions and compete for the right to add a block of verified transactions to the Blockchain and thereby confirm bitcoin transactions included in that block’s data. The miner who successfully “solves” the complex mathematical calculations has the right to add a block of transactions to the Blockchain and is then rewarded with new bitcoin, the amount of which is determined by the Bitcoin protocol, plus any transaction fees paid for the transactions included in such block.

Confirmed and validated bitcoin transactions are recorded in blocks added to the Blockchain. Each block contains the details of some or all of the most recent transactions that are not memorialized in prior blocks, as well as a record of the award of bitcoin to the miner who added the new block. Each unique block can only be solved and added to the Blockchain by one miner; therefore, all individual miners and mining pools on the Bitcoin Network are engaged in a competitive process of constantly increasing their computing power to improve their likelihood of solving for new blocks. As more miners join the Bitcoin Network and its processing power increases, the Bitcoin Network adjusts the complexity of the block-solving equation to maintain a predetermined pace of adding a new block to the Blockchain approximately every ten minutes.

Mathematically Controlled Supply

The method for creating new bitcoin is mathematically controlled in a manner so that the supply of bitcoin grows at a limited rate pursuant to a pre-set schedule. The number of bitcoin awarded for solving a new block is automatically halved every 210,000 blocks. Thus, the current fixed reward for solving a new block is 6.25 bitcoin per block; the reward decreased from 25 bitcoin in July 2016 and 12.5 in May 2020. It is estimated to halve again in

April or May of 2024. This deliberately controlled rate of bitcoin creation means that the number of bitcoin in existence will never exceed 21 million and that bitcoin cannot be devalued through excessive production unless the Bitcoin Network’s source code (and the underlying protocol for bitcoin issuance) is altered. As of November 2023, approximately 19.5 million bitcoin are outstanding. The date when the 21 million bitcoin limitation will be reached is estimated to be the year 2140.

Bitcoin Market and Bitcoin Trading Platforms

In addition to using bitcoin to engage in transactions, investors may purchase and sell bitcoin to speculate as to the value of bitcoin in the bitcoin market, or as a long-term investment to diversify their portfolio. The value of bitcoin within the market is determined, in part, by: (i) the supply of and demand for bitcoin in the bitcoin market; (ii) market expectations for the expansion of investor interest in bitcoin and the adoption of bitcoin by individuals; (iii), the number of merchants that accept bitcoin as a form of payment; and (iv) the volume of private end-user-to-end-user transactions.

Although the value of bitcoin is determined by the value that two transacting market participants place on bitcoin through their transaction, the most common means of determining a reference value is by surveying one or more trading platforms where secondary markets for bitcoin exist. The most prominent digital asset trading platforms neither report trade information nor are they regulated in the same way as a national securities exchange. As such, there is some difference in the form, transparency, and reliability of trading data from digital asset trading platforms. Generally speaking, bitcoin data is available from these trading platforms with publicly disclosed valuations for each executed trade, measured by one or more fiat currencies such as the U.S. dollar or Euro or another digital asset such as ether. OTC dealers or market makers do not typically disclose their trade data.

Currently, there are many digital asset trading platforms operating worldwide and trading platforms represent a substantial percentage of bitcoin buying and selling activity and, therefore, provide large data sets for market valuation of bitcoin. A digital asset trading platform provides investors with a way to purchase and sell bitcoin, similar to stock exchanges like the New York Stock Exchange or Nasdaq, which provide ways for investors to buy stocks and bonds in the “secondary market.”

Unlike stock exchanges, which are regulated to monitor securities trading activity, digital asset trading platforms are largely regulated as money services businesses (or a foreign regulatory equivalent) and are required to monitor for and detect money-laundering and other illicit financing activities that may take place on the platform. Digital asset trading platforms operate websites designed to permit investors to open accounts with the trading platform and then purchase and sell bitcoin.

As with conventional stock exchanges, an investor opening a trading account and wishing to transact at a digital asset trading platform must deposit an accepted government-issued currency into their account, or a previously acquired digital asset. The process of establishing an account with a digital asset trading platform and trading bitcoin is different from, and should not be confused with, the process of users sending bitcoin from one bitcoin address to another bitcoin address, such as to pay for goods and services. This latter process is an activity that occurs wholly within the confines of the Bitcoin network, while the former is an activity that occurs largely on private websites and databases owned by the digital asset trading platform.

Overview of Commodity Futures Markets and Carbon Markets

Futures Markets

According to the Registration Statement, the Fund will invest in Carbon Credit Futures. A futures contract is a standardized contract traded on, or subject to the rules of, an exchange that calls for the future delivery of a specified quantity and type of a particular underlying asset at a specified time and place or alternatively may call for cash settlement. Futures contracts are traded on a wide variety of underlying assets, including bonds, interest rates, agricultural products, stock indexes, currencies, energy, metals, economic indicators and statistical measures. The notional size and calendar term futures contracts on a particular underlying asset are identical and are not subject to any negotiation, other than with respect to price and the number of contracts traded between the buyer and seller.

Certain futures contracts settle in cash. The cash settlement amount reflects the difference between the contract purchase/sale price and the contract settlement price. The cash settlement mechanism avoids the potential for either side to have to deliver the underlying asset. For other

futures contracts, the contractual obligations of a buyer or seller may generally be satisfied by taking or making physical delivery of the underlying asset or by making an offsetting sale or purchase of an identical futures contract on the same or linked exchange before the designated date of delivery. The difference between the price at which the futures contract is purchased or sold and the price paid for the offsetting sale or purchase, after allowance for brokerage commissions and exchange fees, constitutes the profit or loss to the trader.

Futures contracts involve, to varying degrees, elements of market risk. Additional risks associated with the use of futures contracts are imperfect correlation between movements in the price of the futures contracts and the level of the underlying benchmark and the possibility of an illiquid market for a futures contract. With futures contracts, there is minimal but some counterparty risk to a fund since futures contracts are exchange traded and the exchange's clearing house, as counterparty to all exchange-traded futures contracts, effectively guarantees futures contracts against default. Many futures exchanges and boards of trade limit the amount of fluctuation permitted in futures contract prices during a single trading day. Once the daily limit has been reached in a particular contract, no trades may be made that day at a price beyond that limit or trading may be suspended for specified times during the trading day.¹⁹ Futures contracts prices could move to the limit for several consecutive trading days with little or no trading, thereby preventing prompt liquidation of futures positions.

Carbon Markets

Carbon markets are designed to reduce GHG emissions and promote sustainable development by putting a price on carbon. Carbon markets are markets where GHG emissions are commodified as a tradable unit either as an emission allowance in government compliance markets or as a verified emission reduction/removal credit in voluntary markets. There are two types of instruments that are traded in carbon markets: carbon credits (sometimes called "allowances") and carbon offsets. The two main types of carbon markets are compliance carbon markets ("CCMs") and voluntary carbon markets ("VCMs"). Carbon Credit Futures are an

expansion of the carbon market. Carbon Credit Futures are credit instruments where the buyer seeks to have exposure to CCMs or VCM carbon offset projects, but without directly buying or selling allowances or investing in any projects.²⁰

CCMs are established by governments and operate under a cap-and-trade system. Cap-and-trade regimes set emission limits (*i.e.*, the right to emit a certain quantity of GHG emissions), which can be allocated or auctioned to the parties in the mechanism up to the total emissions cap. In these types of markets, a regulator will define an allowed maximum level of GHG emissions (the "Cap") for a certain group of entities (*e.g.*, countries, companies, or facilities). The Cap is then subdivided into distinct emission allowances, which are distributed by regulated entities. To stay in compliance with the regulator, the covered entities need to submit one allowance for each ton of carbon dioxide equivalent emitted during a compliance period (usually a year). The initial allocation of allowances to covered entities can be free of charge, partially free, and/or sold at auction by the regulator.

The Index

The Index is designed to track the performance of investing in a portfolio comprised of 80% bitcoin and 20% Carbon Credit Futures, which are linked to the value of emissions allowances issued under the following cap-and-trade regimes: the European Union Emissions Trading System, the California Carbon Allowance, and Regional Greenhouse Gas Initiative. The purpose of the Index is to obtain exposure to both bitcoin and Carbon Credit Futures. Because the Fund's investment objective is to track the daily changes of the price of bitcoin and Carbon Credit Futures, changes in the price of the Shares will vary from changes in the spot price of bitcoin, carbon credits, and Carbon Credit Futures individually.

Invierno AB ("Vinter") administers and calculates the bitcoin portion of the Index. According to the Sponsor, Vinter is a trusted index provider with experience constructing and maintaining indexes relied upon by banks and exchange-traded products. Vinter is a registered benchmark administrator governed by the European Benchmarks Regulation (2016/1011) ("BMR") and included in the European Securities and Markets Authority's register over benchmark administrators.

To calculate the value of bitcoin, Vinter selects bitcoin trading platforms based on the criteria described below in "Valuation of Bitcoin" and takes the last price on each trading platform. Vinter then takes the median price across these trading platforms and calculates the time-weighted average price between 3:00 p.m. to 4:00 p.m. Eastern Time ("E.T.") to determine the value of bitcoin at 4:00 p.m. E.T.

The Carbon Credit Futures component of the Index is calculated by Solactive and built with a combination of three Carbon Credit Futures indices, each of which is calculated and administered by a third party: (i) Solactive Carbon European Union Allowance Futures ER Index (SOCARBUN), which tracks EU ETS futures; (ii) Solactive California Carbon Rolling Futures ER Index (SOCCAER), which tracks CCA futures; and (iii) Solactive Futures Series Regional Greenhouse Gas Rolling Futures Index, which tracks RGGI futures. The weights of the components are adjusted once per year (in November) and the weights are proportional to the trading volume over the last six months. As of the last quarterly rebalancing date, September 10, 2024, the weighting of Carbon Credit Futures in the Index was, and the weighting of Carbon Credit Futures in the Fund would have been, 18% EU ETS futures; 2% CCA futures; and 0% RGGI futures. The combination of exposure to the three underlying indices provides the Index with returns tied to futures contracts on carbon credits connected to EU ETS, CCA, and RGGI. The value of the Carbon Credit Futures that comprise the Index will be based on market prices. The Index includes only Carbon Credit Futures that mature in December of the next one to two years.²¹ Although the Carbon Credit Futures in the Index are physically settled futures contracts, the Sponsor does not anticipate that the Fund will hold Carbon Futures until expiry or take or make delivery of any physical commodities. Instead, the Sponsor expects to roll Carbon Credit Futures in the Fund's portfolio approximately two weeks prior to expiry. Thus, the Sponsor expects to sell near to expiry Carbon Credit Futures and reinvest the proceeds in new Carbon Credit Futures to achieve the Fund's investment objective.

Vinter is the benchmark administrator for the bitcoin portion of the Index. As benchmark administrator for the bitcoin

¹⁹ The calculation of the Index will be based on the last traded price for each of the Carbon Credit Futures components, regardless of whether trading has been limited or suspended during a trading day.

²⁰ The Fund will not provide any exposure to VCMs.

²¹ The Index includes front-month futures contracts that are rolled each month. The Index rolls over five business days into the new contract, with an expiration of December of the next calendar year.

portion of the Index, Vinter is the central recipient of input data and evaluates the integrity and accuracy of input data on a consistent basis. Solactive is the benchmark administrator for the Carbon Credit Futures portion of the Index. Solactive calculates the value of the Carbon Credit Futures portion of the Index and the value of the overall Index.

The Index is rebalanced quarterly, starting at the end of January. After a rebalance, the portfolio is updated so that its current weights per asset equal the rebalancing weights per asset.

Valuation of Bitcoin

The Fund uses the same methodology that the Index does to determine the value of bitcoin for purposes of calculating the NAV of the Fund. The Index requires each digital asset trading platform used to calculate the price of bitcoin to meet each of the following criteria:

- Has had operating history as a digital asset trading platform for a minimum of two years;
- Implemented trading, deposits, and withdrawal fees for a minimum of one month without interruption;
- Met a minimum monthly volume threshold of \$30 million with respect to total trading volume;
- Provided reliable, continuous, and valid market data for a minimum of one month;
- Offered the possibility to withdraw and deposit for a minimum of one month, settling in two to seven business days;
- Chosen a jurisdiction of incorporation that offers sufficient investor protection, such as Financial Action Task Force (“FATF”), FATF-style regional bodies (“FSRBs”), or Moneyval member states;
- Complied with relevant anti-money laundering and know-your-customer regulations;
- Cooperated with requests from Vinter and relevant regulatory bodies;
- Has not been domiciled in a jurisdiction subject to EU restrictive measures (sanctions);
- Provided information concerning ownership and corporate structure; and
- Has not been declared unlawful by any governmental authority or agency with jurisdiction over the exchange.

Digital asset trading platforms meeting these criteria are used to calculate the price of the bitcoin portion of the Index (the “Index Pricing Sources”). Vinter reviews the eligibility of digital asset trading platforms for inclusion in the Index twice a year, and such platforms must meet Vinter’s

criteria at the time of such review.²² The selection of Index Pricing Sources may evolve from time to time, and Vinter may make changes to the eligibility requirements.²³ As of the date of this filing, the following digital asset trading platforms are used to calculate the Index price: Kraken, Coinbase, Bitstamp, Itbit, Gemini, *Gate.io*, and *Crypto.com*.

Custody of the Fund’s Assets

The Bitcoin Custodian will establish accounts that hold the bitcoins deposited with the Bitcoin Custodian on behalf of the Fund, pursuant to the agreement between the Trust, on behalf of the Fund, and the Bitcoin Custodian (the “Bitcoin Custody Agreement”). The Non-Digital Custodian will custody the Fund’s investments in cash and cash equivalents in connection with its exposure to the returns of the Carbon Credit Futures portion of the Index.

With respect to the settlement of Shares in response to the placement of creation orders and redemption orders from Authorized Purchasers (as defined below), the Sponsor will retain discretion to determine which Custodians, to the extent there are multiple custodians for Bitcoin or multiple custodians for cash and cash equivalents in connection with Carbon Credit Futures, are selected to facilitate the respective order.

The Fund will maintain ownership and control of bitcoin in a manner consistent with good delivery requirements for spot commodity transactions.

Custody of Bitcoin

The Fund is responsible for acquiring bitcoin from a “Bitcoin Trading Counterparty.”²⁴ Once the bitcoin has

been transferred to the Bitcoin Custodian, it will be stored pursuant to the terms of the Bitcoin Custody Agreement.

Bitcoin private keys are stored in two different forms: “hot” storage, whereby the private keys are stored on secure, internet-connected devices, and “cold” storage, where digital currency private keys are stored completely offline. The Bitcoin Custody Agreement requires the Bitcoin Custodian to hold the Fund’s bitcoin in cold storage, unless required to facilitate withdrawals as a temporary measure. The Bitcoin Custodian will use segregated cold storage bitcoin addresses for the Fund which are separate from the bitcoin addresses that the Bitcoin Custodian uses for its other customers and which are directly verifiable via the Bitcoin Blockchain. The Bitcoin Custodian will at all times record and identify in its books and records that such bitcoins constitute the property of the Fund. The Bitcoin Custodian will not withdraw the Fund’s bitcoin from the Fund’s account with the Bitcoin Custodian, or loan, hypothecate, pledge or otherwise encumber the Fund’s bitcoin, without the Fund’s instruction.

The Sponsor has evaluated the Bitcoin Custodian’s policies, procedures, and controls for safekeeping, exclusively possessing, and controlling the Fund’s bitcoin holdings and believes these are designed consistent with accepted industry practices to protect against theft, loss, and unauthorized and accidental use of the private keys.

Net Asset Value (“NAV”)

According to the Registration Statement, the Fund’s NAV per Share is calculated by taking the current market value of its total assets, subtracting any liabilities, and dividing that total by the total number of outstanding Shares.

The Administrator will calculate the NAV of the Fund once each trading day as of the earlier of the close of trading on the Exchange or 4:00 p.m. E.T. The NAV for a normal trading day will be released after 4:00 p.m. E.T.

In determining the NAV of the Fund, the Administrator ordinarily values the bitcoin held by the Fund based on the methodology used by the Index. If the Index is not available or the Sponsor in

²² According to the Sponsor, Vinter does not require a minimum number of Index Pricing Sources comprising the Index.

²³ According to the Sponsor, Vinter may, as permitted under BMR Article 12, change the eligibility requirements for Index Pricing Sources if, for example, market conditions evolved in such a way that the requirements no longer reflected the intended economic reality. Any material change to the eligibility requirements would be subject to the notification and consultation provisions detailed in Vinter’s Benchmark Statement.

²⁴ Each Bitcoin Trading Counterparty must be approved by the Sponsor on behalf of the Fund before the Fund may engage in transactions with the entity. The Sponsor continuously reviews all approved Bitcoin Trading Counterparties and will reject the approval of any previously approved Bitcoin Trading Counterparty if new information arises regarding the entity that puts the appropriateness of that entity as an approved Bitcoin Trading Counterparty in doubt. The Bitcoin Trading Counterparties with which the Sponsor will engage in bitcoin transactions are unaffiliated third parties of the Trust and Sponsor and are not acting as agents of the Trust, the Sponsor, or any Authorized Purchaser (as defined below), and all transactions will be done on an arms-length basis.

There will be no contractual relationship between each Bitcoin Trading Counterparty and the Trust, the Sponsor, or any Authorized Purchaser. When seeking to purchase bitcoin on behalf of the Fund, the Sponsor will seek to purchase bitcoin at commercially reasonable prices and terms from any of the approved Bitcoin Trading Counterparties. Once agreed upon, the transaction will generally occur on an “over-the-counter” basis.

its sole discretion determines that the price of bitcoin determined by the Index should not be used, the Fund's holdings may be fair valued in accordance with the policy approved by the Sponsor.²⁵ For purposes of determining the NAV of the Fund, Carbon Credit Futures held by the Fund will be valued based on market price as of the time the NAV is calculated on each trading day.

Intraday Indicative Value

According to the Registration Statement, in order to provide updated information relating to the Fund for use by shareholders and market professionals, an updated intraday indicative value ("IIV") will be calculated and disseminated throughout the core trading session on each trading day. The IIV will be calculated by using the prior day's closing NAV per Share of the Fund as a base and updating that value throughout the trading day to reflect changes in the most recently reported price level of the Fund's assets.

The IIV disseminated during the Exchange's core trading session should not be viewed as an actual real time update of the NAV, because NAV per Share is calculated only once at the end of each trading day based upon the relevant end of day values of the Fund's investments. The IIV will be disseminated on a per Share basis every 15 seconds during the Exchange's Core Trading Session and be widely disseminated by one or more major market data vendors during the Exchange's Core Trading Session.²⁶

Creation and Redemption of Shares

According to the Registration Statement, when the Fund creates or redeems its Shares, it will do so only in "Baskets" (blocks of 10,000 Shares) based on the NAV per Share. The allocation between Bitcoin and Carbon Credit Futures is fixed at 80% and 20%, respectively, for all creations and redemptions of Shares. "Authorized Purchasers" are the only persons that may place orders to create and redeem Baskets. Authorized Purchasers must be

(1) registered broker-dealers or other securities market participants, such as banks and other financial institutions, that are not required to register as broker-dealers to engage in securities transactions described below, and (2) Depository Trust Company ("DTC") participants.

To become an Authorized Purchaser, a person must enter into an Authorized Purchaser Agreement. The Authorized Purchaser Agreement provides the procedures for the creation and redemption of Baskets and for the delivery of the cash or Shares required for such creation and redemptions.

The "Basket Price" for the creation or redemption of Baskets is the NAV per Share (net of accrued but unpaid expenses and liabilities) multiplied by the number of Shares comprising a Basket. The Basket Price required to create each Basket changes from day to day. On each day that the Exchange is open for regular trading, the Administrator adjusts the Basket Price as appropriate to reflect accrued expenses and any loss in value of the assets that may occur. The computation is made by the Administrator each business day, prior to the commencement of trading on the Exchange. The Basket Price so determined is communicated to all Authorized Purchasers and made available on the Fund's website for the Shares.

The Authorized Purchasers will deliver only cash to create Shares and will receive only cash when redeeming Shares. Authorized Purchasers will deliver cash to the Non-Digital Custodian pursuant to Purchase Orders (as defined below) for Shares, and the Non-Digital Custodian will hold such cash until such time as it can be converted to bitcoin or Carbon Credit Futures. With respect to bitcoin transactions, the Non-Digital Custodian will transfer the cash received from the Authorized Purchaser to the Bitcoin Trading Counterparty upon the Bitcoin Custodian's receipt of bitcoin from the Bitcoin Trading Counterparty. The Fund will acquire bitcoin from a Bitcoin Trading Counterparty and will purchase Carbon Credit Futures via a Futures Commission Merchant ("FCM") to facilitate Purchase Orders. The Fund will sell bitcoin and Carbon Credit Futures in exchange for cash pursuant to Redemption Orders (as defined below) of its Shares, and the Non-Digital Custodian will hold such cash until it can be distributed to the redeeming Authorized Purchaser. In connection with such sales, the Non-Digital Custodian will receive cash from an approved Bitcoin Trading Counterparty

for the sale of the Fund's bitcoin and from an FCM for the sale of the Fund's Carbon Credit Futures. With respect to bitcoin transactions, the Bitcoin Custodian will transfer the bitcoin to the Bitcoin Trading Counterparty upon the Non-Digital Custodian's receipt of cash from the Bitcoin Trading Counterparty.

Authorized Purchasers will not directly or indirectly purchase, hold, deliver, or receive bitcoin as part of the creation or redemption process or otherwise direct the Fund or a third party with respect to purchasing, holding, delivering, or receiving bitcoin as part of the creation or redemption process. The Fund will create shares by receiving bitcoin from a third party that is not the Authorized Purchaser and is not affiliated with the Sponsor or the Fund, and the Fund—not the Authorized Purchaser—is responsible for selecting the third party to deliver the bitcoin. Further, the third party will not be acting as an agent of the Authorized Purchaser with respect to the delivery of the bitcoin to the Fund or acting at the direction of the Authorized Purchaser with respect to the delivery of the bitcoin to the Fund. The Fund will redeem shares by delivering bitcoin to a third party that is not the Authorized Purchaser and is not affiliated with the Sponsor or the Fund, and the Fund—not the Authorized Purchaser—is responsible for selecting the third party to receive the bitcoin. Further, the third party will not be acting as an agent of the Authorized Purchaser with respect to the receipt of the bitcoin from the Fund or acting at the direction of the Authorized Purchaser with respect to the receipt of the bitcoin from the Fund.

Creation Procedures

According to the Registration Statement, on any Business Day,²⁷ an Authorized Purchaser may create Shares by placing an order to purchase one or more Baskets with the transfer agent ("Transfer Agent") through the marketing agent ("Marketing Agent") in exchange for cash (a "Purchase Order"). Purchase Orders must be placed by 2:00 p.m. E.T., or the close of regular trading on the Exchange, whichever is earlier, or an earlier time as determined and communicated by the Sponsor and its agent. The day on which a Purchase Order is accepted by the Transfer Agent is considered the "Purchase Order Date."

²⁵ The Sponsor does not anticipate that the need to "fair value" bitcoin will be a common occurrence. If the Sponsor determines in good faith that the Index does not reflect an accurate bitcoin price, then the Fund will cause to be employed an alternative method to determine the fair value of the Fund's assets as reviewed and approved by the Sponsor's valuation committee. If the Sponsor determines to use any alternative method other than on an ad hoc or temporary basis, such change to the calculation of the NAV would be subject to a proposed rule change under Section 19(b) filed with the Commission.

²⁶ Several major market data vendors display and/or make widely available IIVs taken from the Consolidated Tape Association ("CTA") or other data feeds.

²⁷ For purposes of processing creation and redemption orders, a "Business Day" means any day other than a day when the Exchange is closed for regular trading.

By placing a Purchase Order, an Authorized Purchaser agrees to deposit cash as determined by the Sponsor with the Fund's Non-Digital Custodian. The total deposit required to create each basket will be an amount of cash that is in the same proportion to the total assets of the Fund (net of estimated accrued but unpaid fees, expenses and other liabilities) on the date the Purchase Order is properly received as the number of Shares to be created under the Purchase Order is in proportion to the total number of Shares outstanding on the date the Purchase Order is received. The Sponsor, through the Transfer Agent, shall notify the Authorized Purchaser of the amount of cash to be included in deposits to create Baskets by email or telephone correspondence and such amount will be available via the Fund's website.

An Authorized Purchaser who places a Purchase Order is responsible for transferring to the Fund's account with the Non-Digital Custodian the required amount of cash by the end of the next Business Day following the Purchase Order Date or as agreed to by the Authorized Purchaser, Sponsor, Marketing Agent, and Transfer Agent in advance of when the Purchase Order is placed. Upon receipt of the deposit amount, the Administrator will cause DTC to credit the number of Baskets ordered to the Authorized Purchaser's DTC account.

Redemption Procedures

On any business day, an Authorized Purchaser may place an order with the Transfer Agent to redeem one or more Baskets (a "Redemption Order"). Redemption Orders must be placed by 2:00 p.m. E.T., or the close of regular trading on the Exchange, whichever is earlier. A Redemption Order will be effective on the date it is accepted by the Transfer Agent ("Redemption Order Date").

By placing a Redemption Order, an Authorized Purchaser agrees to deliver the Redemption Basket to be redeemed through DTC's book-entry system to the Fund's account with the Non-Digital Custodian not later than the end of the next Business Day following the effective date of the Redemption Order ("Redemption Distribution Date") or the end of such later Business Day as agreed to by the Authorized Purchaser and the Transfer Agent in advance of when the Redemption Order is placed. Failure to consummate such delivery shall result in the cancellation of the order.

The redemption distribution due from the Fund is delivered to the Authorized Purchaser on the Redemption Distribution Date if the Fund's DTC

account has been credited with the Baskets to be redeemed pursuant to the terms of the Authorized Purchaser Agreement.

Standard for Approval

On January 10, 2024, the Commission approved the listing and trading of shares of Grayscale Bitcoin Trust (BTC) and Bitwise Bitcoin ETF under NYSE Arca Rule 8.201-E (Commodity-Based Trust Shares); the Hashdex Bitcoin ETF under NYSE Arca Rule 8.500-E (Trust Units); the iShares Bitcoin Trust and Valkyrie Bitcoin Fund under Nasdaq Rule 5711(d) (Commodity-Based Trust Shares); and the ARK 21Shares Bitcoin ETF, Invesco Galaxy Bitcoin ETF, VanEck Bitcoin Trust, the WisdomTree Bitcoin Fund, Fidelity Wise Origin Bitcoin Fund, and Franklin Bitcoin ETF under BZX Rule 14.11(e)(4) (Commodity-Based Trust Shares) (collectively, the "Bitcoin ETPs").²⁸ In the Bitcoin ETP Approval Order, the Commission found that the proposed rule changes to list the Bitcoin ETPs demonstrated that there were "sufficient 'other means' of preventing fraud and manipulation," including that:

[B]ased on the record before the Commission and the improved quality of the correlation analysis in the record, including the Commission's own analysis, the Commission is able to conclude that fraud or manipulation that impacts prices in spot bitcoin markets would likely similarly impact CME bitcoin futures prices. And because the CME's surveillance can assist in detecting those impacts on CME bitcoin futures prices, the Exchanges' comprehensive surveillance-sharing agreement with the CME—a U.S. regulated market whose bitcoin futures market is consistently highly correlated to spot bitcoin, albeit not of "significant size" related to spot bitcoin—can be reasonably expected to assist in surveilling for fraudulent and manipulative acts and practices in the specific context of the [Bitcoin ETPs].²⁹

The Fund is structured and will operate in a manner materially the same as the Bitcoin ETPs. With respect to the Fund's bitcoin holdings, the Sponsor believes that the Exchange's ability to obtain information regarding trading in bitcoin futures from the CME, which, like the Exchange, is a member of the

Intermarket Surveillance Group ("ISG"), would assist the Exchange in detecting potential fraud or manipulation with respect to trading in the Shares. In addition, with respect to the Fund's Carbon Credit Futures holdings, the Sponsor believes that the Exchange would be able to obtain information regarding trading in Carbon Credit Futures that would similarly assist in surveilling for potential fraud or manipulation. As stated above, the Fund will hold only: (i) EU ETS futures which trade only on ICE Endex Markets B.V. ("ICE Endex"),³⁰ with which the Exchange has entered into a comprehensive surveillance sharing agreement ("CSSA"); and (ii) CCA futures and RGGI futures which are traded only on ICE Futures U.S.,³¹ which, like the Exchange, is a member of the ISG. Accordingly, the Sponsor believes that the Exchange's ability to share information with ICE Endex and ICE Futures U.S., pursuant to a CSSA or common ISG membership, would assist in surveilling for fraudulent and manipulative acts and practices. The Sponsor thus believes that, for reasons similar to those set forth in the Bitcoin ETP Approval Order, listing and trading Shares of the Fund would be consistent with the requirements of the Act.

Availability of Information

The NAV per Share will be disseminated daily to all market participants at the same time. Quotation and last-sale information regarding the Shares will be disseminated through the facilities of the CTA. The IIV will be calculated every 15 seconds throughout the core trading session each trading day.

Quotation and last sale information for bitcoin will be widely disseminated through a variety of major market data vendors, including Bloomberg and

²⁸ Securities Exchange Act Release No. 34-99306 (January 10, 2024), 89 FR 3008 (January 17, 2024) (SR-NYSEARCA-2021-90; SR-NYSEARCA-2023-44; SRNYSEARCA-2023-58; SR-NASDAQ-2023-016; SR-NASDAQ-2023-019; SR-CboeBZX-2023028; SR-CboeBZX-2023-038; SR-CboeBZX-2023-040; SR-CboeBZX-2023-042; SR-CboeBZX-2023-044; SR-CboeBZX-2023-072) (Order Granting Accelerated Approval of Proposed Rule Changes, as Modified by Amendments Thereto, to List and Trade Bitcoin-Based Commodity-Based Trust Shares and Trust Units) (the "Bitcoin ETP Approval Order").

²⁹ Bitcoin ETP Approval Order, 89 FR at 3009-11.

³⁰ ICE Endex is regulated in the Netherlands by the Dutch Authority for the Financial Markets ("AFM") as a RM, as defined in MIFID II, which is implemented in Dutch Act on Financial Supervision ("DFSA"). The license as a RM is obtained under Section 5:26(1) of the DFSA, resulting in an authorization by the Minister of Dutch Ministry of Finance to operate a RM and supervised by the AFM. In the UK, ICE Endex is a Recognized Overseas Investment Exchange by the Financial Conduct Authority. See <https://www.ice.com/endex/regulation#:~:text=The%20Dutch%20Authority%20for%20Consumers,energy%20industry%20and%20wholesale%20trading>. ICE Endex is also recognized by the CFTC as an authorized Foreign Board of Trade. See <https://www.cftc.gov/sites/default/files/ido/groups/public/otherif/documents/ifdocs/orgiceeregorder170110.pdf>.

³¹ ICE Futures U.S. is a registered Designated Contract Market regulated by the CFTC and subject to the requirements of the Commodity Exchange Act ("CEA"), as amended, and the regulations issues by the CFTC pursuant to the CEA. See <https://www.ice.com/futures-us>.

Reuters. In addition, real-time price (and volume) data for bitcoin is available by subscription from Reuters and Bloomberg. The spot price of bitcoin is available on a 24-hour basis from major market data vendors, including Bloomberg and Reuters. The real-time version of the value of the Index will be disseminated once every 15 seconds during the Core Trading Session. Information relating to trading, including price and volume information, in bitcoin will be available from major market data vendors and from the trading platforms on which bitcoin is traded.

The intraday, closing prices, and settlement prices of the Carbon Credit Futures will be readily available from automated quotation systems, published or other public sources, or major market data vendors, such as ICE Data Services. 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.

Real-time data for Carbon Credit Futures will be available by subscription through on-line information services. Delayed futures and options on futures information on current and past trading sessions and market news will also be available. The specific contract specifications for Carbon Credit Futures will also be available on such websites, as well as other financial informational sources.

On each business day, the Sponsor will publish the value of the Index, the Fund's NAV, and the NAV per Share on the Fund's website as soon as practicable after its determination. If the NAV and NAV per Share have been calculated using a price per bitcoin other than the price of bitcoin determined by the Index, the publication on the Fund's website will note the valuation methodology used and the price per bitcoin resulting from such calculation.

The Fund will provide website disclosure of its NAV and NAV per Share daily. The website disclosure of the Fund's NAV and NAV per Share will occur at the same time as the disclosure by the Sponsor of the NAV and NAV per Share to Authorized Purchasers so that all market participants are provided such portfolio information at the same time. Therefore, the same portfolio information will be provided on the public website as well as in electronic files provided to

Authorized Purchasers. Accordingly, each investor will have access to the current NAV and NAV per Share of the Fund through the Fund's website, as well as from one or more major market data vendors.

The value of the Index, as well as additional information regarding the Index, will be available on a continuous basis on the Fund's website.

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.

The Sponsor will cause information about the Shares to be posted to the Fund's website: (1) the NAV and NAV per Share for each Exchange trading day, posted at end of day; (2) the daily holdings of the Fund, before 9:30 a.m. E.T. on each Exchange trading day; (3) the Fund's effective prospectus, in a form available for download; and (4) the Shares' ticker and CUSIP information, along with additional quantitative information updated on a daily basis for the Fund. The Fund's website will include (1) the prior Business Day's trading volume, the prior Business Day's reported NAV and closing price, and a calculation of the premium and discount of the closing price or mid-point of the bid/ask spread at the time of NAV calculation ("Bid/Ask Price") against the NAV; and (2) data in chart format displaying the frequency distribution of discounts and premiums of the daily closing price or Bid/Ask Price against the NAV, within appropriate ranges, for at least each of the four previous calendar quarters. The website disclosure of portfolio holdings will be made daily and will include (i) the name, quantity, price, and market value of the Fund's holdings and (ii) the total cash and cash equivalents held in the Fund's portfolio, if applicable.

The Fund's website will be publicly available prior to the public offering of Shares and accessible at no charge.

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.³² 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.

The Exchange may halt trading during the day in which an interruption to the dissemination of the IIV or the value of the Index occurs. The real-time version of the value of the Index will be disseminated once every 15 seconds during the Core Trading Session. If the interruption to the dissemination of the IIV or to the value of the Index persists past the trading day in which it occurred, the Exchange will halt trading no later than the beginning of the trading day following the interruption. In addition, if the Exchange becomes aware that the NAV with respect to the Shares is not disseminated to all market participants at the same time, it will halt trading in the Shares until such time as the NAV is available to all market participants.

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 (Early, Core, and Late 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.

The Shares will conform to the initial and continued listing criteria under NYSE Arca Rule 8.500-E. The trading of the Shares will be subject to NYSE Arca Rule 8.500-E(f), which sets forth certain restrictions on Equity Trading Permit Holders ("ETP Holders") acting as registered market makers in Trust Units to facilitate surveillance. Pursuant to NYSE Arca Rule 8.500-E(f), an ETP Holder acting as a registered market maker in Trust Units must file with the Exchange in a manner prescribed by the Exchange and keep current a list identifying all accounts for trading in an underlying commodity, related commodity futures or options on commodity futures, or any other related commodity derivatives, which the market maker may have or over which it may exercise investment discretion. No market maker shall trade in an underlying commodity, related commodity futures or options on

³² See NYSE Arca Rule 7.12-E.

commodity futures, or any other related commodity derivatives, in an account in which a market maker, directly or indirectly, controls trading activities, or has a direct interest in the profits or losses thereof, which has not been reported to the Exchange as required by this Rule. In addition to the existing obligations under Exchange rules regarding the production of books and records, the ETP Holder acting as a market maker in Trust Units shall make available to the Exchange such books, records or other information pertaining to transactions by such entity or registered or non-registered employee affiliated with such entity for its or their own accounts for trading the underlying physical commodity, related commodity futures or options on commodity futures, or any other related commodity derivatives, as may be requested by the Exchange.

For initial and continued listing as proposed herein, the Fund will be in compliance with Rule 10A–3 under the Act, and the Trust will rely on the exception contained in Rule 10A–3(c)(7).³³ A minimum of 50,000 Shares of the Fund will be outstanding at the commencement of trading on the Exchange.

Surveillance

The Exchange represents that trading in the Shares of the Fund will be subject to the existing trading surveillances administered by the Exchange, as well as cross-market surveillances administered by FINRA on behalf of the Exchange, which are designed to detect violations of Exchange rules and applicable federal securities laws.³⁴ 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.

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 the Fund's holdings 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 the Shares and the Fund's holdings from such markets and other entities. In addition, the Exchange may obtain information regarding trading in the Shares and the Fund's holdings from markets and other entities that are members of ISG³⁵ or with which the Exchange has in place a CSSA. Specifically, the Exchange or FINRA, on behalf of the Exchange, may communicate as needed and may obtain information regarding trading in bitcoin futures from the CME, which is a member of the ISG. Also, the Exchange may communicate as needed and may obtain information regarding trading in Carbon Credit Futures from ICE Endex, with which the Exchange has in place a CSSA, and ICE Futures U.S., which is a member of the ISG.

The Exchange believes that ICE Endex and ICE Futures U.S. are regulated³⁶ markets of significant size related to the Carbon Credit Futures held by the Fund and that it is reasonably likely that any bad actor trying to manipulate the price of the Fund would have to trade on those markets. As noted above, the EU ETS futures held by the Fund trade only on ICE Endex, and CCA futures and RGGI futures held by the Fund are traded only on ICE Futures U.S. Therefore, ICE Endex and ICE Futures U.S. are appropriate markets to surveil in order to detect and deter fraud and manipulation.

The Exchange is also able to obtain information regarding trading in the Shares, the underlying bitcoin, Carbon Credit Futures, bitcoin futures contracts, options on bitcoin futures, or any other bitcoin derivative through ETP Holders, in connection with such ETP Holders' proprietary or customer trades which they effect through ETP Holders on any relevant market. The Exchange can obtain market surveillance information, including customer identity information, with respect to transactions (including transactions in futures

contracts) occurring on US futures exchanges, which are members of the ISG. In addition, the Exchange also has a general policy prohibiting the distribution of material, non-public information by its employees.

Under NYSE Arca Rule 8.500–E(f), an ETP Holder acting as a registered market maker in the Shares is required to provide the Exchange with information relating to its accounts for trading in the underlying physical commodity, related commodity futures or options on commodity futures, or any other related commodity derivatives, and must provide any information concerning trading in those accounts that the Exchange may request. Commentary .04 of NYSE Arca Rule 11.3–E requires an ETP Holder acting as a registered market maker, and its affiliates, in the Shares to establish, maintain and enforce written policies and procedures reasonably designed to prevent the misuse of any material nonpublic information with respect to such products, any components of the related products, any physical asset or commodity underlying the product, applicable currencies, underlying indexes, related futures or options on futures, and any related derivative instruments (including the Shares). As a general matter, the Exchange has regulatory jurisdiction over its ETP Holders and their associated persons, which include any person or entity controlling an ETP Holder. To the extent the Exchange may be found to lack jurisdiction over a subsidiary or affiliate of an ETP Holder that does business only in commodities or futures contracts, the Exchange could obtain information regarding the activities of such subsidiary or affiliate through surveillance sharing agreements with regulatory organizations to the extent the Exchange has such an agreement with an organization of which the subsidiary or affiliate is a member.

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 on the Exchange.

The issuer has represented to the Exchange that it will advise 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 Fund is not in

³³ See Rule 10A–3(c)(7), 17 CFR 240.10A–3(c)(7) (stating that a listed issuer is not subject to the requirements of Rule 10A–3 if the issuer is organized as an unincorporated association that does not have a board of directors and the activities of the issuer are limited to passively owning or holding securities or other assets on behalf of or for the benefit of the holders of the listed securities).

³⁴ 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.

³⁵ For a list of the current members of ISG, see www.isgportal.org. The Exchange notes that not all components of the Fund may trade on markets that are members of ISG or with which the Exchange has in place a CSSA.

³⁶ See notes 29 & 30, *supra*.

compliance with the applicable listing requirements, the Exchange will commence delisting procedures under NYSE Arca Rule 5.5–E(m).

Information Bulletin

Prior to the commencement of trading of the Shares, the Exchange will inform its ETP Holders in an information bulletin (“Information Bulletin”) of the special characteristics and risks associated with trading the Shares. Specifically, the Information Bulletin will discuss the following: (1) the risks involved in trading the Shares during the Early and Late Trading Sessions when an updated IIV will not be calculated or publicly disseminated; (2) the procedures for purchases and redemptions of Shares in Creation Baskets and Redemption Baskets (and that Shares are not individually redeemable); (3) NYSE Arca Rule 9.2–E(a), which imposes a duty of due diligence on its ETP Holders to learn the essential facts relating to every customer prior to trading the Shares; (4) how information regarding the IIV is disseminated; (5) how information regarding portfolio holdings is disseminated; (6) the requirement that ETP Holders deliver a prospectus to investors purchasing newly issued Shares prior to or concurrently with the confirmation of a transaction; and (7) trading information.

In addition, the Information Bulletin will advise ETP Holders, prior to the commencement of trading, of the prospectus delivery requirements applicable to the Fund. The Exchange notes that investors purchasing Shares directly from the Fund will receive a prospectus. ETP Holders purchasing Shares from the Fund for resale to investors will deliver a prospectus to such investors. The Information Bulletin will also discuss any exemptive, no-action, and interpretive relief granted by the Commission from any rules under the Act. In addition, the Information Bulletin will reference that the Fund is subject to various fees and expenses described in the Registration Statement.

The Information Bulletin will also reference the fact that there is no regulated source of last sale information regarding bitcoin, that the Commission has no jurisdiction over the trading of Bitcoin as a commodity, and that the CFTC has regulatory jurisdiction over the trading of bitcoin futures contracts and options on bitcoin futures contracts.

The Information Bulletin will also disclose the trading hours of the Shares and that the NAV for the Shares will be calculated after 4:00 p.m. E.T. each trading day. The Information Bulletin will disclose that information about the

Shares will be publicly available on the Fund’s website.

2. Statutory Basis

The basis under the Act for this proposed rule change is the requirement under Section 6(b)(5)³⁷ 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 and to protect investors and the public interest in that the Shares will be listed and traded on the Exchange pursuant to the initial and continued listing criteria in NYSE Arca Rule 8.500–E. The proposed rule change is also designed to prevent fraudulent and manipulative acts and practices because the Fund is structured similarly to and will operate in materially the same manner as the Bitcoin ETPs previously approved by the Commission. The Exchange further believes that the proposed rule change is designed to prevent fraudulent and manipulative acts and practices because, as noted by the Commission in the Bitcoin ETP Approval Order, the Exchange’s ability to obtain information regarding trading in the Shares and futures from markets and other entities that are members of the ISG (including the CME and ICE Futures U.S.) or with which the Exchange has in place a CSSA would assist the Exchange in detecting and deterring misconduct.

The Exchange has in place surveillance procedures that are adequate to properly monitor Exchange trading in the Shares in all trading sessions and to deter and detect attempted manipulation of the Shares or other violations of Exchange rules and applicable federal securities laws. The Exchange or FINRA, on behalf of the Exchange, or both, will communicate as needed regarding trading in the Shares 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 the Shares from such markets and other entities. In addition, the Exchange may obtain information regarding trading in the Shares from markets and other entities that are members of ISG or with which the Exchange has in place a CSSA. The Exchange is also able to

obtain information regarding trading in the Shares and bitcoin futures or the underlying bitcoin through ETP Holders, in connection with such ETP Holders’ proprietary or customer trades which they effect through ETP Holders on any relevant market.

Quotation and last-sale information regarding the Shares will be disseminated through the facilities of the CTA. The Fund’s website will also include a form of the prospectus for the Fund that may be downloaded. The website will include the Shares’ ticker and CUSIP information, along with additional quantitative information updated on a daily basis for the Fund. The Fund’s website will include (1) daily trading volume, the prior Business Day’s reported NAV and closing price, and a calculation of the premium and discount of the closing price or midpoint of the Bid/Ask Price against the NAV; and (ii) data in chart format displaying the frequency distribution of discounts and premiums of the daily closing price or Bid/Ask Price against the NAV, within appropriate ranges, for at least each of the four previous calendar quarters. The Fund’s website will be publicly available prior to the public offering of Shares and accessible at no charge.

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.

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 a new type of exchange-traded product based on the price of bitcoin 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 that are adequate to properly monitor trading in the Shares in all trading sessions and to deter and detect violations of Exchange rules and applicable federal securities laws.

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 the listing and trading of the Shares, which are Trust Units based on bitcoin and Carbon Credit Futures and

³⁷ 15 U.S.C. 78f(b)(5).

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. Discussion and Commission Findings

After careful review, the Commission finds that the proposed rule change, as modified by Amendment No. 4, is consistent with the Act and the rules and regulations thereunder applicable to a national securities exchange.³⁸ In particular, the Commission finds that the proposed rule change is consistent with Section 6(b)(5) of the Exchange Act,³⁹ which requires, among other things, that the Exchange's rules be designed to "prevent fraudulent and manipulative acts and practices" and, "in general, to protect investors and the public interest"; and with Section 11A(a)(1)(C)(iii) of the Exchange Act,⁴⁰ which 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 assure the availability to brokers, dealers, and investors of information with respect to quotations for and transactions in securities.

A. Exchange Act Section 6(b)(5)

In approving the listing and trading of shares of exchange-traded products ("ETPs") that hold bitcoin, the Commission explained that one way an exchange that lists such ETPs can meet the obligation under Exchange Act Section 6(b)(5) that its rules be designed to prevent fraudulent and manipulative acts and practices is by demonstrating that the exchange has a comprehensive surveillance-sharing agreement with a regulated market of significant size related to the underlying or reference assets.⁴¹ Such an agreement would

assist in detecting and deterring fraud and manipulation related to that underlying asset.

The Commission also recognized, however, that this is not the *exclusive* means by which an ETP listing exchange can meet this statutory obligation.⁴² A listing exchange could, alternatively, demonstrate that "other means to prevent fraudulent and manipulative acts and practices will be sufficient" to justify dispensing with a surveillance-sharing agreement with a regulated market of significant size.⁴³ In the Spot Bitcoin ETP Approval Orders, the Commission determined that having a comprehensive surveillance-sharing agreement with a U.S.-regulated market that, based on evidence from robust correlation analysis, is consistently highly correlated with the ETPs' underlying assets (spot bitcoin) constituted "other means" sufficient to satisfy the Exchange Act Section 6(b)(5) standard.⁴⁴ Specifically, given the consistently high correlation between the bitcoin futures market of the Chicago Mercantile Exchange ("CME") and a sample of spot bitcoin markets—confirmed by the Commission through robust⁴⁵ correlation analysis using data at hourly, five-minute, and one-minute intervals—the Commission was able to conclude that fraud or manipulation that impacts prices in spot bitcoin markets would likely similarly impact CME bitcoin futures prices. And because the CME's surveillance can

assist in detecting those impacts on CME bitcoin futures prices, the Commission was able to conclude that the comprehensive surveillance-sharing agreement among the relevant listing exchanges and the CME can be reasonably expected to assist in surveilling for fraudulent and manipulative acts and practices in the specific context of the proposals considered in the Spot Bitcoin ETP Approval Orders.

With respect to the bitcoin holdings of the Fund,⁴⁶ the structure of the Fund, the terms of its operation and the trading of the Shares, and the representations in the proposed rule change, as modified by Amendment No. 4, are substantially similar to those of the proposals considered in the Spot Bitcoin ETP Approval Orders.⁴⁷ In addition, the Commission finds that the spot bitcoin market continues to be consistently highly correlated with the CME bitcoin futures market.⁴⁸ In the proposal, as modified by Amendment No. 4, the Exchange represents that the Exchange or FINRA, on behalf of the Exchange, may communicate as needed and may obtain information regarding trading in CME bitcoin futures from the CME, which is a member of the ISG. As such, based on the record before the Commission, including the Commission's correlation analysis, the Commission is able to conclude that the Exchange's comprehensive surveillance-sharing agreement with the CME can be reasonably expected to assist in surveilling for fraudulent and manipulative acts and practices with respect to the spot bitcoin proposed to be held by the Fund.

With respect to the Carbon Credit Futures proposed to be held by the Fund, the Commission is able to conclude that the Exchange has CSSAs or shares ISG membership with

Order"); Order Granting Accelerated Approval of Proposed Rule Changes, as Modified by Amendments Thereto, To List and Trade Bitcoin-Based Commodity-Based Trust Shares and Trust Units, Securities Exchange Act Release No. 99306 (Jan. 10, 2024), 89 FR 3008 (Jan. 17, 2024) (SR-NYSEARCA-2021-90; SR-NYSEARCA-2023-44; SR-NYSEARCA-2023-58; SR-NASDAQ-2023-016; SR-NASDAQ-2023-019; SR-CboeBZX-2023-028; SR-CboeBZX-2023-038; SR-CboeBZX-2023-040; SR-CboeBZX-2023-042; SR-CboeBZX-2023-044; SR-CboeBZX-2023-072) ("January 2024 Spot Bitcoin ETP Approval Order") (collectively, "Spot Bitcoin ETP Approval Orders").

⁴² See July 2024 Spot Bitcoin ETP Approval Order at 62822; January 2024 Spot Bitcoin ETP Approval Order at 3009.

⁴³ See July 2024 Spot Bitcoin ETP Approval Order at 62822; January 2024 Spot Bitcoin ETP Approval Order at 3009.

⁴⁴ See July 2024 Spot Bitcoin ETP Approval Order at 62822; January 2024 Spot Bitcoin ETP Approval Order at 3009–11.

⁴⁵ The Commission stated that the "robustness" of its correlation analysis rested on the pre-requisites of (1) the correlations being calculated with respect to bitcoin futures that trade on the CME, a U.S. market regulated by the CFTC, (2) the lengthy sample period of price returns for both the CME bitcoin futures market and the spot bitcoin market, (3) the frequent intra-day trading data in both the CME bitcoin futures market and the spot bitcoin market over that lengthy sample period, and (4) the consistency of the correlation results throughout the lengthy sample period. See July 2024 Spot Bitcoin ETP Approval Order at 62822 n.17; January 2024 Spot Bitcoin ETP Approval Order at 3010 n.38.

⁴⁶ While the Fund uses "ETF" in its name, it is not registered under the Investment Company Act of 1940.

⁴⁷ See also *infra* Section III.B.

⁴⁸ The Commission examined correlation between the CME bitcoin futures market and the Coinbase and Kraken spot bitcoin trading platforms at hourly, five-minute, and one-minute intervals, using the same data sources and methodology as in the Spot Bitcoin ETP Approval Orders (see July 2024 Spot Bitcoin ETP Approval Order at 62822 n.19; January 2024 Spot Bitcoin ETP Approval Order at 3010 n.35), for the period from March 1, 2021, to August 22, 2024. The correlation between the CME bitcoin futures market and this subset of spot bitcoin platforms for the full sample period is no less than 98.9 percent using data at an hourly interval, 93.9 percent using data at a five-minute interval, and 83.1 percent using data at a one-minute interval. The rolling three-month correlation results range between 94.0 and 99.5 percent using data at an hourly interval, 79.9 and 96.2 percent using data at a five-minute interval, and 73.7 and 88.5 percent using data at a one-minute interval.

³⁸ In approving this proposed rule change, the Commission has considered the proposed rule's impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f).

³⁹ 15 U.S.C. 78f(b)(5).

⁴⁰ 15 U.S.C. 78k–1(a)(1)(C)(iii).

⁴¹ See Order Granting Approval of a Proposed Rule Change, as Modified by Amendment No. 1, to List and Trade Shares of the Grayscale Bitcoin Mini Trust and Granting Accelerated Approval of a Proposed Rule Change, as Modified by Amendment No. 1, to List and Trade Shares of the Pando Asset Spot Bitcoin Trust, Securities Exchange Act Release No. 100610 (July 26, 2024), 89 FR 62821 (Aug. 1, 2024) (SR-NYSEARCA-2024-45; SR-CboeBZX-2023-101) ("July 2024 Spot Bitcoin ETP Approval

significant, regulated markets related to such holdings, and, thus, that such CSSAs and ISG membership can be reasonably expected to assist in surveilling for fraudulent and manipulative acts and practices with respect to such holdings.⁴⁹ The Exchange represents that the Fund will hold only: (i) EU ETS futures which trade only on ICE Index, with which the Exchange has entered into a CSSA; and (ii) CCA futures and RGGI futures which are traded only on ICE Futures U.S., which, like the Exchange, is a member of the ISG. Further, each of ICE Index and ICE Futures U.S. is “regulated” because ICE Index is regulated in the Netherlands by the Dutch Authority for the Financial Markets and is registered with the CFTC as an authorized Foreign Board of Trade,⁵⁰ and ICE Futures U.S. is a registered Designated Contract Market regulated by the CFTC.⁵¹

Moreover, each of ICE Index and ICE Futures U.S. is a “significant market”⁵² in relation to the respective Carbon Credit Futures that trade thereon. Specifically, with respect to the first prong of the “significant market” analysis, as the Commission has

previously recognized,⁵³ because the Carbon Credit Futures that would be held by the Fund (*i.e.*, EU ETS futures, CCA futures, and RGGI futures) are only traded on markets which are members of the ISG or with which the Exchange holds a CSSA, the ISG membership and CSSA can reasonably be relied upon to assist in detecting and deterring fraudulent or manipulative misconduct that affects those assets.

With respect to the second prong of the “significant market” analysis, evidence supports the Commission’s conclusion that it is unlikely that trading in the Fund’s Shares would be the predominant influence on prices in the EU ETS futures market of ICE Index, or the CCA or RGGI futures markets of ICE Futures U.S. ICE Index and ICE Futures U.S., on which the Fund’s investments in Carbon Credit Futures exclusively trade, are currently the largest and most liquid carbon credit futures markets for these instruments.⁵⁴ In addition, since the launch of the KFA Global Carbon ETF under the Investment Company Act of 1940,⁵⁵ which holds CCA and RGGI futures traded on ICE Futures U.S., and EU ETS futures traded on ICE Index, the

Commission has neither observed any disruption to the ICE Futures U.S. or ICE Index futures markets, nor any evidence that this ETF has exerted a dominant influence on CCA, RGGI, and/or EU ETS futures’ prices. For example, based on ICE Futures U.S. and ICE Index data,⁵⁶ the Commission has not observed any disruption to, or dominant influence from this ETF on, settlement prices, spreads, or roll costs of the EU ETS, RGGI, or CCA futures contracts. For these reasons, the Commission is able to conclude that the Exchange’s ISG membership and comprehensive surveillance-sharing agreement with ICE Index can be reasonably expected to assist in surveilling for fraudulent and manipulative acts and practices with respect to the Carbon Credit Futures proposed to be held by the Fund.

B. Exchange Act Section 11A(a)(1)(C)(iii)

The proposed rule change, as modified by Amendment No. 4, sets forth aspects of the Fund, including the availability of pricing information, transparency of portfolio holdings, and types of surveillance procedures, that are consistent with other ETPs that the Commission has approved.⁵⁷ This includes commitments regarding: the availability via the Consolidated Tape Association of quotation and last-sale information for the Shares; the availability on the Fund’s website of certain information related to the Fund, including net asset value; the dissemination of the intra-day indicative value by one or more major market data vendors, updated every 15 seconds throughout the Exchange’s regular trading hours; the Exchange’s surveillance procedures and ability to

⁴⁹ As the Commission has explained (*see* Order Setting Aside Action by Delegated Authority and Disapproving a Proposed Rule Change, as Modified by Amendments No. 1 and 2, To List and Trade Shares of the Winklevoss Bitcoin Trust, Securities Exchange Act Release No. 83723 (July 26, 2018), 83 FR 37579 (Aug. 1, 2018) (SR-BatsBZX–2016–30) (“Winklevoss Order”), an exchange that lists commodity-based ETPs can meet its obligations under Exchange Act Section 6(b)(5) by demonstrating that the exchange has a CSSA with a regulated market of significant size related to the underlying or reference assets. The Winklevoss Order applied this standard to a commodity-trust ETP based on spot bitcoin, and the Commission has found that this standard is also appropriate for, and has applied the standard to, proposed ETPs based on bitcoin futures. *See, e.g.*, Order Granting Approval of a Proposed Rule Change, as Modified by Amendment No. 2, To List and Trade Shares of the Teucrium Bitcoin Futures Fund Under NYSE Arca Rule 8.200–E, Commentary .02 (Trust Issued Receipts), Securities Exchange Act Release No. 94620 (Apr. 6, 2022), 87 FR 21676 (Apr. 12, 2022) (SR–NYSEArca–2021–053) (“Teucrium Order”).

⁵⁰ *See supra* note 30. *See also* CFTC Order of Registration for ICE Index at [orgiceeregorder170110.pdf](https://www.cftc.gov/record/170110.pdf).

⁵¹ *See supra* note 31.

⁵² In the Winklevoss Order, the Commission stated that the term “significant market” or “market of significant size” includes a market (or group of markets) as to which (1) there is a reasonable likelihood that a person attempting to manipulate the ETP would also have to trade on that market to successfully manipulate the ETP, so that a surveillance-sharing agreement would assist in detecting and deterring misconduct, and (2) it is unlikely that trading in the ETP would be the predominant influence on prices in that market. *See* Winklevoss Order, 83 FR at 37594. The Commission explained that this definition is illustrative and not exclusive, and that there could be other types of “significant markets” and “markets of significant size. *See id.*

⁵³ *See* Teucrium Order, 87 FR at 21679; Order Granting Approval of a Proposed Rule Change, as Modified by Amendment Nos. 1 and 2, To List and Trade Shares of the Valkyrie XBTO Bitcoin Futures Fund Under Nasdaq Rule 5711(g), Securities Exchange Act Release No. 94853 (May 5, 2022), 87 FR 28848 (May 11, 2022) (SR–NASDAQ–2021–066), at 28852.

⁵⁴ For example, ICE Futures U.S. open interest in RGGI Futures were 77 million allowances in June 2024. The next largest RGGI Futures exchange, Nodal, had only 15.6 million allowances open interest at that time. Report on the Secondary Market for RGGI CO2 Allowances: Second Quarter 2024, Prepared for RGGI, Inc. by Potomac Economics (Aug. 2024), available at https://www.rggi.org/sites/default/files/Uploads/Market-Monitor/Quarterly-Reports/MM_Secondary_Market_Report_2024_Q2.pdf. Similarly, ICE Index’s EU ETS futures reached record participation throughout 2023 and during the first quarter of 2024. *See* Press Release, Intercontinental Exchange, ICE Environmental Contracts Traded the Equivalent of \$1 Trillion in Notional Value for the Third Consecutive Year (Apr. 22, 2024) available at https://s2.q4cdn.com/154085107/files/doc_news/ICE-Environmental-Contracts-Traded-the-Equivalent-of-1-Trillion-in-Notional-Value-for-the-Third-Consecutive-Year-2024.pdf.

⁵⁵ *See* Securities Exchange Act Release No. 88255 (Feb. 20, 2020), 85 FR 11146, 11156 (Feb. 26, 2020) (SR–NYSEArca–2019–60) (Order Granting Accelerated Approval of a Proposed Rule Change, as Modified by Amendment No. 4, To List and Trade Shares of the KFA Global Carbon ETF under NYSE Arca Rule 8.600–E) (approving the listing and trading of an exchange-traded fund (“ETF”), registered under the Investment Company Act of 1940, holding carbon credit futures). In 2021, EU ETS futures were transitioned from ICE Futures Europe to ICE Index. *See* press release at *Intercontinental Exchange—ICE to transition European Union Emission Allowance Contracts to ICE Index in the Netherlands during the Second Quarter of 2021*.

⁵⁶ The Commission examined futures volume, open interest, price, and spread data provided by Bloomberg.

⁵⁷ *See, e.g.*, July 2024 Spot Bitcoin ETP Approval Order at 62822; January 2024 Spot Bitcoin ETP Approval Order at 3011; Securities Exchange Act Release No. 61220 (Dec. 22, 2009), 74 FR 68895 (Dec. 29, 2009) (SR–NYSEARCA–2009–94) (Order Granting Approval of Proposed Rule Change Relating To Listing and Trading Shares of the EFTS Palladium Trust); Securities Exchange Act Release No. 94518 (Mar. 25, 2022), 87 FR 18837 (Mar. 31, 2022) (SR–NYSEARCA–2021–65) (Notice of Filing of Amendment No. 1 and Order Granting Accelerated Approval of a Proposed Rule Change, as Modified by Amendment No. 1, To List and Trade Shares of the Sprott ESG Gold ETF Under NYSE Arca Rule 8.201–E (Commodity-Based Trust Shares); Securities Exchange Act Release No. 100224 (May 23, 2024), 89 FR 46937 (May 30, 2024) (SR–NYSEARCA–2023–70; SR–NYSEARCA–2024–31; SR–NASDAQ–2023–045; SR–CboeBZX–2023–069; SR–CboeBZX–2023–070; SR–CboeBZX–2023–087; SR–CboeBZX–2023–095; SR–CboeBZX–2024–018) (Order Granting Accelerated Approval of Proposed Rule Changes, as Modified by Amendments Thereto, To List and Trade Shares of Ether-Based Exchange-Traded Products).

obtain information regarding trading in the Shares of the Fund; the conditions under which the Exchange would implement trading halts and suspensions; and the requirements of registered market makers in the Shares of the Fund. In addition, the Exchange deems the Shares to be equity securities, thus rendering trading in the Shares subject to that Exchange's rules governing the trading of equity securities. Further, the applicable listing rule of the Exchange requires that all statements and representations made in its filing regarding, among others, the description of the Fund's holdings, limitations on such holdings, and the applicability of the Exchange's listing rules specified in the filing, will constitute continued listing requirements.⁵⁸ Moreover, the proposed rule change states that the Sponsor has represented to the Exchange that it will advise that Exchange of any failure to comply with the applicable continued listing requirements; pursuant to obligations under Section 19(g)(1) of the Exchange Act, the Exchange will monitor for compliance with the continued listing requirements; and if the Fund is not in compliance with the applicable listing requirements, that Exchange will commence delisting procedures.

The Commission therefore finds that the proposed rule change, as modified by Amendment No. 4, is reasonably designed to promote fair disclosure of information that may be necessary to price the Shares appropriately, to prevent trading when a reasonable degree of transparency cannot be assured, to safeguard material non-public information relating to the Fund's portfolio, and to ensure fair and orderly markets for the Shares of the Fund.

IV. Solicitation of Comments on Amendment No. 4 to the Proposed Rule Change

Interested persons are invited to submit written data, views and arguments concerning whether Amendment No. 4 is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's internet comment form (<https://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include file number SR-NYSEARCA-2024-27 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-2024-27. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's internet website (<https://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street NE, Washington, DC 20549, on official business days between the hours of 10 a.m. and 3 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. Do not include personal identifiable information in submissions; you should submit only information that you wish to make available publicly. We may redact in part or withhold entirely from publication submitted material that is obscene or subject to copyright protection. All submissions should refer to file number SR-NYSEARCA-2024-27 and should be submitted on or before December 12, 2024.

V. Accelerated Approval of Proposed Rule Change, as Modified by Amendment No. 4

The Commission finds good cause to approve the proposed rule change, as modified by Amendment No. 4, prior to the thirtieth day after the date of publication of notice of the filing of Amendment No. 4 in the **Federal Register**. Amendment No. 4 to the proposed rule change clarified the creation and redemptions procedures for the Shares and provided additional clarification relating to statements concerning the holdings of the Fund and the custody of cash and cash equivalents. The changes and additional information in Amendment No. 4 assist the Commission in evaluating the Exchange's proposal and in determining that it is consistent with the Act. The

amended filing is now substantially similar to other spot bitcoin ETPs that the Commission has approved with respect to the Fund's spot bitcoin holdings, and as discussed above in Section III.A, the spot bitcoin market and the CME bitcoin futures market remain consistently highly correlated. Accordingly, the Commission finds good cause, pursuant to Section 19(b)(2) of the Act,⁵⁹ to approve the proposed rule change, as modified by Amendment No. 4, on an accelerated basis.

VI. Conclusion

This approval order is based on all of the Exchange's representations, including those set forth above and in Amendment No. 4. For the foregoing reasons, the Commission finds that the proposed rule change, as modified by Amendment No. 4, is consistent with the requirements of the Act and the rules and regulations thereunder applicable to a national securities exchange, and in particular, Section 6(b)(5) and Section 11A(a)(1)(C)(iii) of the Act.⁶⁰

It is therefore ordered, pursuant to Section 19(b)(2) of the Act,⁶¹ that the proposed rule change (SR-NYSEARCA-2024-27), as modified by Amendment No. 4, be, and it hereby is, approved on an accelerated basis.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.⁶²

Stephanie J. Fouse,
Assistant Secretary.

[FR Doc. 2024-27221 Filed 11-20-24; 8:45 am]

BILLING CODE P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-101638; File No. SR-NASDAQ-2024-066]

Self-Regulatory Organizations; The Nasdaq Stock Market LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change To Amend Its Schedule of Credits at Equity 7, Section 118(a)

November 15, 2024.

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 November 1, 2024, The Nasdaq Stock Market LLC

⁵⁹ 15 U.S.C. 78s(b)(2).

⁶⁰ 15 U.S.C. 78f(b)(5); 15 U.S.C. 78k-1(a)(1)(C)(iii).

⁶¹ 15 U.S.C. 78s(b)(2).

⁶² 17 CFR 200.30-3(a)(12).

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

⁵⁸ See NYSE Arca Rule 8.500-E(d)(2).

(“Nasdaq” or “Exchange”) 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 Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to amend the Exchange's schedule of credits at Equity 7, Section 118(a), as described further below.

The text of the proposed rule change is available on the Exchange's website at <https://listingcenter.nasdaq.com/rulebook/nasdaq/rules>, 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 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 amend the Exchange's schedule of credits, at Equity 7, Section 118(a). Specifically, the Exchange proposes to introduce a new credit applicable to Tapes A, B, and C for displayed quotes (other than Supplemental Orders) that provide liquidity. Under the proposed rule change, members will be eligible for the new credit of \$0.0029 if they meet the following criteria: (1) the member adds at least 0.50% of the Consolidated Volume, with at least 0.10% of such volume being Tape B securities; and (2) the member adds at least 0.15% of Consolidated Volume of non-displayed liquidity, which includes midpoint orders and Midpoint Extended Life Orders (“M-ELO”).

This proposed change will apply to Tapes A, B, and C. The purpose of the

new credit structure is to incentivize members to increase their liquidity adding activity on the Exchange. By providing an additional incentive for members to contribute displayed liquidity, the Exchange aims to enhance market quality and improve liquidity.

The new proposed credit of \$0.0029 is in addition to other credits the Exchange already offers to member for providing displayed liquidity. The Exchange believes that if this incentive successfully drives additional liquidity, the resulting increase will enhance overall market quality, benefiting all participants.

2. Statutory Basis

The Exchange believes that its proposal is consistent with Section 6(b) of the Act,³ in general, and furthers the objectives of Sections 6(b)(4) and 6(b)(5) of the Act,⁴ in particular, in that it provides for the equitable allocation of reasonable dues, fees and other charges among members and issuers and other persons using any facility, and is not designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

The Proposal Is Reasonable

The Exchange's proposed change to its schedule of credits is reasonable in several respects. As a threshold matter, the Exchange is subject to significant competitive forces in the market for equity securities transaction services that constrain its pricing determinations in that market. The fact that this market is competitive has long been recognized by the courts. In *NetCoalition v. Securities and Exchange Commission*, the D.C. Circuit stated as follows: “[n]o one disputes that competition for order flow is ‘fierce.’ . . . As the SEC explained, ‘[i]n the U.S. national market system, buyers and sellers of securities, and the broker-dealers that act as their order-routing agents, have a wide range of choices of where to route orders for execution’; [and] ‘no exchange can afford to take its market share percentages for granted’ because ‘no exchange possesses a monopoly, regulatory or otherwise, in the execution of order flow from broker dealers’ . . .”⁵

The Commission and the courts have repeatedly expressed their preference for competition over regulatory intervention in determining prices, products, and services in the securities

markets. In Regulation NMS, while adopting a series of steps to improve the current market model, the Commission highlighted the importance of market forces in determining prices and SRO revenues and, also, recognized that current regulation of the market system “has been remarkably successful in promoting market competition in its broader forms that are most important to investors and listed companies.”⁶

Numerous indicia demonstrate the competitive nature of this market. For example, clear substitutes to the Exchange exist in the market for equity security transaction services. The Exchange is only one of several equity venues to which market participants may direct their order flow. Competing equity exchanges offer similar tiered pricing structures to that of the Exchange, including schedules of rebates and fees that apply based upon members achieving certain volume thresholds.

Within this environment, market participants can freely and often do shift their order flow among the Exchange and competing venues in response to changes in their respective pricing schedules. As such, the proposal represents a reasonable attempt by the Exchange to increase its liquidity and market share relative to its competitors.

The Exchange believes that it is reasonable to establish a new credit of \$0.0029 for members that add displayed liquidity when the member adds at least 0.50% of Consolidated Volume, of which at least 0.10% are Tape B securities, and the member adds at least 0.15% of Consolidated Volume of non-displayed liquidity (including midpoint orders) and Midpoint Extended Life Orders. This proposal is reasonable because it will incentivize liquidity adding activity and provide an incentive to members that provide additional displayed liquidity to the Exchange. The Exchange believes that if such incentive is effective, then any ensuring increase in liquidity to the Exchange will improve market quality, to the benefit of all participants.

The Exchange believes that establishing a new credit for members that add displayed liquidity is equitable. To the extent that the Exchange succeeds in increasing the levels of liquidity and activity on the Exchange, the Exchange will experience improvements in its market quality, which stands to benefit all market participants. The Exchange further believes that the proposed new credit of

³ 15 U.S.C. 78f(b).

⁴ 15 U.S.C. 78f(b)(4) and (5).

⁵ *NetCoalition v. SEC*, 615 F.3d 525, 539 (D.C. Cir. 2010) (quoting Securities Exchange Act Release No. 59039 (December 2, 2008), 73 FR 74770, 74782–83 (December 9, 2008) (SR–NYSEArca–2006–21)).

⁶ Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496, 37499 (June 29, 2005) (“Regulation NMS Adopting Release”).

\$0.0029 for members providing additional liquidity is equitable because it will be applied uniformly to all members that meet the specified criteria.

Any participant that is dissatisfied with the proposal is free to shift their order flow to competing venues that provide more generous pricing or less stringent qualifying criteria.

The Proposal Is Not Unfairly Discriminatory

The Exchange believes that the proposed \$0.0029 new credit for members adding additional liquidity is not unfairly discriminatory. As an initial matter, the Exchange believes that nothing about its volume-based tiered pricing model is inherently unfair; instead, it is a rational pricing model that is well-established and ubiquitous in today's economy among firms in various industries—from co-branded credit cards to grocery stores to cellular telephone data plans—that use it to reward the loyalty of their best customers that provide high levels of business activity and incent other customers to increase the extent of their business activity. It is also a pricing model that the Exchange and its competitors have long employed with the assent of the Commission. It is fair because it enhances price discovery and improves the overall quality of the equity markets.

The Exchange believes that the proposal to add a new credit for members providing additional displayed liquidity (other than Supplemental Orders) as described above, is not unfairly discriminatory. The new credit is not intended to advantage any particular member and will be applied uniformly to all members that meet the qualifying criteria. Moreover, the proposal stands to improve the overall market quality of the Exchange, to the benefit of all market participants, by incentivizing members to increase the extent of their liquidity adding activity.

Any participant that is dissatisfied with the proposal is free to shift their order flow to competing venues that provide more generous pricing or less stringent qualifying criteria.

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 not necessary or appropriate in furtherance of the purposes of the Act.

Intramarket Competition

The Exchange does not believe that its proposal will place any category of Exchange participant at a competitive disadvantage.

As noted above, the Exchange's proposal to add a new credit for members that add displayed liquidity is intended to have market-improving effects, to the benefit of all members. Any member can satisfy the criteria to qualify for the new credit.

The Exchange notes that its members are free to trade on other venues to the extent they believe that the Exchange's fee schedule is not attractive. As one can observe by looking at any market share chart, price competition between exchanges is fierce, with liquidity and market share moving freely between exchanges in reaction to fee and credit changes.

Intermarket Competition

In terms of inter-market competition, the Exchange notes that it operates in a highly competitive market in which market participants can readily favor competing venues if they deem fee levels at a particular venue to be excessive, or rebate opportunities available at other venues to be more favorable. In such an environment, the Exchange must continually adjust its credits and fees to remain competitive with other exchanges and with alternative trading systems that have been exempted from compliance with the statutory standards applicable to exchanges. Because competitors are free to modify their credit and own fees in response, and because market participants may readily adjust their order routing practices, the Exchange believes that the degree to which credit or fee changes in this market may impose any burden on competition is extremely limited.

The proposed new credit is reflective of this competition because, as a threshold issue, even as one of the largest U.S. equities exchanges by volume, the Exchange has less than 20% market share, which in most markets could hardly be categorized as having enough market power to burden competition. Moreover, price competition between exchanges is fierce, with liquidity and market share moving freely between exchanges in reaction to credit and fee changes. This is an addition to free flow of order flow to and among off-exchange venues which comprises more than 40% of industry volume in recent months.

The Exchange's proposal to add a new credit is pro-competitive in that the Exchange intends for the credit to

increase liquidity addition activity on the Exchange, thereby rendering the Exchange more attractive and vibrant to participants.

In sum, if the changes proposed herein are unattractive to market participants, it is likely that the Exchange will lose market share as a result. Accordingly, the Exchange does not believe that the proposed change will impair the ability of members or competing order execution venues to maintain their competitive standing in the financial markets.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

No written comments were either solicited or received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The foregoing rule change has become effective pursuant to Section 19(b)(3)(A)(ii) of the Act.⁷

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 (<https://www.sec.gov/rules/sro.shtml>); or
- Send an email to rule-comments@sec.gov. Please include file number SR-NASDAQ-2024-066 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-NASDAQ-2024-066. This file number should be included on the

⁷ 15 U.S.C. 78s(b)(3)(A)(ii).

subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's internet website (<https://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street NE, Washington, DC 20549, on official business days between the hours of 10 a.m. and 3 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. Do not include personal identifiable information in submissions; you should submit only information that you wish to make available publicly. We may redact in part or withhold entirely from publication submitted material that is obscene or subject to copyright protection. All submissions should refer to file number SR-NASDAQ-2024-066 and should be submitted on or before December 12, 2024.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.⁸

Stephanie J. Fouse,
Assistant Secretary.

[FR Doc. 2024-27218 Filed 11-20-24; 8:45 am]

BILLING CODE 8011-01-P

SMALL BUSINESS ADMINISTRATION

[Disaster Declaration #20854 and #20855;
NEW MEXICO Disaster Number NM-20010]

Presidential Declaration of a Major Disaster for Public Assistance Only for the State of New Mexico; Correction

AGENCY: U.S. Small Business Administration.

ACTION: Notice; correction.

SUMMARY: This is a correction of the Presidential declaration of a major disaster for Public Assistance Only for the State of New Mexico (FEMA-4843-DR), dated November 1, 2024.

Incident: Severe Storm and Flooding.

DATES: Issued on November 15, 2024.

Incident Period: October 19, 2024 through October 20, 2024.

Physical Loan Application Deadline Date: January 2, 2025.

Economic Injury (EIDL) Loan Application Deadline Date: August 1, 2025.

ADDRESSES: Visit the MySBA Loan Portal at <https://lending.sba.gov> to apply for a disaster assistance loan.

FOR FURTHER INFORMATION CONTACT: Vanessa Morgan, Office of Disaster Recovery & Resilience, U.S. Small Business Administration, 409 3rd Street SW, Suite 6050, Washington, DC 20416, (202) 205-6734.

SUPPLEMENTARY INFORMATION: The notice of the President's major disaster declaration for the State of New Mexico dated November 1, 2024 and published in the **Federal Register** on November 8, 2024 at 89 FR 88849 in the third column, is hereby corrected to change the physical loan application deadline date to January 2, 2025. Private Non-Profit organizations that provide essential services of a governmental nature may file disaster loan applications online using the MySBA Loan Portal <https://lending.sba.gov> or other locally announced locations. Please contact the SBA disaster assistance customer service center by email at disastercustomerservice@sba.gov or by phone at 1-800-659-2955 for further assistance.

The following areas have been determined to be adversely affected by the disaster:

Primary County: Chaves.

The Interest Rates are:

	Percent
<i>For Physical Damage:</i>	
Non-Profit Organizations with Credit Available Elsewhere ...	3.250
Non-Profit Organizations without Credit Available Elsewhere	3.250
<i>For Economic Injury:</i>	
Non-Profit Organizations without Credit Available Elsewhere	3.250

The number assigned to this disaster for physical damage is 208546 and for economic injury is 208550.

(Catalog of Federal Domestic Assistance Number 59008)

Alejandro Contreras,
Acting Deputy Associate Administrator Office of Disaster Recovery & Resilience.

[FR Doc. 2024-27171 Filed 11-20-24; 8:45 am]

BILLING CODE 8026-09-P

SMALL BUSINESS ADMINISTRATION

[Disaster Declaration #20718 and #20719;
TENNESSEE Disaster Number TN-20017]

Presidential Declaration Amendment of a Major Disaster for the State of Tennessee

AGENCY: U.S. Small Business Administration.

ACTION: Amendment 2.

SUMMARY: This is an amendment of the Presidential declaration of a major disaster for the State of TENNESSEE (FEMA-4832-DR), dated October 2, 2024.

Incident: Tropical Storm Helene.

DATES: Issued on November 12, 2024.

Incident Period: September 26, 2024 through September 30, 2024.

Physical Loan Application Deadline Date: January 7, 2025.

Economic Injury (EIDL) Loan Application Deadline Date: July 2, 2025.

ADDRESSES: Visit the MySBA Loan Portal at <https://lending.sba.gov> to apply for a disaster assistance loan.

FOR FURTHER INFORMATION CONTACT: Alan Escobar, Office of Disaster Recovery & Resilience, U.S. Small Business Administration, 409 3rd Street SW, Suite 6050, Washington, DC 20416, (202) 205-6734.

SUPPLEMENTARY INFORMATION: The notice of the President's major disaster declaration for the State of TENNESSEE, dated October 2, 2024, is hereby amended to extend the deadline for filing applications for physical damages as a result of this disaster to January 7, 2025.

All other information in the original declaration remains unchanged.

(Catalog of Federal Domestic Assistance Number 59008)

Alejandro Contreras,
Acting Deputy Associate Administrator, Office of Disaster Recovery & Resilience.

[FR Doc. 2024-27285 Filed 11-20-24; 8:45 am]

BILLING CODE 8026-09-P

SMALL BUSINESS ADMINISTRATION

[Disaster Declaration #20811 and #20812;
NEW MEXICO Disaster Number NM-20009]

Presidential Declaration of a Major Disaster for the State of New Mexico

AGENCY: U.S. Small Business Administration.

ACTION: Correction.

SUMMARY: This is a correction of the Presidential declaration of a major disaster for the State of New Mexico

⁸ 17 CFR 200.30-3(a)(12).

(FEMA–4843–DR), dated November 1, 2024.
Incident: Severe Storm and Flooding.
DATES: Issued on November 15, 2024.
Incident Period: October 19, 2024 through October 20, 2024.
Physical Loan Application Deadline Date: January 2, 2025.
Economic Injury (EIDL) Loan Application Deadline Date: August 1, 2025.

ADDRESSES: Visit the MySBA Loan Portal at <https://lending.sba.gov> to apply for a disaster assistance loan.
FOR FURTHER INFORMATION CONTACT: Vanessa Morgan, Office of Disaster Recovery & Resilience, U.S. Small Business Administration, 409 3rd Street SW, Suite 6050, Washington, DC 20416, (202) 205–6734.

SUPPLEMENTARY INFORMATION: The notice of the President’s major disaster declaration for the State of New Mexico dated November 1, 2024, is hereby corrected to change the physical loan application deadline date to January 2, 2025. Applications for disaster loans may be submitted online using the MySBA Loan Portal <https://lending.sba.gov> or other locally announced locations. Please contact the SBA disaster assistance customer service center by email at disastercustomerservice@sba.gov or by phone at 1–800–659–2955 for further assistance.

The following areas have been determined to be adversely affected by the disaster:
Primary County (Physical Damage and Economic Injury Loans): Chaves.
Contiguous Counties (Economic Injury Loans Only):
New Mexico: De Baca, Eddy, Lea, Lincoln, Otero, Roosevelt
The Interest Rates are:

	Percent
<i>For Physical Damage:</i>	
Homeowners with Credit Available Elsewhere	5.625
Homeowners without Credit Available Elsewhere	2.813
Businesses with Credit Available Elsewhere	8.000
Businesses without Credit Available Elsewhere	4.000
Non-Profit Organizations with Credit Available Elsewhere ...	3.250
Non-Profit Organizations without Credit Available Elsewhere	3.250
<i>For Economic Injury:</i>	
Business and Small Agricultural Cooperatives without Credit Available Elsewhere	4.000
Non-Profit Organizations without Credit Available Elsewhere	3.250

The number assigned to this disaster for physical damage is 208116 and for economic injury is 208120.
(Catalog of Federal Domestic Assistance Number 59008)
Alejandro Contreras,
Acting Deputy Associate Administrator, Office of Disaster Recovery & Resilience.
[FR Doc. 2024–27195 Filed 11–20–24; 8:45 am]
BILLING CODE 8026–09–P

SMALL BUSINESS ADMINISTRATION
[Disaster Declaration #20879 and #20880; CROW TRIBE OF MONTANA Disaster Number MT–20014]

Presidential Declaration of a Major Disaster for the Crow Tribe of Montana
AGENCY: U.S. Small Business Administration.
ACTION: Notice.

SUMMARY: This is a Notice of the Presidential declaration of a major disaster for the CROW TRIBE OF MONTANA (FEMA–4847–DR), dated November 14, 2024.
Incident: Severe Storm and Straight-line Winds.
DATES: Issued on November 14, 2024.
Incident Period: August 6, 2024.
Physical Loan Application Deadline Date: January 13, 2025.
Economic Injury (EIDL) Loan Application Deadline Date: August 14, 2025.

ADDRESSES: Visit the MySBA Loan Portal at <https://lending.sba.gov> to apply for a disaster assistance loan.
FOR FURTHER INFORMATION CONTACT: Alan Escobar, Office of Disaster Recovery & Resilience, U.S. Small Business Administration, 409 3rd Street SW, Suite 6050, Washington, DC 20416, (202) 205–6734.

SUPPLEMENTARY INFORMATION: Notice is hereby given that as a result of the President’s major disaster declaration on November 14, 2024, applications for disaster loans may be submitted online using the MySBA Loan Portal <https://lending.sba.gov> or other locally announced locations. Please contact the SBA disaster assistance customer service center by email at disastercustomerservice@sba.gov or by phone at 1–800–659–2955 for further assistance.
The following areas have been determined to be adversely affected by the disaster:
Primary Area (Physical Damage and Economic Injury Loans): Crow Tribe of Montana.
Contiguous Counties (Economic Injury Loans Only):

Montana: Big Horn, Carbon, Golden Valley, Musselshell, Powder River, Rosebud, Stillwater, Treasure, Yellowstone.
Wyoming: Big Horn, Sheridan.
The Interest Rates are:

	Percent
<i>For Physical Damage:</i>	
Homeowners with Credit Available Elsewhere	5.625
Homeowners without Credit Available Elsewhere	2.813
Businesses with Credit Available Elsewhere	8.000
Businesses without Credit Available Elsewhere	4.000
Non-Profit Organizations with Credit Available Elsewhere ...	3.250
Non-Profit Organizations without Credit Available Elsewhere	3.250
<i>For Economic Injury:</i>	
Business and Small Agricultural Cooperatives without Credit Available Elsewhere	4.000
Non-Profit Organizations without Credit Available Elsewhere	3.250

The number assigned to this disaster for physical damage is 20879B and for economic injury is 208800.
(Catalog of Federal Domestic Assistance Number 59008)
Alejandro Contreras,
Acting Deputy Associate Administrator, Office of Disaster Recovery & Resilience.
[FR Doc. 2024–27306 Filed 11–20–24; 8:45 am]
BILLING CODE 8026–09–P

SURFACE TRANSPORTATION BOARD
[Docket No. FD 36795]

Stefan Soloviev, Executor, Estate of Sheldon H. Solow—Continuance in Control Exemption—Colorado Pacific San Luis Railroad LLC
By petition filed on August 23, 2024, Stefan Soloviev, Executor, the Estate of Sheldon H. Solow (the Estate), seeks an exemption under 49 U.S.C. 10502 from the prior approval requirements of 49 U.S.C. 11323–24 to continue in control of Colorado Pacific San Luis Railroad LLC (CXSL), upon CXSL’s becoming a carrier in a related transaction. As discussed below, the Board will grant the exemption.
Background
According to the petition, the Estate is a noncarrier that currently controls two rail carriers. The Estate controls Colorado Pacific Railroad LLC (CXR), a Class III rail carrier, through the Estate’s control of KCVN, LLC (KCVN), a

noncarrier.¹ (Pet. 2, 5.) The Estate also controls Colorado Pacific Rio Grande Railroad LLC (CXRG), a Class III rail carrier.² (Pet. 3.) The rail carrier the Estate is seeking to control, CXSL, is a wholly owned subsidiary of Soloviev Investors LLC (Soloviev Investors), which is controlled by the Estate. (*Id.* at 2–3.) The exemption here would allow the Estate to control CXR, CXRG, and CXSL.³ (*Id.* at 5.)

On August 22, 2024, CXSL filed a verified notice of exemption pursuant to 49 CFR 1150.31 to acquire and operate a 13-mile line of railroad owned by the San Luis Central Railroad Company (SLC). *See Colo. Pac. San Luis R.R.—Acquis. & Operation Exemption—San Luis Cent. R.R.*, FD 36794 (STB served Sept. 6, 2024). Notice of the exemption was served and published in the **Federal Register** on September 6, 2024 (86 FR 72,920).⁴ Upon CXSL's acquisition of SLC's assets, which the Estate indicates occurred on October 1, 2024, CXSL became a rail carrier.⁵ As a

result, the Estate needs authorization to continue in control of CXSL.

The Estate explains that because the SLC rail line acquired by CXSL connects to the CXRG mainline at Sugar Junction, Colo., the Estate cannot seek continuance in control authority pursuant to the class exemption at 49 CFR 1180.2(d)(2). (Pet. 4, 6); *see* 49 CFR 1180.2(d)(2) (requiring that the subject line not connect with any other rail lines in the corporate family). No additional rail carriers connect to the line that CXSL acquired from SLC. (*See* Pet., Ex. A.)

In support of its petition, the Estate asserts that its proposed control of CXSL is part of an overall transaction that is intended to continue and enhance the rail service provided to shippers along the former SLC rail line. (Pet. 7.) In particular, the Estate states that its control would allow farmers along the rail line to increase their railroad shipments, as some of those shippers are currently shipping by truck due in part to the inability of SLC to meet their needs. (*Id.*) The Estate asserts that its control of CXSL would enable the infusion of resources and other support necessary to achieve these objectives. (*Id.*) Given these circumstances, the Estate argues that exempting it from the requirements of 49 U.S.C. 11323–24 is consistent with the rail transportation policy of 49 U.S.C. 10101 (RTP). (*Id.*)

The Estate also asserts that the transaction is limited in scope, as it is confined to a 13-mile, stub-ended rail line, and that CXSL intends to continue rail service and try to expand it. (*Id.* at 8.) The Estate also claims that its control of CXSL would not result in an abuse of market power; instead, it asserts that no shipper along the CXSL line will lose rail service options because of the transaction and that efficiencies and improvements through CXSL's connection to CXRG should enhance existing service and incentivize use of the line by new shippers. (*Id.* at 8–9.)

The Estate seeks expedited consideration of its petition. As noted, *supra* note 6, the Estate has placed its membership interest in CXSL into a voting trust until the control authority sought in this docket becomes effective. The Estate requests expedition to minimize the length of time the

membership interest must remain in the voting trust. (*Id.* at 10.)

Discussion and Conclusions

Under 49 U.S.C. 11323(a)(5), prior approval by the Board is required for the acquisition of control over a rail carrier by a person that is not a rail carrier but that controls any number of rail carriers. Under 49 U.S.C. 10502(a), the Board, to the maximum extent consistent with 49 U.S.C. subtitle IV, part A, must exempt a transaction or service from regulation if it finds that: (1) regulation is not necessary to carry out the RTP; and (2) either (a) the transaction or service is limited in scope, or (b) regulation is not needed to protect shippers from the abuse of market power.

In this case, an exemption from the prior approval requirements of 49 U.S.C. 11323–25 is consistent with the standards of 49 U.S.C. 10502. Detailed scrutiny of the proposed transaction through an application for review and approval under 49 U.S.C. 11323–25 is not necessary to carry out the RTP. An exemption would promote the RTP by minimizing the need for federal regulatory control over the proposed transaction, 49 U.S.C. 10101(2), by reducing regulatory barriers to entry, 49 U.S.C. 10101(7), and by facilitating the honest and efficient management of railroads, 49 U.S.C. 10101(9). Granting the Estate an exemption to control CXSL would also allow it to make investments in the rail line and support a more efficient connection between it and the CXRG mainline; this would facilitate the development and continuation of a sound rail transportation system with effective competition to meet the needs of the public, 49 U.S.C. 10101(4), and foster sound economic conditions in transportation, 49 U.S.C. 10101(5). The exemption would also promote energy conservation by incentivizing the diversion to rail of traffic currently moving by truck, 49 U.S.C. 10101(14). Other aspects of the RTP would not be adversely affected.

Regulation of the transaction is not needed to protect shippers from an abuse of market power.⁶ Because the line that CXSL has acquired connects only to CXRG, there is no risk that CXSL may foreclose interchange with other connecting carriers or that shippers will otherwise lose access to alternative rail service as a result of the transaction. And, as noted above, the transaction would enable improvements that could make the line a more attractive option for rail users. Moreover, no shipper (or

¹ According to the petition, CXR is a wholly owned subsidiary of KCVN. (Pet. 2 n.1.) In a letter filed with the Board on September 16, 2024, the Estate clarified that the Estate and Stefan Soloviev each own 50% of KCVN. (Estate Letter 1.) Stefan Soloviev is the executor of the Estate. (Pet. 2–3.)

² *See Colo. Pac. Rio Grande R.R.—Acquis. & Operation Exemption Containing Interchange Commitment—San Luis & Rio Grande R.R.*, FD 36656 (STB served Jan. 5, 2023) (granting CXRG authority to acquire and operate the assets of the San Luis Rio Grande Railroad (SLRG)); *Soloviev ex rel. Solow—Continuance in Control Exemption—Colo. Pac. Rio Grande R.R.*, FD 36662 (STB served Feb. 2, 2023) (granting the Estate authority to continue in control of CXRG). Subsequently, CXRG received authority to acquire and operate approximately 1.53 miles of additional SLRG track known as the Blanca Spur. *See Colo. Pac. Rio Grande R.R.—Pet. for Exemption—Acquis. & Operation of a Line of R.R. in Costilla Cnty., Colo.*, FD 36694 (STB served Sept. 18, 2023).

³ According to the Estate, it is intended that CXR, CXRG, and CXSL will all eventually be owned and controlled by the Soloviev Group, a noncarrier corporation headed by Stefan Soloviev. (Pet. 3 n.3.) The petition states that such transition will be accompanied by the appropriate regulatory filings to the Board. (*Id.*)

⁴ The owners of SLC and Soloviev Investors executed an Asset Purchase Agreement on July 26, 2024, whereby the track assets and certain other assets of SLC were to be sold to Soloviev Investors or “its permitted assignee,” and Soloviev Investors assigned all of its rights in the Asset Purchase Agreement to CXSL on July 31, 2024. *See Colo. Pac. San Luis R.R.—Acquis. & Operation Exemption*, FD 36794, slip op. at 1.

⁵ The Estate's continuance in control petition in this docket noted that CXSL's acquisition and operating authority granted in Docket No. FD 36794 could become effective and that transaction could close before the Board's decision on the Estate's continuance in control authority becomes effective. For that reason, the Estate indicated that it would enter into a voting trust agreement pursuant to 49 CFR part 1013 to permit CXSL to begin operations immediately upon receiving acquisition and operating authority, while ensuring that the Estate does not control CXSL until the continuance in control authority becomes effective. (Pet. 4.) The

acquisition and operating authority granted in Docket No. FD 36794 became effective on September 22, 2024. On October 7, 2024, the Estate filed a copy of its voting trust agreement with the Board, as required by 49 CFR 1013.3(b). The voting trust agreement, which was executed on October 1, 2024, indicates that CXSL exercised its acquisition and operating authority on the same date. (Voting Trust Agreement 1.)

⁶ Given this finding, the Board need not determine whether the transaction is limited in scope. *See* 49 U.S.C. 10502(a).

any other entity) has objected to this continuance in control transaction or CXSL's line acquisition authorized in Docket No. FD 36794. Nevertheless, to ensure that the shippers are informed of our action, we will require the Estate to serve a copy of this decision on all shippers on the line that was acquired and is now operated by CXSL within five days of the service date of this decision and certify to the Board that it has done so.

Under 49 U.S.C. 10502(g), the Board may not use its exemption authority to relieve a rail carrier of its statutory obligation to protect the interests of its employees. However, 49 U.S.C. 11326(c) does not provide for labor protection for transactions under 49 U.S.C. 11324 and 11325 that involve only Class III rail carriers. Accordingly, the Board may not impose labor protective conditions here because all carriers involved are Class III carriers.

The control transaction is exempt from environmental reporting requirements under 49 CFR 1105.6(c)(1)(i) because it would not result in any significant change in carrier operations. Similarly, the transaction is exempt from the historic reporting requirements under 49 CFR 1105.8(b)(3), because it would not substantially change the level of maintenance of railroad properties.

The Board also finds the Estate's request for expedited action on its petition for exemption to be reasonable under the circumstances and, therefore, the effective date of the exemption will be December 6, 2024. *See* 49 CFR 1121.4(e) ("Unless otherwise specified in the decision, an exemption generally will be effective 30 days from the service date of the decision granting the exemption."). Petitions for stay must be filed by November 29, 2024. Petitions to reopen will be due by December 11, 2024.

It is ordered:

1. Under 49 U.S.C. 10502, the Board exempts the transaction described above from the prior approval requirements of 49 U.S.C. 11323–25.

2. Notice of this control exemption will be published in the **Federal Register**.

3. The Estate shall serve a copy of the decision on all shippers on the CXSL line and certify to the Board that it has done so, by November 26, 2024.

4. The control exemption will become effective on December 6, 2024. Petitions to stay must be filed by November 29, 2024. Petitions to reopen must be filed by December 11, 2024.

Decided: November 18, 2024.

By the Board, Board Members Fuchs, Hedlund, Primus, and Schultz.

Kenyatta Clay,
Clearance Clerk.

[FR Doc. 2024–27303 Filed 11–20–24; 8:45 am]

BILLING CODE 4915–01–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Notice of Solicitation for Nominations for Appointment to the Bessie Coleman Women in Aviation (BCWA) Advisory Committee

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Solicitation of nominations for appointment to the BCWA Advisory Committee.

SUMMARY: FAA is publishing this notice to solicit nominations for membership on the BCWA Advisory Committee.

DATES: Nominations must be received no later than 6:00 p.m. Eastern Time on December 23, 2024. Nominations received after the above due date may be retained for evaluation for future BCWA Advisory Committee vacancies after all other nominations received by the due date have been evaluated and considered.

ADDRESSES: Nominations can be submitted electronically (by email) to BCWAAC@faa.gov. The subject line should state, "2024 BCWA Advisory Committee Nomination." Anyone wishing to submit an application by paper may do so by contacting BCWAAC@faa.gov or by calling 202–267–5869.

FOR FURTHER INFORMATION CONTACT: Thomas W. Cuddy, Federal Aviation Administration, 800 Independence Avenue SW, Washington, DC 20591, telephone (202) 267–5869; email to BCWAAC@faa.gov.

SUPPLEMENTARY INFORMATION:

Further Instructions for Submission of Nominations

When emailing nominations as directed in the **ADDRESSES** section, the body of the email must contain content or attachments that address all requirements as specified in the below "Materials to Submit" section. Incomplete/partial submittals, as well as those that exceed the specified document length, may not be considered for evaluation. An email confirmation from the FAA will be sent upon receipt of all complete nominations that meet the criteria in the

"Materials to Submit" section. The FAA will notify those appointed to serve on the BCWA Advisory Committee in writing.

Background

The BCWA Advisory Committee is an advisory committee established under DOT's authority as specified in section 403 of the FAA Reauthorization Act of 2024, Public Law (Pub. L.) 118–63, and in accordance with the provisions of the Federal Advisory Committee Act as amended, Public Law 92–463, 5 U.S.C. Ch. 10. The objective of the BCWA Advisory Committee is to provide independent advice and recommendations to the FAA and in response to specific taskings received directly from DOT or the FAA or approved by a majority of the voting members of the Committee. The advice, recommendations, and taskings relate to promoting the recruitment, retention, employment, education, training, career advancement, and well-being of women in the aviation industry and aviation-focused Federal civil service positions. In response to DOT or FAA requests, the BCWA Advisory Committee may provide DOT and the FAA with information that may be used for planning purposes.

This notice seeks to fill vacancies on the BCWA Advisory Committee.

Description of Duties

The BCWA Advisory Committee acts solely in an advisory capacity and does not exercise program management responsibilities. Decisions directly affecting the implementation of transportation policy will remain with the Secretary of Transportation and the FAA Administrator, as appropriate. The BCWA Advisory Committee duties include:

a. Undertaking tasks assigned only by the FAA or DOT or approved by a majority of the voting members of the Committee, without duplicating the objectives of the Air Carrier Training Aviation Rulemaking Committee.

b. Deliberating on and approving recommendations for assigned tasks in meetings open to the public.

c. Responding to ad hoc informational requests from DOT or the FAA and/or providing input to DOT or the FAA on the overall BCWA Advisory Committee structure (including structure of the subcommittees and or task groups).

Membership: The membership must be balanced in terms of points of view represented and the functions performed. The stakeholder groups represented on the BCWA Advisory Committee include the following:

- (i) Aircraft manufacturers and aerospace companies.
- (ii) Public and private aviation labor organizations, including collective bargaining representatives of—
 - (I) aviation safety inspectors and safety engineers of the FAA;
 - (II) air traffic controllers;
 - (III) certified aircraft maintenance technicians; and
 - (IV) commercial airline crewmembers.
- (iii) General aviation operators.
- (iv) Air carriers.
- (v) Business aviation operators, including poweredlift operators.
- (vi) Unmanned aircraft systems operators.
- (vii) Aviation safety management experts.
- (viii) Aviation maintenance, repair, and overhaul entities.
- (ix) Airport owners, operators, and employees.
- (x) Institutions of higher education (as defined in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001)), a postsecondary vocational institution (as defined in section 102(c) of the Higher Education Act of 1965 (20 U.S.C. 1002)), or a high school or secondary school (as such terms are defined in section 8101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7801)).
- (xi) A flight school that provides flight training, as defined in part 61 of title 14, Code of Federal Regulations, or that holds a pilot school certificate under part 141 of title 14, Code of Federal Regulations.
- (xii) Aviation maintenance technician schools governed under part 147 of title 14, Code of Federal Regulations.
- (xiii) Engineering business associations.
- (xiv) Civil Air Patrol.
- (xv) Nonprofit organizations within the aviation industry.

All BCWA Advisory Committee members serve at the pleasure of the Secretary of Transportation. Membership selection will be based on materials submitted and in a manner that ensures equal opportunity for all people consistent with all Federal anti-discrimination laws that prohibit discrimination on the basis of race, color, religion, sex, gender identity, sexual orientation, national origin, disability or age. Membership solicitation will be undertaken in a manner that encourages participation by members of underrepresented and underserved communities in accordance with Executive Order 13985. The BCWA Advisory Committee will have no more than 25 voting members. Additional nonvoting members may be appointed from among officers or employees of the

FAA, as well as from the Department of Education and Department of Labor. Other membership terms include:

- a. The Chairperson shall serve a 2-year term. Each voting member and nonvoting member of the Committee shall be appointed for a 2-year term but can continue to serve until their replacement is chosen or they are reappointed.
- b. Service without charge and without government compensation.
- c. Representation of a particular interest of employment, education, experience, or affiliation with a specific aviation-related organization.
- d. Ability to attend all BCWA Advisory Committee meetings (estimated at least two meetings per year), in-person or virtually.

Qualifications: Candidates must be in good public standing and bring a unique perspective that will help advance the BCWA Advisory Committee's goals to promote the recruitment, retention, employment, education, training, career advancement, and well-being of women in the aviation industry and aviation-focused Federal civil service positions. In rare circumstances, membership may be granted to uniquely qualified individuals who do not meet the previous requirement.

Materials to Submit: Candidates are required to submit, in full, the following materials to be considered for BCWA Advisory Committee membership. Failure to submit the required information may disqualify a candidate from the review process.

- a. A short biography of the nominee, including professional and academic credentials.
- b. A résumé or curriculum vitae, which must include relevant job experience, qualifications, as well as contact information (email, telephone, and mailing address).
- c. A one-page statement describing how the candidate will benefit the BCWA Advisory Committee, considering a primary and secondary interest to which the candidate's expertise best aligns and the candidate's unique perspective that will advance the conversation.

- d. A short statement describing the candidate's previous experience on Federal Advisory Committees and/or Aviation Rulemaking Committees (if any), their level of knowledge in their above stakeholder groups, and the size

of their constituency they represent or are able to reach.

Natasha A. Durkins,

Executive Director, Office of Aviation Policy & Plans.

[FR Doc. 2024–27389 Filed 11–19–24; 11:15 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration Aviation Rulemaking Advisory Committee; Meeting

AGENCY: Federal Aviation Administration (FAA), Department of Transportation.

ACTION: Notice of Aviation Rulemaking Advisory Committee (ARAC) meeting.

SUMMARY: This notice announces a meeting of the ARAC.

DATES: The FAA will hold the meeting on Thursday, December 12, 2024, from 1 p.m. to 4 p.m. eastern time.

The FAA must receive requests to attend the meeting by Thursday, December 5, 2024.

The FAA must receive requests for accommodations to a disability by Thursday, December 5, 2024.

The FAA must receive any written materials for the meeting by Thursday, December 5, 2024.

ADDRESSES: The meeting will be held at the Federal Aviation Administration, 800 Independence Avenue SW, Washington, DC 20591, and virtually on Zoom. However, if the FAA is unable to hold the meeting in person due to circumstances outside of its control, the FAA will hold a virtual meeting, notifying registrants of the meeting details and posting any updates on the FAA Committee website. Members of the public who wish to observe the meeting must RSVP by emailing 9-awa-arac@faa.gov. General committee information, including copies of the meeting minutes, will be available on the FAA Committee website (https://www.faa.gov/regulations_policies/rulemaking/committees/documents/) at least one week in advance of the meeting.

FOR FURTHER INFORMATION CONTACT:

Aliah Duckett, Federal Aviation Administration, Office of Rulemaking, 800 Independence Avenue SW, Washington, DC 20591, 9-awa-arac@faa.gov or (202) 267–6952. Any committee-related request should be sent to the person listed in this section.

SUPPLEMENTARY INFORMATION:

I. Background

ARAC was established on January 22, 1991, under the Federal Advisory Committee Act (FACA) and pursuant to title 5 of the United States Code (5 U.S.C. Ch.10.), as a discretionary committee. The purpose of ARAC is to provide information, advice, and recommendations to the Secretary of Transportation, through the FAA Administrator, concerning rulemaking activities, such as aircraft operations, airman and air agency certification, airworthiness standards and certification, airports, maintenance, noise, and training.

II. Agenda

At the meeting, the agenda will cover the following topics:

- Welcome and Introductions
- Federal Advisory Committee Act (FACA) Statement
- Ratification of Minutes
- Status Updates and Recommendation Reports
 - Airman Certification System Working Group
 - Transport Airplane and Engine (TAE) Subcommittee
 - Flight Test Harmonization Working Group
 - Ice Crystals Icing Working Group
 - Engine and Powerplant Interface Working Group
- Any Other Business
- FAA Update on Regulatory Activities
- Adjourn

Detailed agenda information will be posted on the FAA Committee website address listed in the **ADDRESSES** section at least one week in advance of the meeting.

III. Public Participation

The meeting will be open to the public for virtual or in-person attendance on a first-come, first-served basis, as there is limited space. Please confirm your attendance with the person listed in the **FOR FURTHER INFORMATION CONTACT** section and provide the following information: full legal name, country of citizenship, and name of your industry association or applicable affiliation. Please indicate if you plan to observe the meeting in person or virtually. The FAA will email registrants the meeting access information in a timely manner prior to the start of the meeting.

The DOT is committed to providing equal access to this meeting for all participants. If you need alternative formats or services because of a disability, such as sign language, interpretation, or other ancillary aids, please contact the person listed in the

FOR FURTHER INFORMATION CONTACT section of this notice no later than one week prior to the meeting.

The FAA is not accepting oral presentations at the meeting due to time constraints. Members of the public may present written statements to ARAC by providing a copy to the Designated Federal Officer via the email listed in the **FOR FURTHER INFORMATION CONTACT** section of this notice no later than one week before the meeting. Advance submissions that become part of the committee deliberations will become part of the official record of the meeting.

Issued in Washington, DC, on November 18, 2024.

Brandon Roberts,

Executive Director, Office of Rulemaking.

[FR Doc. 2024–27267 Filed 11–20–24; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Motor Carrier Safety Administration

[Docket No. FMCSA–2024–0238]

Parts and Accessories Necessary for Safe Operation; Application for an Exemption From Coffeyville Resources Crude Transportation, USDOT#1236378

AGENCY: Federal Motor Carrier Safety Administration (FMCSA), Department of Transportation.

ACTION: Notice of application for exemption; request for comments.

SUMMARY: The Federal Motor Carrier Safety Administration (FMCSA) requests public comment on an application from Coffeyville Resources Crude Transportation, USDOT No. 1236378, (Coffeyville) for an exemption from the requirement that lighting devices be steady burning. The exemption would allow the company to operate commercial motor vehicles (CMVs) equipped with a module manufactured by Intellistop, Inc. (Intellistop) which pulses the rear clearance, identification, and brake lamps from low-level lighting intensity to high-level lighting intensity 4 times in 2 seconds when the brakes are applied. FMCSA requests public comment on the applicant's request for exemption.

DATES: Comments must be received on or before December 23, 2024.

ADDRESSES: You may submit comments identified by Federal Docket Management System (FDMS) Number FMCSA–2024–0238 by any of the following methods:

- *Federal eRulemaking Portal:* www.regulations.gov. Follow the online instructions for submitting comments. See the Public Participation and Request for Comments section below for further information.

- *Mail:* Dockets Operations, U.S. Department of Transportation, 1200 New Jersey Avenue SE, West Building, Ground Floor, Room W12–140, Washington, DC 20590–0001.

- *Hand Delivery or Courier:* West Building, Ground Floor, 1200 New Jersey Avenue SE, between 9 a.m. and 5 p.m. E.T., Monday through Friday, except Federal holidays.

- *Fax:* (202) 493–2251.

Each submission must include the Agency name and the docket number (FMCSA–2024–0238) for this notice. Note that DOT posts all comments received without change to www.regulations.gov, including any personal information included in a comment. Please see the Privacy Act heading below.

Docket: For access to the docket to read background documents or comments, go to www.regulations.gov at any time or visit the ground level of the West Building, 1200 New Jersey Avenue SE, Washington, DC, between 9 a.m. and 5 p.m., ET, Monday through Friday, except Federal holidays. To be sure someone is there to help you, please call (202) 366–9317 or (202) 366–9826 before visiting Dockets Operations.

Privacy Act: In accordance with 49 U.S.C. 31315(b), DOT solicits comments from the public to better inform its exemption process. DOT posts these comments, including any personal information the commenter provides, to www.regulations.gov, as described in the system of records notice DOT/ALL–14 FDMS, which can be reviewed at <https://www.transportation.gov/privacy>. The comments are posted without edit and are searchable by the name of the submitter.

FOR FURTHER INFORMATION CONTACT: Mr. David Sutula, Vehicle and Roadside Operations Division, Office of Carrier, Driver, and Vehicle Safety, FMCSA, at (202) 366–9209, or by email at MCPSV@dot.gov.

If you have questions on viewing or submitting material to the docket, contact Dockets Operations at (202) 366–9826.

SUPPLEMENTARY INFORMATION:

I. Public Participation and Request for Comments

A. Submitting Comments

If you submit a comment, please include the docket number for this notice (Docket No. FMCSA–2024–0238),

indicate the specific section of this document to which your comment applies, and provide a reason for each suggestion or recommendation. You may submit your comments and material online or by fax, mail, or hand delivery, but please use only one of these means. FMCSA recommends that you include your name and a mailing address, an email address, or a phone number in the body of your document so that FMCSA can contact you if it has questions regarding your submission.

To submit your comment online, go to <https://www.regulations.gov/docket/FMCSA-2024-0238/document>, click on this notice, click "Comment," and type your comment into the text box on the following screen.

If you submit your comments by mail or hand delivery, submit them in an unbound format, no larger than 8 1/2 by 11 inches, suitable for copying and electronic filing.

FMCSA will consider all comments and material received during the comment period. Comments received after the comment closing date will be filed in the public docket and will be considered to the extent practicable.

B. Confidential Business Information (CBI)

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to the notice contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to the notice, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission that constitutes CBI as "PROPIN" to indicate it contains proprietary information. FMCSA will treat such marked submissions as confidential under the Freedom of Information Act, and they will not be placed in the public docket of the notice. Submissions containing CBI should be sent to Brian Dahlin, Chief, Regulatory Evaluation Division, Office of Policy, FMCSA, 1200 New Jersey Avenue SE, Washington, DC 20590–0001 or via email at brian.g.dahlin@dot.gov. At this time, you need not send a duplicate hardcopy of your electronic CBI submissions to FMCSA headquarters. Any comments FMCSA receives not specifically designated as CBI will be placed in the public docket for this notice.

C. Viewing Comments and Documents

To view comments, as well as any documents mentioned in this preamble as being available in the docket, go to <https://www.regulations.gov/docket/FMCSA-2024-0238/document> and choose the document to review. To view comments, click this notice, then click "Browse Comments." If you do not have access to the internet, you may view the docket online by visiting Docket Operations on the ground floor of the DOT West Building, 1200 New Jersey Avenue SE., Washington, DC 20590–0001, between 9 a.m. and 5 p.m., ET Monday through Friday, except Federal holidays. To be sure someone is there to help you, please call (202) 366–9317 or (202) 366–9826 before visiting Dockets Operations.

II. Legal Basis

FMCSA has authority under 49 U.S.C. 31136(e) and 31315(b) to grant exemptions from Federal Motor Carrier Safety Regulations (FMCSRs). FMCSA must publish a notice of each exemption request in the **Federal Register** (49 CFR 381.315(a)). The Agency must provide the public an opportunity to inspect the information relevant to the application, including the applicant's safety analysis. The Agency must provide an opportunity for public comment on the request.

The Agency reviews safety analyses and public comments submitted and determines whether granting the exemption would likely achieve a level of safety equivalent to, or greater than, the level that would be achieved by the current regulation (49 CFR 381.305(a)). The Agency must publish its decision in the **Federal Register** (49 CFR 381.315(b)). If granted, the notice will identify the regulatory provision from which the applicant will be exempt, the effective period, and all terms and conditions of the exemption (49 CFR 381.315(c)(1)). If the exemption is denied, the notice will explain the reason for the denial (49 CFR 381.315(c)(2)). The exemption may be renewed (49 CFR 381.300(b)).

III. Coffeyville's Request

Coffeyville seeks an exemption from the requirement in 49 CFR 393.25(e) that all exterior lamps (both required lamps and any additional lamps) 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 CMVs transporting oversized loads, and warning lamps on emergency and

service vehicles authorized by State or local authorities.

Coffeyville asserts that using the Intellistop module, which pulses the rear clearance, identification, and brake lamps from low-level lighting intensity to high-level lighting intensity 4 times in 2 seconds when the brakes are applied rather than providing steady burning lamps during the first 2 seconds, would enhance rear signal systems. Coffeyville submits that pulsing the rear brake lamps of a CMV may significantly increase visibility and reduce the frequency of rear-end crashes, and thus would maintain a level of safety that is equivalent to, or greater than, the level that the CMV would achieve without the requested exemption.

On October 7, 2022, FMCSA denied Intellistop's application for an industry-wide exemption to allow all motor carriers to operate CMVs equipped with Intellistop's module. (87 FR 61133.) FMCSA noted that the decision did not preclude individual motor carriers from seeking an exemption from 49 CFR 393.25(e) to purchase, install, and use Intellistop's device subject to terms and conditions to allow sufficient monitoring of the use of the device. Therefore, consistent with the October 7, 2022, decision, the Agency seeks public comment on Coffeyville's carrier-specific exemption application.

A copy of Coffeyville's application is included in the docket referenced at the beginning of this notice.

IV. Request for Comments

In accordance with 49 U.S.C. 31315(b), FMCSA requests public comment from all interested persons on Coffeyville's application for a five-year exemption from 49 CFR 393.25(e) to allow the company to operate CMVs equipped with Intellistop's module which pulses the rear clearance, identification and brake lamps from low-level lighting intensity to high-level lighting intensity 4 times in 2 seconds when the brakes are applied.

All comments received before the close of business on the comment closing date 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 may be considered to the extent practicable. In addition to late comments, FMCSA will also continue to file, in the public docket, relevant information that becomes available after the comment closing date. Interested

persons should continue to examine the public docket for new material.

Larry W. Minor,
Associate Administrator for Policy.
[FR Doc. 2024–27269 Filed 11–20–24; 8:45 am]
BILLING CODE 4910–EX–P

DEPARTMENT OF TRANSPORTATION

Federal Motor Carrier Safety Administration

[Docket No. FMCSA–2024–0091]

Agency Information Collection Activities; Approval of a New Information Collection Request: Quantitative Data on Commercial Motor Vehicle Drivers Safety Belt Usage

AGENCY: Federal Motor Carrier Safety Administration (FMCSA), Department of Transportation (DOT).
ACTION: Notice and request for comments.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995, FMCSA announces its plan to submit the Information Collection Request (ICR) described below to the Office of Management and Budget (OMB) for review and approval. This notice announces that FMCSA intends to use quantitative data collection techniques through a self-administered online survey to understand commercial motor vehicle (CMV) drivers’ perceptions and behaviors regarding safety belt usage and road safety. Four comments were received from the public in response to the 60-day **Federal Register** notice.
DATES: Comments on this notice must be received on or before December 23, 2024.
ADDRESSES: Written comments and recommendations for the proposed information collection should be submitted within 30 days of publication of this notice to www.reginfo.gov/public/do/PRAMain. Find this information collection by selecting “Currently under 30-day Review—Open

for Public Comments” or by using the search function.
FOR FURTHER INFORMATION CONTACT: Brian Ronk, Marketing Specialist, Office of Outreach and Education, DOT, FMCSA, West Building 6th Floor, 1200 New Jersey Avenue SE, Washington, DC 20590–0001; (202) 366–1072; Brian.Ronk@dot.gov.
SUPPLEMENTARY INFORMATION:
Title: Online Survey on Safety Belt Usage of Commercial Motor Vehicle Drivers.
OMB Control Number: 2126–00XX.
Type of Request: New ICR.
Respondents: Commercial motor vehicle drivers residing in the United States.
Estimated Number of Respondents: 1,060.
Estimated Time per Response: 10 minutes.
Expiration Date: This is a new ICR.
Frequency of Response: Other—The survey will be conducted over a three-to-four-week period.

ESTIMATED TOTAL ANNUAL BURDEN

Category of respondent	Number of respondents	Participation time (minutes)	Burden (hours)
Pre-testing survey instrument	10	10	1.66
Piloting the survey	50	10	8.33
Self-administered survey	1,000	10	166.66
Totals	1,060	10	176.65

Background

Existing data on the usage of safety belts and perceptions related to road safety do not capture the diversity of different types of CMV drivers in a post-coronavirus disease 2019 pandemic landscape. Understanding safety belt usage and perceptions of road safety among CMV drivers will assist FMCSA in gauging emerging trends among this cohort and will inform future messaging and communication efforts targeting CMV drivers.
Eligible participants are self-identified CMV drivers residing in the United States with internet access. The collection is an online voluntary survey, with a low burden for respondents and a low cost for the Federal Government. The collection is non-controversial and does not raise issues of concern to other Federal agencies. The results are not intended to be disseminated to the public, and the information gathered will not be used for the purpose of substantially informing influential policy decisions. The collection is targeted to the solicitation of opinions

from respondents who have experience with the program or may have experience with the program in the future. Personally identifiable information (PII) is not being collected. There are no gifts or payment incentives (e.g., money or reimbursement of expenses, a token of appreciation) being provided to participants.
The following public comments were received in response to the 60-day **Federal Register** notice, which was published on June 13, 2024 (89 FR 50402):
FMCSA received four public comments in response to the 60-day notice regarding the proposed survey on safety belt usage by commercial motor vehicle drivers. Three comments provided personal perspectives on safety belt use and broader reflections on safety belt mandates. One comment questioned the need and cost of the survey and whether a Federal law on safety belt usage is intended because of the survey’s proposed data collection.
In reply to this comment, the data collected in the proposed survey will

help FMCSA identify attitudes and behaviors related to safety belt usage among commercial motor vehicle drivers. The data gained from this undertaking will inform targeted communication strategies directed at commercial motor vehicle drivers related to safety belt use compliance. FMCSA develops and enforces regulations to ensure safety on the nation’s highways but does not have the authority to create Federal laws. The proposed study’s overall cost is less than thirty-six thousand dollars.
Public Comments Invited: You are asked to comment on any aspect of this information collection, including: (1) whether the proposed collection is necessary for the performance of FMCSA’s functions; (2) the accuracy of the estimated burden; (3) ways for FMCSA to enhance the quality, usefulness, and clarity of the collected information; and (4) ways that the burden could be minimized without reducing the quality of the collected information.

Issued under the authority of 49 CFR 1.87.
Thomas P. Keane,
Associate Administrator, Office of Research
and Registration.
[FR Doc. 2024-27270 Filed 11-20-24; 8:45 am]
BILLING CODE 4910-EX-P

DEPARTMENT OF TRANSPORTATION

Maritime Administration

[Docket No. MARAD-2024-0145]

Coastwise Endorsement Eligibility Determination for a Foreign-Built Vessel: **LEVERAGE (Motor)**; Invitation for Public Comments

AGENCY: Maritime Administration, DOT.
ACTION: Notice.

SUMMARY: The Secretary of Transportation, as represented by the Maritime Administration (MARAD), is authorized to issue coastwise endorsement eligibility determinations for foreign-built vessels which will carry no more than twelve passengers for hire. A request for such a determination has been received by MARAD. By this notice, MARAD seeks comments from interested parties as to any effect this action may have on U.S. vessel builders or businesses in the U.S. that use U.S.-flag vessels. Information about the requestor's vessel, including a brief description of the proposed service, is listed below.

DATES: Submit comments on or before December 23, 2024.

ADDRESSES: You may submit comments identified by DOT Docket Number MARAD-2024-0145 by any one of the following methods:

- *Federal eRulemaking Portal:* Go to <https://www.regulations.gov>. Search MARAD-2024-0145 and follow the instructions for submitting comments.
- *Mail or Hand Delivery:* Docket Management Facility is in the West Building, Ground Floor of the U.S. Department of Transportation. The Docket Management Facility location address is U.S. Department of Transportation, MARAD-2024-0145, 1200 New Jersey Avenue SE, West Building, Room W12-140, Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except on Federal holidays.

Note: If you mail or hand-deliver your comments, we recommend that you include your name and a mailing address, an email address, or a telephone number in the body of your document so that we can contact you if we have questions regarding your submission.

Instructions: All submissions received must include the agency name and

specific docket number. All comments received will be posted without change to the docket at www.regulations.gov, including any personal information provided. For detailed instructions on submitting comments, or to submit comments that are confidential in nature, see the section entitled Public Participation.

FOR FURTHER INFORMATION CONTACT:

Patricia Hagerty, U.S. Department of Transportation, Maritime Administration, 1200 New Jersey Avenue SE, Room W23-461, Washington, DC 20590. Telephone: (202) 366-0903. Email: patricia.hagerty@dot.gov.

SUPPLEMENTARY INFORMATION: As described in the application, the intended service of the vessel **LEVERAGE** is:

Intended Commercial Use of Vessel: Requester intends to offer passenger charters.

Geographic Region Including Base of Operations: Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, the east coast of Florida, and between Ketchikan and Juneau, Alaska. Base of Operations: Fort Lauderdale, Florida.

Vessel Length and Type: 115' Motor yacht.

The complete application is available for review identified in the DOT docket as MARAD 2024-0145 at <https://www.regulations.gov>. Interested parties may comment on the effect this action may have on U.S. vessel builders or businesses in the U.S. that use U.S.-flag vessels. If MARAD determines, in accordance with 46 U.S.C. 12121 and MARAD's regulations at 46 CFR part 388, that the employment of the vessel in the coastwise trade to carry no more than 12 passengers will have an unduly adverse effect on a U.S.-vessel builder or a business that uses U.S.-flag vessels in that business, MARAD will not issue an approval of the vessel's coastwise endorsement eligibility. Comments should refer to the vessel name, state the commenter's interest in the application, and address the eligibility criteria given in section 388.4 of MARAD's regulations at 46 CFR part 388.

Public Participation

How do I submit comments?

Please submit your comments, including the attachments, following the instructions provided under the above heading entitled **ADDRESSES**. Be advised that it may take a few hours or even days for your comment to be reflected

on the docket. In addition, your comments must be written in English. We encourage you to provide concise comments and you may attach additional documents as necessary. There is no limit on the length of the attachments.

Where do I go to read public comments, and find supporting information?

Go to the docket online at <https://www.regulations.gov>, keyword search MARAD-2024-0145 or visit the Docket Management Facility (see **ADDRESSES** for hours of operation). We recommend that you periodically check the Docket for new submissions and supporting material.

Will my comments be made available to the public?

Yes. Be aware that your entire comment, including your personal identifying information, will be made publicly available.

May I submit comments confidentially?

If you wish to submit comments under a claim of confidentiality, you should submit the information you claim to be confidential commercial information by email to SmallVessels@dot.gov. Include in the email subject heading "Contains Confidential Commercial Information" or "Contains CCI" and state in your submission, with specificity, the basis for any such confidential claim highlighting or denoting the CCI portions. If possible, please provide a summary of your submission that can be made available to the public.

In the event MARAD receives a Freedom of Information Act (FOIA) request for the information, procedures described in the Department's FOIA regulation at 49 CFR 7.29 will be followed. Only information that is ultimately determined to be confidential under those procedures will be exempt from disclosure under FOIA.

Privacy Act

Anyone can search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). For information on DOT's compliance with the Privacy Act, please visit <https://www.transportation.gov/privacy>.

(Authority: 49 CFR 1.93(a), 46 U.S.C. 55103, 46 U.S.C. 12121)

By Order of the Maritime Administrator.
T. Mitchell Hudson, Jr.,
Secretary, Maritime Administration.
[FR Doc. 2024–27274 Filed 11–20–24; 8:45 am]
BILLING CODE 4910–81–P

DEPARTMENT OF TRANSPORTATION

Maritime Administration

[Docket No. MARAD–2024–0148]

Coastwise Endorsement Eligibility Determination for a Foreign-Built Vessel: SEAWARD 14 (Motor); Invitation for Public Comments

AGENCY: Maritime Administration, DOT.
ACTION: Notice.

SUMMARY: The Secretary of Transportation, as represented by the Maritime Administration (MARAD), is authorized to issue coastwise endorsement eligibility determinations for foreign-built vessels which will carry no more than twelve passengers for hire. A request for such a determination has been received by MARAD. By this notice, MARAD seeks comments from interested parties as to any effect this action may have on U.S. vessel builders or businesses in the U.S. that use U.S.-flag vessels. Information about the requestor's vessel, including a brief description of the proposed service, is listed below.

DATES: Submit comments on or before December 23, 2024.

ADDRESSES: You may submit comments identified by DOT Docket Number MARAD–2024–0148 by any one of the following methods:

- *Federal eRulemaking Portal:* Go to <https://www.regulations.gov>. Search MARAD–2024–0148 and follow the instructions for submitting comments.
- *Mail or Hand Delivery:* Docket Management Facility is in the West Building, Ground Floor of the U.S. Department of Transportation. The Docket Management Facility location address is U.S. Department of Transportation, MARAD–2024–0148, 1200 New Jersey Avenue SE, West Building, Room W12–140, Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except on Federal holidays.

Note: If you mail or hand-deliver your comments, we recommend that you include your name and a mailing address, an email address, or a telephone number in the body of your document so that we can contact you if we have questions regarding your submission.

Instructions: All submissions received must include the agency name and

specific docket number. All comments received will be posted without change to the docket at www.regulations.gov, including any personal information provided. For detailed instructions on submitting comments, or to submit comments that are confidential in nature, see the section entitled Public Participation.

FOR FURTHER INFORMATION CONTACT:
Patricia Hagerty, U.S. Department of Transportation, Maritime Administration, 1200 New Jersey Avenue SE, Room W23–461, Washington, DC 20590. Telephone: (202) 366–0903. Email: patricia.hagerty@dot.gov.

SUPPLEMENTARY INFORMATION: As described in the application, the intended service of the vessel SEAWARD 14 is:

Intended Commercial Use of Vessel: Requester intends to use as passenger crew transport.

Geographic Region Including Base of Operations: Virginia, North Carolina, Maryland. Base of Operations: Norfolk, Virginia.

Vessel Length and Type: 48' Motor.
The complete application is available for review identified in the DOT docket as MARAD 2024–0148 at <https://www.regulations.gov>. Interested parties may comment on the effect this action may have on U.S. vessel builders or businesses in the U.S. that use U.S.-flag vessels. If MARAD determines, in accordance with 46 U.S.C. 12121 and MARAD's regulations at 46 CFR part 388, that the employment of the vessel in the coastwise trade to carry no more than 12 passengers will have an unduly adverse effect on a U.S.-vessel builder or a business that uses U.S.-flag vessels in that business, MARAD will not issue an approval of the vessel's coastwise endorsement eligibility. Comments should refer to the vessel name, state the commenter's interest in the application, and address the eligibility criteria given in section 388.4 of MARAD's regulations at 46 CFR part 388.

Public Participation

How do I submit comments?

Please submit your comments, including the attachments, following the instructions provided under the above heading entitled **ADDRESSES**. Be advised that it may take a few hours or even days for your comment to be reflected on the docket. In addition, your comments must be written in English. We encourage you to provide concise comments and you may attach additional documents as necessary. There is no limit on the length of the attachments.

Where do I go to read public comments, and find supporting information?

Go to the docket online at <https://www.regulations.gov>, keyword search MARAD–2024–0148 or visit the Docket Management Facility (see **ADDRESSES** for hours of operation). We recommend that you periodically check the Docket for new submissions and supporting material.

Will my comments be made available to the public?

Yes. Be aware that your entire comment, including your personal identifying information, will be made publicly available.

May I submit comments confidentially?

If you wish to submit comments under a claim of confidentiality, you should submit the information you claim to be confidential commercial information by email to SmallVessels@dot.gov. Include in the email subject heading "Contains Confidential Commercial Information" or "Contains CCI" and state in your submission, with specificity, the basis for any such confidential claim highlighting or denoting the CCI portions. If possible, please provide a summary of your submission that can be made available to the public.

In the event MARAD receives a Freedom of Information Act (FOIA) request for the information, procedures described in the Department's FOIA regulation at 49 CFR 7.29 will be followed. Only information that is ultimately determined to be confidential under those procedures will be exempt from disclosure under FOIA.

Privacy Act

Anyone can search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). For information on DOT's compliance with the Privacy Act, please visit <https://www.transportation.gov/privacy>.

(Authority: 49 CFR 1.93(a), 46 U.S.C. 55103, 46 U.S.C. 12121)

By Order of the Maritime Administrator.
T. Mitchell Hudson, Jr.,
Secretary, Maritime Administration.
[FR Doc. 2024–27275 Filed 11–20–24; 8:45 am]
BILLING CODE 4910–81–P

DEPARTMENT OF TRANSPORTATION**Maritime Administration****U.S. Merchant Marine Academy
Advisory Council; Public Meeting****AGENCY:** Maritime Administration, DOT.**ACTION:** Notice of public meeting.

SUMMARY: The U.S. Department of Transportation, Maritime Administration (MARAD) announces a meeting of the U.S. Merchant Marine Academy (USMMA) Advisory Council (Council). During the meeting, the USMMA leadership will provide an update on programs and priorities, including governance, sexual assault and sexual harassment prevention, academics, culture and diversity, and facilities and infrastructure.

DATES: December 6, 2024, 9 a.m. to 12 p.m. EST.

Written statements to be considered during the meeting must be received via email to USMMAAdvisoryCouncil@dot.gov no later than November 29, 2024. Requests for accommodations for a disability must be received via email by November 28, 2024.

ADDRESSES: The meeting will be held in-person at USMMA. Meeting location and access information will be posted no later than November 29, 2024, on the Council's website, along with other general information, at www.maritime.dot.gov/outreach/united-states-merchant-marine-academy-advisory-council. Requests to attend the meeting must be received by November 28, 2024, and permission will be based on space available. Requests will be taken as they are received until available spaces are full.

FOR FURTHER INFORMATION CONTACT: The Council's Designated Federal Officer and Point of Contact, Mary Grice, 202-366-4264 or via email to USMMAAdvisoryCouncil@dot.gov.

SUPPLEMENTARY INFORMATION:**Background**

The Council is established pursuant to 46 U.S.C. 51323. The Council operates in accordance with the provisions of the Federal Advisory Committee Act (FACA), 5 U.S.C. ch. 10.

The purpose of the Council is to provide independent advice and recommendations to the Secretary of Transportation (Secretary) on matters relating to the USMMA, including in the areas of curriculum development and training programs; diversity, equity, and inclusion; sexual assault prevention and response; infrastructure maintenance and redevelopment; midshipmen health and welfare; governance and

administrative policies; and other matters.

Agenda

The meeting agenda will cover, but is not limited to, the following proposed topics:

1. Welcome and opening remarks.
2. Public comments.
3. Interim Recommendations and Workplan for Final Report.
4. Administrative items.

Public Participation

This meeting is open to the public and will be held at the Academy. The U.S. Department of Transportation is committed to providing equal access to this meeting for all participants. If you need alternative formats or services because of a disability, such as sign language, interpretation, or other ancillary aids, please contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section.

Any member of the public is permitted to file a written statement with the Council. Written statements should be sent to the Designated Federal Officer listed in the **FOR FURTHER INFORMATION CONTACT** section provided above by no later than November 29, 2024.

Only written statements will be considered by the Council; no member of the public will be allowed to present questions or speak during the meeting unless requested to do so by a member of the Council.

(Authorities: 46 U.S.C. 51323; 5 U.S.C. 552b; 5 U.S.C. ch. 10; 41 CFR parts 102-3.140 through 102-3.165)

By Order of the Maritime Administrator.
T. Mitchell Hudson, Jr.,
Secretary, Maritime Administration.

[FR Doc. 2024-27272 Filed 11-20-24; 8:45 am]

BILLING CODE 4910-81-P

DEPARTMENT OF TRANSPORTATION**Maritime Administration**

[Docket No. MARAD-2024-0147]

**Coastwise Endorsement Eligibility
Determination for a Foreign-Built
Vessel: 31 AND DONE (Motor);
Invitation for Public Comments**

AGENCY: Maritime Administration, DOT.

ACTION: Notice.

SUMMARY: The Secretary of Transportation, as represented by the Maritime Administration (MARAD), is authorized to issue coastwise endorsement eligibility determinations for foreign-built vessels which will carry

no more than twelve passengers for hire. A request for such a determination has been received by MARAD. By this notice, MARAD seeks comments from interested parties as to any effect this action may have on U.S. vessel builders or businesses in the U.S. that use U.S.-flag vessels. Information about the requestor's vessel, including a brief description of the proposed service, is listed below.

DATES: Submit comments on or before December 23, 2024.

ADDRESSES: You may submit comments identified by DOT Docket Number MARAD-2024-0147 by any one of the following methods:

- *Federal eRulemaking Portal:* Go to <https://www.regulations.gov>. Search MARAD-2024-0147 and follow the instructions for submitting comments.
- *Mail or Hand Delivery:* Docket Management Facility is in the West Building, Ground Floor of the U.S. Department of Transportation. The Docket Management Facility location address is U.S. Department of Transportation, MARAD-2024-0147, 1200 New Jersey Avenue SE, West Building, Room W12-140, Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except on Federal holidays.

Note: If you mail or hand-deliver your comments, we recommend that you include your name and a mailing address, an email address, or a telephone number in the body of your document so that we can contact you if we have questions regarding your submission.

Instructions: All submissions received must include the agency name and specific docket number. All comments received will be posted without change to the docket at www.regulations.gov, including any personal information provided. For detailed instructions on submitting comments, or to submit comments that are confidential in nature, see the section entitled Public Participation.

FOR FURTHER INFORMATION CONTACT: Patricia Hagerty, U.S. Department of Transportation, Maritime Administration, 1200 New Jersey Avenue SE, Room W23-461, Washington, DC 20590. Telephone: (202) 366-0903. Email: patricia.hagerty@dot.gov.

SUPPLEMENTARY INFORMATION: As described in the application, the intended service of the vessel 31 AND DONE is:

Intended Commercial Use of Vessel: Requester intends to use for passenger charter fishing and sightseeing tours.

Geographic Region Including Base of Operations: Kodiak Island and Woody

Island, Alaska. Base of Operations: Kodiak, Alaska.

Vessel Length and Type: 24.3' Pleasure Craft.

The complete application is available for review identified in the DOT docket as MARAD 2024–0147 at <https://www.regulations.gov>. Interested parties may comment on the effect this action may have on U.S. vessel builders or businesses in the U.S. that use U.S.-flag vessels. If MARAD determines, in accordance with 46 U.S.C. 12121 and MARAD's regulations at 46 CFR part 388, that the employment of the vessel in the coastwise trade to carry no more than 12 passengers will have an unduly adverse effect on a U.S.-vessel builder or a business that uses U.S.-flag vessels in that business, MARAD will not issue an approval of the vessel's coastwise endorsement eligibility. Comments should refer to the vessel name, state the commenter's interest in the application, and address the eligibility criteria given in section 388.4 of MARAD's regulations at 46 CFR part 388.

Public Participation

How do I submit comments?

Please submit your comments, including the attachments, following the instructions provided under the above heading entitled **ADDRESSES**. Be advised that it may take a few hours or even days for your comment to be reflected on the docket. In addition, your comments must be written in English. We encourage you to provide concise comments and you may attach additional documents as necessary. There is no limit on the length of the attachments.

Where do I go to read public comments, and find supporting information?

Go to the docket online at <https://www.regulations.gov>, keyword search MARAD–2024–0147 or visit the Docket Management Facility (see **ADDRESSES** for hours of operation). We recommend that you periodically check the Docket for new submissions and supporting material.

Will my comments be made available to the public?

Yes. Be aware that your entire comment, including your personal identifying information, will be made publicly available.

May I submit comments confidentially?

If you wish to submit comments under a claim of confidentiality, you should submit the information you claim to be confidential commercial information by email to SmallVessels@dot.gov. Include in the email subject

heading "Contains Confidential Commercial Information" or "Contains CCI" and state in your submission, with specificity, the basis for any such confidential claim highlighting or denoting the CCI portions. If possible, please provide a summary of your submission that can be made available to the public.

In the event MARAD receives a Freedom of Information Act (FOIA) request for the information, procedures described in the Department's FOIA regulation at 49 CFR 7.29 will be followed. Only information that is ultimately determined to be confidential under those procedures will be exempt from disclosure under FOIA.

Privacy Act

Anyone can search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). For information on DOT's compliance with the Privacy Act, please visit <https://www.transportation.gov/privacy>.

(Authority: 49 CFR 1.93(a), 46 U.S.C. 55103, 46 U.S.C. 12121)

By Order of the Maritime Administrator.

T. Mitchell Hudson, Jr.,

Secretary, Maritime Administration.

[FR Doc. 2024–27273 Filed 11–20–24; 8:45 am]

BILLING CODE 4910–81–P

DEPARTMENT OF TRANSPORTATION

Maritime Administration

[Docket No. MARAD–2024–0146]

Coastwise Endorsement Eligibility Determination for a Foreign-Built Vessel: WANDERLUST (Motor); Invitation for Public Comments

AGENCY: Maritime Administration, DOT.

ACTION: Notice.

SUMMARY: The Secretary of Transportation, as represented by the Maritime Administration (MARAD), is authorized to issue coastwise endorsement eligibility determinations for foreign-built vessels which will carry no more than twelve passengers for hire. A request for such a determination has been received by MARAD. By this notice, MARAD seeks comments from interested parties as to any effect this action may have on U.S. vessel builders or businesses in the U.S. that use U.S.-flag vessels. Information about the requestor's vessel, including a brief description of the proposed service, is listed below.

DATES: Submit comments on or before December 23, 2024.

ADDRESSES: You may submit comments identified by DOT Docket Number MARAD–2024–0146 by any one of the following methods:

- *Federal eRulemaking Portal:* Go to <https://www.regulations.gov>. Search MARAD–2024–0146 and follow the instructions for submitting comments.

- *Mail or Hand Delivery:* Docket Management Facility is in the West Building, Ground Floor of the U.S. Department of Transportation. The Docket Management Facility location address is U.S. Department of Transportation, MARAD–2024–0146, 1200 New Jersey Avenue SE, West Building, Room W12–140, Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except on Federal holidays.

Note: If you mail or hand-deliver your comments, we recommend that you include your name and a mailing address, an email address, or a telephone number in the body of your document so that we can contact you if we have questions regarding your submission.

Instructions: All submissions received must include the agency name and specific docket number. All comments received will be posted without change to the docket at www.regulations.gov, including any personal information provided. For detailed instructions on submitting comments, or to submit comments that are confidential in nature, see the section entitled Public Participation.

FOR FURTHER INFORMATION CONTACT: Patricia Hagerty, U.S. Department of Transportation, Maritime Administration, 1200 New Jersey Avenue SE, Room W23–461, Washington, DC 20590. Telephone: (202) 366–0903. Email: patricia.hagerty@dot.gov.

SUPPLEMENTARY INFORMATION: As described in the application, the intended service of the vessel WANDERLUST is:

Intended Commercial Use of Vessel: Requester intends to offer passenger charters.

Geographic Region Including Base of Operations: Florida. Base of Operations: Key Largo, Florida.

Vessel Length and Type: 45' Power Catamaran.

The complete application is available for review identified in the DOT docket as MARAD 2024–0146 at <https://www.regulations.gov>. Interested parties may comment on the effect this action may have on U.S. vessel builders or businesses in the U.S. that use U.S.-flag vessels. If MARAD determines, in

accordance with 46 U.S.C. 12121 and MARAD's regulations at 46 CFR part 388, that the employment of the vessel in the coastwise trade to carry no more than 12 passengers will have an unduly adverse effect on a U.S.-vessel builder or a business that uses U.S.-flag vessels in that business, MARAD will not issue an approval of the vessel's coastwise endorsement eligibility. Comments should refer to the vessel name, state the commenter's interest in the application, and address the eligibility criteria given in section 388.4 of MARAD's regulations at 46 CFR part 388.

Public Participation

How do I submit comments?

Please submit your comments, including the attachments, following the instructions provided under the above heading entitled **ADDRESSES**. Be advised that it may take a few hours or even days for your comment to be reflected on the docket. In addition, your comments must be written in English. We encourage you to provide concise comments and you may attach additional documents as necessary. There is no limit on the length of the attachments.

Where do I go to read public comments, and find supporting information?

Go to the docket online at <https://www.regulations.gov>, keyword search MARAD-2024-0146 or visit the Docket Management Facility (see **ADDRESSES** for hours of operation). We recommend that you periodically check the Docket for new submissions and supporting material.

Will my comments be made available to the public?

Yes. Be aware that your entire comment, including your personal identifying information, will be made publicly available.

May I submit comments confidentially?

If you wish to submit comments under a claim of confidentiality, you should submit the information you claim to be confidential commercial information by email to SmallVessels@dot.gov. Include in the email subject heading "Contains Confidential Commercial Information" or "Contains CCI" and state in your submission, with specificity, the basis for any such confidential claim highlighting or denoting the CCI portions. If possible, please provide a summary of your submission that can be made available to the public.

In the event MARAD receives a Freedom of Information Act (FOIA) request for the information, procedures

described in the Department's FOIA regulation at 49 CFR 7.29 will be followed. Only information that is ultimately determined to be confidential under those procedures will be exempt from disclosure under FOIA.

Privacy Act

Anyone can search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). For information on DOT's compliance with the Privacy Act, please visit <https://www.transportation.gov/privacy>.

(Authority: 49 CFR 1.93(a), 46 U.S.C. 55103, 46 U.S.C. 12121)

By Order of the Maritime Administrator.
T. Mitchell Hudson, Jr.,
Secretary, Maritime Administration.

[FR Doc. 2024-27276 Filed 11-20-24; 8:45 am]

BILLING CODE 4910-81-P

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

[DOT-NHTSA-2024-0074]

Speed Measuring Device Conformity—RADAR

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

ACTION: Notice of Transition of the NHTSA managed Down The Road (DTR) Radar Speed Measuring Device (SMD) Conforming Products List (CPL) program to an industry-based Verification Program.

SUMMARY: The National Highway Traffic Safety Administration (NHTSA) provides notice to the public that the Conforming Products List (CPL) maintained and updated by NHTSA for Down The Road (DTR) radar speed measuring devices will be discontinued. A new industry-based product Verification Program has been developed to confirm that DTR radar speed measuring devices conform to certain minimum specifications. The new industry-based product Verification Program will provide manufacturers the flexibility to confirm conformance with any testing entity as long as the entity can fulfill the requirements for testing and verifying device compliance with the established performance specifications, testing protocols and laboratory accreditation requirements of the industry-based Verification Program.

To afford manufacturers time to transition to the new program, NHTSA will maintain the CPL for one year after the date of this notice.

Under the new Verification Program, a DTR radar speed measuring device manufacturer can use an accredited testing entity to verify that its speed measuring device conforms to an established performance standard and will be placed on a verified products list maintained by the Verification Program. Please refer to the NIST website for a list of available Verification Programs: <https://www.nist.gov/mml/mmsd/security-technologies-group/down-road-dtr-radar>. The new Verification Program will provide manufacturers with a proven method of demonstrating compliance to the minimum performance specifications, will empower end-users to make better purchasing decisions, and benefit manufacturers as products can quickly gain market acceptance.

Accordingly, as of the date of this publication, NHTSA will no longer perform CPL processing under the Interim Administrative Guide for the Traffic Enforcement Technologies Program.

DATES: Comments are due by within 30 days of this announcement.

ADDRESSES: You may submit comments identified by the docket number in the heading of this document by any of the following methods:

- Go to <http://www.regulations.gov>. Follow the instructions for submitting comments on the electronic docket site by clicking on "Help" or "FAQ".
- *Mail or Hand Delivery:* Docket Management, U.S. Department of Transportation, 1200 New Jersey Avenue SE, West Building, Room W12-140, Washington, DC 20590, between 9 a.m. and 5 p.m. Eastern Time, Monday through Friday, except on Federal holidays. To be sure someone is there to help you, please call (202) 366-9322 before coming.
- *Fax:* 202-493-2251.

Instructions: Each submission must include the Agency name and the Docket number for this Notice. Note that all comments received will be posted without change to www.regulations.gov, including any personal information provided. Please see the Privacy heading below.

Privacy Act: Anyone can search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). DOT's complete Privacy Act Statement can be

viewed on the **Federal Register** published on April 11, 2000 (65 FR 19477–78) or by visiting <https://www.dot.gov/privacy.html>.

Docket: For access to the docket to read comments received, go to <http://www.regulations.gov>, or the street address listed above. Follow the online instructions for accessing the dockets.

FOR FURTHER INFORMATION CONTACT:

Keith D. Williams, Enforcement and Justice Services Division, NPD–220, National Highway Traffic Safety Administration, 1200 New Jersey Avenue SE, Washington, DC 20590; Telephone: (202) 366–8137.

SUPPLEMENTARY INFORMATION:

I. Background

The use of enforcement technologies is a major component of many traffic safety programs. Traffic Radio Detection and Ranging (RADAR) technology has been used in the United States to detect speeding motorists since the late 1940s. Over time, radar speed-measuring devices have evolved from large, unwieldy stationary models to compact and sophisticated units capable of monitoring the speeds of moving vehicles while operating in either a stationary or moving mode. These technological advances, as well as the development of other traffic enforcement technologies, have greatly enhanced the mobility, efficiency, and effectiveness of enforcement of speed limits.

Speed measuring device performance specifications ensure that devices are accurate and reliable when properly operated and maintained. Law enforcement agencies have historically been encouraged to utilize a CPL as a criteria for determining which speed measuring devices they choose to procure.

Filling a gap for a need of nationally recognized performance standards for law enforcement traffic radar speed measuring devices, in 1977, NHTSA entered into an interagency agreement with the Law Enforcement Standards Laboratory of the National Bureau of Standards (NBS) to develop performance standards for law enforcement speed measuring devices. Further, at that time, concurrence between operator training requirements and technological advances had not been maintained.

In December 1980, NHTSA published a proposed rulemaking for Down-the-Road (DTR) Radar performance standards specifications, 49 FR 2097. After a thorough review of comments received in response to the proposed rulemaking for performance standards

for radar speed measuring devices (see 46 FR 2097–2120), NHTSA decided not to regulate in the area because the benefits of the proposed rule could be achieved without the issuance of a federal regulation. Instead of a performance standard, NHTSA engaged with the United States Department of Commerce, National Bureau of Standards, now known as the National Institute of Standards and Technology (NIST), to develop model performance specifications. A technical report was published in March 1982 entitled “Model Performance Specifications for Police Traffic Radar Devices” under NHTSA report number DOT HS 806–191. States and local law enforcement were free to adopt these specifications to guide their purchase of DTR radar devices.

In late 1990s, the International Association of Chiefs of Police (IACP), through a Cooperative Agreement with NHTSA, formed the Enforcement Technologies Advisory Technical Subcommittee (ETATS), which brought together manufacturers, practitioners, law enforcement, and other stakeholders to update and/or revise the specifications and provide laboratory services to test and validate compliance of DTR radar units against the minimum performance specifications. Under the cooperative agreement, the IACP/ETATS produced an update to the 1982 Model Performance Specifications titled Speed Measuring Device Performance Specifications: Down the Road Radar Module (DOT HS 812 266).

With the conclusion of the cooperative agreement, the ETATS was disbanded. Thereafter, NHTSA administered the CPL pursuant to NHTSA produced guidance titled Interim Administrative Guide for the Traffic Enforcement Technologies Program. See: https://www.nhtsa.gov/sites/nhtsa.gov/files/documents/interim_admin_guide_-_nov_29_2016.pdf.

Since the conclusion of the IACP cooperative agreement, NHTSA has worked with NIST to develop a new industry-based verification program by which DTR Radar devices could be tested and verified against a minimum performance standard. NIST engaged the Institute of Electrical and Electronics Engineers (IEEE), who, through its Instrumentation and Measurement Society, established the TC–41 Traffic Enforcement Technologies technical committee and the DTR Radar Working Group. The DTR Radar Working Group brought together manufacturers, scientists, law enforcement and other stakeholders to develop, through a consensus process,

documentary standards, minimum performance specifications and associated test methods for DTR radar devices. The DTR Radar Working Group was also tasked with preparing a framework for establishing criteria, including comprehensive and consistent processes, to address conformity assessment through a verification process of DTR Radar devices (see <https://ieee-ims.org/technical-committee/tc-41>). As a result of these efforts, IEEE published IEEE Standard 2450, The Performance of Down-the-Road Radar Used in Traffic Speed Measurements (IEEE Standard) on November 5, 2019. The IEEE Standard specifies the baseline performance requirements and associated test procedures for DTR radar speed-measuring devices used by law enforcement agencies to enforce vehicle speed limit laws.

Verification processes for DTR Radar devices are focused on product effectiveness and include the following primary components: Verification, Inspection, Testing, Accreditation, Surveillance, Supplier’s Declaration of Conformity, Registration, and Quality Management Systems.

II. Objective

This notice supports NHTSA’s mission to save lives, prevent injuries, and reduce economic costs due to road traffic crashes, through education, research, safety standards, and enforcement. NHTSA has established through research and practice that law enforcement and the work of our Nation’s law enforcement officers are critical to the prevention and reduction of traffic-related fatalities and injuries. Traffic enforcement must have equity—the consistent, fair, just, and impartial treatment of all people—at its foundation. The use of accurate and reliable speed measuring devices to enforce vehicle speed limit laws is crucial in reducing speeding-related crashes.

To ensure that DTR radar devices are reliable and accurate, NHTSA has historically supported efforts to maintain and publish a CPL. The objective of this notice is two-fold. First, to notify the public that a new industry-based verification program, based on the IEEE Standard, is available to manufacturers. Second, NHTSA notifies the public that the NHTSA Traffic Enforcement Technologies Program will be discontinued due to the establishment of the industry-based verification program.

III. Transition to the Industry-Based Verification Program

While today NHTSA is announcing that it will discontinue the Traffic Enforcement Technologies Program and no longer maintain a CPL, it will maintain the CPL for one year after the date of publication of this notice to permit manufacturers with devices on the current CPL time to enter devices into the industry-based verification program. Accordingly, as of November 21, 2025 NHTSA will retire the CPL that it maintained through the Interim Administrative Guide for the Traffic Enforcement Technologies Program. Manufacturers that prefer a verification of DTR radar devices they produce may engage the industry-based verification program developed by NIST.

IV. Industry-Based Verification Program

Manufacturers of DTR Radar devices may, at their expense, obtain product verification through third-party verification programs conducted by entities that are accredited pursuant to the International Organization for Standardization/International Electrotechnical Commission (ISO/IEC) Standard 17065 (see <https://www.iso.org/obp/ui/#iso:std:iso-iec:17065:ed-1:v1:en> to learn more about becoming an accredited verification entity). Accredited verification entities

must perform the required testing in conformance with the standard developed by the Institute of Electrical and Electronics Engineers (IEEE) and is listed as the 2450–2019—IEEE Standard for the Performance of Down-the-Road Radar Used in Traffic Speed Measurements, published November 5, 2019 (see <https://standards.ieee.org/ieee/2450/6920/>). A list of entities that are accredited verification entities to IEEE Standard 2450–2019 is located here <https://www.nist.gov/mml/mmsd/security-technologies-group/down-road-dtr-radar>. The IEEE standard is the baseline for verification requirements and associated test procedures for down-the-road (DTR) traffic radar speed-measuring devices. A DTR radar device that is found to meet the IEEE standard will be added to a verified product listing, that is a list of product models that have demonstrated compliance to applicable performance requirements and specifications. Unmanned radar speed-measuring devices, automated speed enforcement, or DTR radar range measurements are not covered in this standard.

The industry-based verification program includes initial and surveillance performance requirements and the use of the Verification Mark to be placed on all verified units. The testing entity will provide documentation to the manufacturer that its product meets the IEEE standard.

The industry-based Verification Program will maintain a verified product list on its website for products that meet the performance specifications. More information about the Down-the-Road Radar Devices verification program, including information related to entities that are accredited to IEEE Standard 2450–2019, is located here: <https://www.nist.gov/mml/mmsd/security-technologies-group/down-road-dtr-radar>.

Authority: 23 U.S.C. 403; 49 CFR 1.95; 49 CFR 501.8.

Nanda Narayanan Srinivasan,
Associate Administrator, Research and Program Development.

[FR Doc. 2024–27130 Filed 11–20–24; 8:45 am]

BILLING CODE 4910–59–P

DEPARTMENT OF THE TREASURY

Community Development Financial Institutions Fund

Funding Opportunity Title: Notice of Allocation Availability (NOAA) Inviting Applications for the Calendar Years (CY) 2024–2025 Allocation Round of the New Markets Tax Credit (NMTC) Program

Announcement Type: Announcement of NMTC Allocation availability.

DATES:

TABLE 1—CY 2024–2025 ALLOCATION ROUND NMTC PROGRAM CRITICAL DEADLINES FOR APPLICANTS

Description	Deadline/date	Time (eastern time—ET)	Submission method
Request to modify CDE certification service area	December 3, 2024	11:59 p.m.	Electronically via AMIS.
Subsidiary CDE Certification Application for meeting Qualified Equity Investment (QEI) issuance thresholds.	December 3, 2024	11:59 p.m.	Electronically via AMIS.
CY 2024–2025 Allocation Application Registration	December 5, 2024	5:00 p.m.	Electronically via AMIS.
Amendment request to add Subsidiary CDEs to Allocation Agreements for meeting QEI issuance thresholds.	January 17, 2025	11:59 p.m.	Electronically via AMIS.
Amendment request to remove a Controlling Entity from Allocation Agreement(s).	January 17, 2025	11:59 p.m.	Electronically via AMIS.
Last date to contact CDFI Fund staff	January 27, 2025	5:00 p.m.	Electronically via AMIS.
CY 2024–2025 Allocation Application (including required Attachments)	January 29, 2025	5:00 p.m.	Electronically via AMIS.
QEI Issuance and making Qualified Low Income Community Investments (QLICs) by.	April 17, 2025	11:59 p.m.	Not Applicable.
Report QEIs and certify QLICs by	April 24, 2025	11:59 p.m.	Electronically via AMIS.

Executive Summary: This NOAA is issued in connection with the CY 2024–2025 allocation round (Allocation Round) of the New Markets Tax Credit Program (NMTC Program), as authorized by Title I, subtitle C, section 121 of the Community Renewal Tax Relief Act of 2000 (Pub. L. 106–554) as amended. Through the NMTC Program, the Community Development Financial Institutions Fund (CDFI Fund) provides

authority to certified CDEs to offer an incentive to investors in the form of tax credits over seven years, which is expected to stimulate the provision of private investment capital that, in turn, will facilitate economic and community development in Low-Income Communities. Through this NOAA, the CDFI Fund announces the availability of \$10 billion of NMTC Allocation authority in this Allocation Round.

In this NOAA, the CDFI Fund specifically addresses how a CDE may apply to receive an allocation of NMTCs, the competitive procedure through which NMTC Allocations will be made, and the actions that will be taken to ensure that proper allocations are made to appropriate entities.

I. Allocation Availability Description

A. Programmatic changes from the CY 2023 allocation round:

1. Allocation Application Updates:

The NMTC Allocation Application has been revised as part of its renewal under the Paperwork Reduction Act. The Allocation Application will be evaluated as described in Section V of this NOAA.

2. Prior QEI Issuance Requirements:

Prior-year NMTC Allocates will be subject to minimum thresholds for QEI issuance and closing of QLICs with respect to their prior-year NMTC Allocations. These thresholds and deadlines have been revised in comparison to the CY 2023 NOAA. See Section III. A.5(a) of this NOAA for additional details.

3. *CDE Certification:* The CDFI Fund will only consider an Applicant as eligible for an NMTC Allocation in this Allocation Round if the Applicant is certified as a CDE as of the publication date of this NOAA in the **Federal Register**.

II. Allocation Information

A. Allocation amounts: Pursuant to the Taxpayer Certainty and Disaster Tax Relief Act of 2020, the CDFI Fund expects that it may allocate to CDEs the authority to issue to their investors the aggregate amount of \$10 billion in equity as to which NMTCs may be claimed, as permitted under IRC § 45D(f)(1)(D). Pursuant to this NOAA, the CDFI Fund anticipates that it may issue up to \$120 million in tax credit investment authority per Allocatee. The CDFI Fund, in its sole discretion, reserves the right to allocate amounts in excess of or less than the anticipated maximum allocation amount should the CDFI Fund deem it appropriate. The CDFI Fund reserves the right to allocate NMTC authority to any, all, or none of the entities that submit Applications in response to this NOAA, and in any amounts it deems appropriate.

B. Type of award: NMTC Program awards are made in the form of allocations of tax credit investment authority.

C. Program guidance and regulations: This NOAA describes Application and NMTC Allocation requirements for the CY 2024–2025 Allocation Round of the NMTC Program and should be read in conjunction with: (i) the final NMTC Program Income Tax Regulations issued by the Internal Revenue Service (IRS) (26 CFR 1.45D–1, published on December 28, 2004), as amended and related guidance, notices and other publications (collectively referred to as the “IRS NMTC Regulations” in this

NOAA); and (ii) the Application and related materials for this Allocation Round. All such materials may be found on the CDFI Fund’s website at <https://www.cdfifund.gov>. The CDFI Fund requires Applicants to review these documents. Capitalized terms used, but not defined, in this NOAA have the respective meanings assigned to them in the NMTC Program Allocation Application, Internal Revenue Code (IRC) § 45D or the IRS NMTC regulations. In the event of any inconsistency between this NOAA, the CY 2024–2025 Allocation Application (Application), and guidance issued by the CDFI Fund thereto, and IRC § 45D or the IRS NMTC Regulations, the provisions of IRC § 45D and the IRS NMTC Regulations shall govern.

D. Allocation Agreement: Each Allocatee must sign an Allocation Agreement, which must be countersigned by the CDFI Fund, before the NMTC Allocation is effective. The Allocation Agreement contains the terms and conditions of the NMTC Allocation. For further information, see Section VI.B of this NOAA.

E. Statutory and national policy requirements: The CDFI Fund will manage and administer the NMTC Program in a manner so as to ensure that NMTC Allocations associated programs are implemented in full accordance with the U.S. Constitution, Federal law, statutory, and public policy requirements: including, but not limited to, those protecting free speech; religious liberty; public welfare; the environment; and prohibiting discrimination.

III. Eligibility

A. Eligible Applicants: IRC § 45D specifies certain eligibility requirements that each Applicant must meet to be eligible to apply for an allocation of NMTCs. The following sets forth additional detail and certain additional dates that relate to the submission of Applications under this NOAA for the available NMTC Allocation authority.

1. *CDE certification:* For purposes of this NOAA, the CDFI Fund will only consider an Applicant as eligible for an NMTC Allocation in this round if the Applicant is certified as a CDE as of the **Federal Register** publication date of the NOAA. The CDFI Fund will not provide NMTC Allocation authority to Applicants that are not certified as CDEs or to entities that are certified as Subsidiary CDEs.

2. *Modifying CDE Service Area:* If an Applicant currently certified as a CDE wishes to change its designated CDE Service Area for this Allocation Round, then it must submit a CDE Service Area

Amendment Application to request such a change from the CDFI Fund, and the CDE Service Area Amendment Application must be received by the CDFI Fund by the deadline listed in Table 1. A request to change a CDE’s Service Area will need to include the revised service area designation and updated accountability information that demonstrates that the CDE has the required representation from Low-Income Communities in the revised CDE Service Area.

3. *Repayment or Refinancing of QEI with QLICI Proceeds:* An Applicant must commit that it will not permit the use of the proceeds of QEIs to make QLICs in Qualified Active Low-Income Community Businesses (QALICBs) where QLICI proceeds are used, in whole or in part, to repay or refinance a debt or equity provider whose capital was used to fund the QEI, or are used to repay or refinance any Affiliate of such a debt or equity provider, except where: (i) the QLICI proceeds are used to repay or refinance documented reasonable expenditures that are directly attributable to the qualified business of the QALICB, and such reasonable expenditures were incurred no more than 24 months prior to the QLICI closing date; or (ii) no more than five percent of the total QLICI proceeds from the QEI are used to repay or refinance documented reasonable expenditures that are directly attributable to the qualified business of the QALICB. Refinance includes transferring cash or property, directly or indirectly, to the debt or equity provider or an Affiliate of the debt or equity provider.

4. *Do Not Pay:* The CDFI Fund will contact the Do Not Pay Business Center to ensure that an Applicant, its Controlling Entity, and any Affiliate(s) are not prohibited from receiving Federal funds. An Applicant, its Controlling Entity, and any Affiliate(s) reported by the Do Not Pay Business Center as having a pending or delinquent debt to the Federal government will be required to demonstrate that it has resolved such pending or delinquent debt. Applicants that fail to demonstrate resolution of such pending or delinquent debt to the Federal government will be found ineligible to receive an allocation.

5. *Controlling Entities:* An organization that was a Controlling Entity to an Allocatee in a prior round(s) and subsequently separated from that Allocatee as a result of an amendment to the Allocation Agreement(s), may not claim the NMTC-related track record of such Allocatee.

6. *Prior award recipients or Allocatees:* Applicants must be aware that success in a prior Application or allocation round of any of the CDFI Fund's programs is not indicative of success under this NOAA. For purposes of this NOAA, and eligibility determinations, the CDFI Fund will consider an Affiliate to be any entity that meets the definition of Affiliate as defined in the NMTC Allocation Application materials, or any entity

otherwise identified as an Affiliate by the Applicant in its NMTC Allocation Application materials.

Prior award recipients of any CDFI Fund program are eligible to apply under this NOAA, except as follows:

(a) *Prior Allocatees and Qualified Equity Investment (QEI) issuance and Qualified Low Income Community Investment (QLICI) requirements:* CDEs that are Allocatees under the CY 2019 to the CY 2023 rounds must finalize at least the percentage of QEIs noted in

Table 2 for each NMTC Allocation round and use at least the percentage of those QEIs designated in Schedule 1, section 3.2(j) of their Allocation Agreements to make QLICIs by the deadline in Table 1. CDEs that are Allocatees under the CY 2019 to the CY 2023 allocation rounds and CDEs that are Allocatees designated as Rural CDEs in their CY 2022 and CY 2023 Allocation Agreement must meet the thresholds outlined in Table 2.

TABLE 2—QEI ISSUANCE AND QLICI REQUIREMENTS

Prior round allocation	Finalized QEI requirement (%)	Rural CDE finalized QEI requirement (%)	QLICIs
CY 2019	100	100	As stated in Schedule 1, Section 3.2(j) of the applicable Allocation Agreement.
CY 2020	90	90	
CY 2021	80	80	
CY 2022	60	50	
CY 2023	10	0	

In addition to the requirements noted above, a CDE is not eligible to receive an NMTC Allocation pursuant to this NOAA if an Affiliate of the Applicant is a prior Allocatee and has not met the minimum QEI issuance and QLICI thresholds as set forth in Table 2 for Allocatees in the prior allocation rounds of the NMTC Program.

For purposes of this section of the NOAA, the CDFI Fund will only recognize as “finalized” those QEIs that have been properly reported in AMIS Allocation and QEI Tracking System for Qualified Equity Investments (AQEIs) by the deadline in Table 1. Allocatees and their Subsidiary Allocatees, if any, are advised to access AMIS to record each QEI that they issue to an investor in exchange for cash. Furthermore, the CDFI Fund will only recognize QLICIs that have been certified in AMIS by the deadline in Table 1. Instructions on recording a QEI and QLICIs in AMIS are available at <https://www.cdfifund.gov/amisreporting>. Applicants may be required, upon notification from the CDFI Fund, to submit documentation to substantiate the required QEI issuance and QLICI thresholds.

Any prior Allocatee that requires action by the CDFI Fund (*i.e.*, certifying a Subsidiary entity as a CDE; adding a Subsidiary CDE to an Allocation Agreement; etc.) in order to meet the QEI issuance requirements above must submit a CDE Certification Application for Subsidiary CDEs and/or Allocation Agreement amendment requests by the respective deadlines in Table 1, in order to guarantee that the CDFI Fund completes all necessary approvals prior

to the QEI issuance deadline in Table 1. Applicants for Subsidiary CDE certification may obtain information regarding CDE certification and the CDE Certification Application process in AMIS on the CDFI Fund's website at <https://www.cdfifund.gov/programs-training/certification/cde/Pages/default.aspx>.

(b) *Pending determination of noncompliance or default:* If an Applicant or Affiliate of the Applicant is a prior award recipient or Allocatee under any CDFI Fund program and if: (i) it has demonstrated noncompliance with a previous assistance or award agreement or default under a previous Allocation Agreement or pursuant to any other agreement under any CDFI Fund program; and (ii) the entity has been given a timeframe to cure the noncompliance or default, the CDFI Fund will consider the Applicant's Application under this NOAA during the time period given for the entity to cure the noncompliance or default, and until such time as the CDFI Fund makes a final determination that the entity is in noncompliance or default.

(c) *Noncompliance or default status:* The CDFI Fund will not consider an Application submitted by an Applicant that is a prior CDFI Fund award recipient or Allocatee under any CDFI Fund program if, as of the Application deadline of this NOAA: (i) the CDFI Fund has made a final determination in writing that such Applicant or Affiliate of an Applicant is in noncompliance with or default of a previously executed Assistance Agreement, Award Agreement, Allocation Agreement, Bond

Loan Agreement, or Agreement to Guarantee; and (ii) the CDFI Fund has provided written notification that such entity is ineligible to apply for or receive any future CDFI Fund awards or allocations. Such entities will be ineligible to submit an Application for such time period as specified by the CDFI Fund in writing. Additionally, regardless of whether a sanction or remedy is imposed, the CDFI Fund will not consider an Application submitted by an Applicant or Affiliate of an Applicant if the default on a prior Allocation Agreement of the Applicant or Affiliate occurs during the time period beginning 12 months prior to the Application deadline and ending with the CY 2024–2025 allocation award announcement. The CDFI Fund will not consider any Applicant that has defaulted on a loan from the CDFI Fund within five years of the Application deadline.

(d) *Contacting the CDFI Fund:* Accordingly, Applicants that are prior award recipients and/or Allocatees under any CDFI Fund program are advised to comply with the requirements specified in assistance, allocation and/or award agreement(s). All outstanding reports and compliance questions should be directed to the Office of Compliance Monitoring and Evaluation (OCME) through a Service Request initiated in AMIS. Requests submitted less than 30 calendar days prior to the Application deadline may not receive a response before the Application deadline. The CDFI Fund will respond to Applicants' reporting, compliance and CDE certification

inquiries Monday through Friday, between the hours of 9:00 a.m. and 5:00 p.m. ET, starting the date of publication of this NOAA through the “Last date to contact CDFI Fund staff” specified in Table 1. Inquiries received after the “Last date to contact the CDFI Fund staff” will be responded to after the Allocation Application deadline.

7. *Failure to accurately respond to a question in the Assurances and Certifications section of the Application, submit the required written explanation, or provide any updates:* In its sole discretion, the CDFI Fund may deem the Applicant’s Application ineligible if the CDFI Fund determines that the Applicant inaccurately responded to a question, accurately responded to a question, but failed to submit a required written explanation, or failed to notify the CDFI Fund of any changes to the information submitted between the date of Application and the date the Allocatee executes the Allocation Agreement, with respect to the Assurances and Certifications. In making this determination, the CDFI Fund will take into consideration, among other factors, the materiality of the question, the substance of any supplemental responses provided, and whether the information in the Applicant’s supplemental responses would have a material adverse effect on the Applicant, its financial condition or its ability to perform under an Allocation Agreement, should the Applicant receive an allocation.

8. *Entities that propose to transfer NMTCs to Subsidiary CDEs:* Both for-profit and non-profit CDEs may apply for NMTC Allocation authority, but only a for-profit CDE is permitted to provide NMTCs to its investors. A non-profit Applicant wishing to apply for an NMTC Allocation must demonstrate, prior to entering into an Allocation Agreement with the CDFI Fund, that: (i) it controls one or more Subsidiary CDEs that are for-profit entities; and (ii) it intends to transfer the full amount of any NMTC Allocation it receives to said Subsidiary CDEs. An Applicant wishing to transfer all or a portion of its NMTC Allocation to a Subsidiary CDE is not required to create the Subsidiary prior to submitting an NMTC Allocation Application to the CDFI Fund. However, the Subsidiary entities must be certified as CDEs by the CDFI Fund and enjoined as parties to the Allocation Agreement at closing or by amendment to the Allocation Agreement after closing.

The CDFI Fund requires a non-profit Applicant to submit a CDE Certification Application to the CDFI Fund on behalf of at least one for-profit Subsidiary within 30 days after the non-profit

Applicant receives notification from the CDFI Fund of its allocation award, as such Subsidiary must be certified as a CDE prior to entering into an Allocation Agreement with the CDFI Fund. The CDFI Fund reserves the right to rescind the award if a non-profit Applicant that does not already have a certified for-profit Subsidiary CDE fails to submit a CDE Certification Application for one or more for-profit Subsidiaries within 30 days of the date it receives notification from the CDFI Fund of its allocation award.

9. *Entities that submit Applications together with Affiliates; Applications from common enterprises:*

(a) As part of the Allocation Application review process, the CDFI Fund will evaluate whether Applicants are Affiliates, as such term is defined in the Allocation Application. If an Applicant and its Affiliate(s) wish to submit Allocation Applications, they must do so collectively, in one Application; an Applicant and its Affiliate(s) may not submit separate Allocation Applications. If Affiliated entities submit multiple Applications, the CDFI Fund will reject all such Applications received, except for those state-owned or state-controlled governmental Affiliated entities. In the case of state-owned or state-controlled governmental entities, the CDFI Fund may accept Applications submitted by different government bodies within the same state, but only to the extent the CDFI Fund determines that the business strategies and/or activities described in such Applications, submitted by separate entities, are distinctly dissimilar and/or are operated and/or managed by distinctly dissimilar personnel, including staff, board members and identified consultants. In such cases, the CDFI Fund reserves the right to limit award amounts to such entities to ensure that the entities do not collectively receive more than the \$120 million cap.

If the CDFI Fund determines that the Applications submitted by different government bodies in the same state are not distinctly dissimilar and/or operated and/or managed by distinctly dissimilar personnel, it will reject all such Applications.

(b) For purposes of this NOAA, the CDFI Fund will also evaluate whether each Applicant is operated or managed as a “common enterprise” with another Applicant in this Allocation Round using the following indicia, among others: (i) whether different Applicants have the same individual(s), including the Authorized Representative, staff, board members and/or consultants, involved in day-to-day management,

operations and/or investment responsibilities; (ii) whether the Applicants have business strategies and/or proposed activities that are so similar or so closely related that, in fact or effect, they may be viewed as a single entity; and/or (iii) whether the Applications submitted by separate Applicants contain significant narrative, textual or other similarities such that they may, in fact or effect, be viewed as substantially identical Applications. In such cases, the CDFI Fund will reject all Applications received from such entities.

(c) Furthermore, an Applicant that receives an NMTC Allocation in this Allocation Round (or its Subsidiary Allocatee) may not become an Affiliate of or member of a common enterprise (as defined above) with another Applicant that receives an NMTC Allocation in this Allocation Round (or its Subsidiary Allocatee) at any time after the submission of an Allocation Application under this NOAA. This prohibition, however, generally does not apply to entities that are commonly controlled solely because of common ownership by QEI investors. This requirement will also be a term and condition of the Allocation Agreement (see Section VI.B of this NOAA and additional Application guidance materials on the CDFI Fund’s website at <https://www.cdfifund.gov> for more details).

10. *Entities created as a series of funds:* An Applicant whose business structure consists of an entity with a series of funds must apply for CDE certification for each fund. If such an Applicant represents that it is properly classified for Federal tax purposes as a single partnership or corporation, it may apply for CDE certification as a single entity. If an Applicant represents that it is properly classified for Federal tax purposes as multiple partnerships or corporations, then it must submit a CDE Certification Application for the Applicant and each fund it would like to participate in the NMTC Program, and each fund must be separately certified as a CDE. Applicants should note, however, that receipt of CDE certification as a single entity or as multiple entities is not a determination that an Applicant and its related funds are properly classified as a single entity or as multiple entities for Federal tax purposes. Regardless of whether the series of funds is classified as a single partnership or corporation or as multiple partnerships or corporations, an Applicant may not transfer any NMTC Allocations it receives to one or more of its funds unless the fund is a certified CDE that is a Subsidiary of the

Applicant, enjoined to the Allocation Agreement as a Subsidiary Allocatee.

11. *Entities that are Bank Enterprise Award Program (BEA Program) award recipients:* An insured depository institution investor (and its Affiliates and Subsidiaries) may not receive a BEA Program award for the same investment in a CDE that is used to claim NMTCs. Likewise, an insured depository institution investor (and its Affiliates and Subsidiaries) may not receive a BEA Program award for the same investment in a CDE that is used to claim NMTCs.

12. *Insured Depository Institutions:* An Applicant that is or is affiliated with an insured depository institution will not be awarded an NMTC Allocation if it has a composite rating of “5” on its most recent examination, performed in accordance with the Uniform Financial Institutions Rating System.

Furthermore, the CDFI Fund will not award an NMTC Allocation to an Applicant that is an insured depository institution or is an Affiliate of an insured depository institution, if during the time period beginning with the Application deadline and ending with the execution of the CY 2024–2025 Allocation Agreement; the Applicant received any of the following:

(a) CRA assessment rating of below “Satisfactory” on its most recent examination;

(b) A going concern opinion on its most recent audit; or

(c) A Prompt Corrective Action directive from its regulator.

IV. Application and Submission Information

A. Address to request Application package: Applicants must submit Applications electronically under this NOAA, through the CDFI Fund’s AMIS. Following the publication of this NOAA, the CDFI Fund will make the electronic Allocation Application available on its website at <https://www.cdfifund.gov>.

B. Application content requirements: Detailed Application content requirements are found in the Application related to this NOAA. Applicants must submit all materials described in and required by the Application by the applicable deadlines. Applicants will not be afforded an opportunity to provide any missing materials or documentation, except, if necessary and at the request of the CDFI Fund. Electronic Applications must be submitted solely by using the format made available via AMIS. Additional information, including instructions relating to the submission of supporting information (e.g., the Controlling Entity’s representative signature page,

Assurances and Certifications supporting documents, investor letters, organizational charts), is set forth in further detail in the CY 2024–2025 NMTC Application—AMIS Navigation Guide for this Allocation Round. An Application must include a valid and current Employer Identification Number (EIN) issued by the Internal Revenue Service (IRS) and assigned to the Applicant and, if applicable, its Controlling Entity. Electronic Applications without a valid EIN are incomplete and cannot be transmitted to the CDFI Fund. For more information on obtaining an EIN, please contact the IRS at (800) 829–4933 or www.irs.gov. Do not include any personal Social Security Numbers as part of the Application.

C. NMTC Application Registration (Application Registration): CY 2024–2025 Allocation Round Applicants are first required to complete and save the Application Registration section of the NMTC Allocation Application in AMIS by the Application Registration deadline in Table 1 in order to be able to submit the remaining sections of the CY 2024–2025 Allocation Application by the Application deadline. Applicants that do not complete and save the Application Registration by the Application Registration deadline in Table 1, will not be able to subsequently submit a CY 2024–2025 Allocation Application in AMIS.

An Applicant may not submit more than one Application in response to this NOAA. In addition, as stated in Section III.A.8 of this NOAA, an Applicant and its Affiliates must collectively submit only one Allocation Application; an Applicant and its Affiliates may not submit separate Allocation Applications except as outlined in Section III.A.8 above. Once an Application is submitted, an Applicant will not be allowed to change any element of its Application.

D. Form of Application submission: Applicants may only submit Applications under this NOAA electronically via AMIS. Applications and required attachments sent by mail, facsimile, or email will not be accepted. Submission of an electronic Application will facilitate the processing and review of Applications and the selection of Allocatees; further, it will assist the CDFI Fund in the implementation of electronic reporting requirements.

Electronic Applications must be submitted solely by using the CDFI Fund’s website and must be sent in accordance with the submission instructions provided in the CY 2024–2025 NMTC Application—AMIS Navigation Guide for this Allocation Round. AMIS will only permit the

submission of Applications in which all required questions and tables are fully completed. Additional information, including instructions relating to the submission of supporting information (e.g., the Controlling Entity’s representative signature page, Assurances and Certifications supporting documents, investor letters, and organizational charts) is set forth in further detail in the CY 2024–2025 NMTC Application—AMIS Navigation Guide for this Allocation Round.

E. Application submission dates and times: Electronic Applications must be received by the Allocation Application deadline in Table 1. Electronic Applications cannot be transmitted or received after Allocation Application deadline in Table 1. In addition, Applicants must electronically submit supporting information (e.g., the Controlling Entity’s representative signature page, investor letters, and organizational charts) must be submitted on or before the Application deadline in Table 1. For details, see the instructions provided in the CY 2024–2025 NMTC Application—AMIS Navigation Guide for this Allocation Round on the CDFI Fund’s website.

Applications and other required documents received after this date and time will be rejected. Please note that the document submission deadlines in this NOAA and/or the Allocation Application are strictly enforced.

F. Intergovernmental Review: Not applicable.

G. Funding Restrictions: For allowable uses of investment proceeds related to an NMTC Allocation, please see 26 U.S.C. 45D and the final regulations issued by the Internal Revenue Service (26 CFR 1.45D–1, published December 28, 2004 and as amended) and related guidance. Please see Section I, above, for the Programmatic Changes of this NOAA.

H. Paperwork Reduction: Under the Paperwork Reduction Act (44 U.S.C. chapter 35), an agency may not conduct or sponsor a collection of information, and an individual is not required to respond to a collection of information, unless it displays a valid OMB control number. Pursuant to the Paperwork Reduction Act, the Application has been assigned the following control number: 1559–0016.

V. Application Review Information

A. Review and selection process: All Allocation Applications will be reviewed for eligibility and completeness. To be complete, the

Application must contain, at a minimum, all information described as required in the Application form. An incomplete Application will be rejected. Once the Application has been determined to be eligible and complete, the CDFI Fund will conduct the substantive review of each Application in two parts (Phase 1 and Phase 2) in accordance with the criteria and procedures generally described in this NOAA and the Allocation Application.

In Phase 1, two reviewers will evaluate and score the Business Strategy and Community Outcomes sections of each Application. An Applicant must exceed a minimum overall aggregate base score threshold and exceed a minimum aggregate section score threshold in each scored section in order to advance from the Phase 1 to the Phase 2 part of the substantive review process. In Phase 2, the CDFI Fund will rank Applicants and determine the dollar amount of allocation authority awarded in accordance with the procedures set forth below. Factors considered in Phase 2 include the relevant business strategy and community outcome criteria from Section V.B and the additional factors outlined in Section V.C of this NOAA.

B. Criteria:

1. Business Strategy (25-point maximum):

(a) When assessing an Applicant's business strategy, reviewers will consider, among other things: the Applicant's products, services and investment criteria; a pipeline of potential business loans or investments consistent with an Applicant's request for an NMTC Allocation; the prior performance of the Applicant or its Controlling Entity, particularly as it relates to making similar kinds of investments as those it proposes to make with the proceeds of QEIs; the Applicant's prior performance in providing capital or technical assistance to disadvantaged businesses or communities; and the extent to which the Applicant intends to make QLICs in one or more businesses in which persons unrelated to the entity hold a majority equity interest.

Under the Business Strategy criterion, an Applicant will generally score well to the extent that it will deploy debt or investment capital in products or services which are flexible or non-traditional in form and on better terms than available in the marketplace. An Applicant will also score well to the extent that, among other things: (i) it has identified a set of clearly defined potential borrowers or investees; (ii) it describes the due diligence it will conduct prior to making QLICs to

determine whether a QALICB will remain financially viable and operational; (iii) it has a track record of successfully deploying loans or equity investments and providing services similar to those it intends to provide with the proceeds of QEIs; (iv) its projected dollar volume of NMTC Allocation deployment is supported by its track record of deployment; and (v) in the case of an Applicant proposing to purchase loans from CDEs, the Applicant will require the CDE selling such loans to re-invest the proceeds of the loan sale to provide additional products and services to Low-Income Communities.

(b) *Priority Points:* In addition, as provided by IRC § 45D(f)(2), the CDFI Fund will ascribe additional points to entities that meet one or both of the statutory priorities. First, the CDFI Fund will give up to five additional points to any Applicant that has a record of having successfully provided capital or technical assistance to disadvantaged businesses or communities. Second, the CDFI Fund will give five additional points to any Applicant that intends to satisfy the requirement of IRC § 45D(b)(1)(B) by making QLICs in one or more businesses in which persons unrelated (within the meaning of IRC § 267(b) or IRC § 707(b)(1)) to an Applicant (and the Applicant's Subsidiary CDEs, if the Subsidiary Allocatee makes the QLICI) hold the majority equity interest. Applicants may earn points for one or both statutory priorities. Thus, Applicants that meet the requirements of both priority categories can receive up to a total of ten additional points. A record of having successfully provided capital or technical assistance to disadvantaged businesses or communities may be demonstrated either by the past actions of an Applicant itself or by its Controlling Entity (e.g., where a new CDE is established by a nonprofit corporation with a history of providing assistance to disadvantaged communities). An Applicant that receives additional points for intending to make investments in unrelated businesses and is awarded an NMTC Allocation must meet the requirements of IRC § 45D(b)(1)(B) by investing substantially all of the proceeds from its QEIs in unrelated businesses. The CDFI Fund will include an Applicant's priority points when ranking Applicants during Phase 2 of the review process, as described below.

2. *Community Outcomes (25-point maximum):* In assessing the potential benefits to Low-Income Communities that may result from the Applicant's proposed investments, reviewers will

consider, among other things, the degree to which the Applicant is likely to: (i) achieve significant and measurable community development outcomes in its Low-Income Communities; (ii) invest in particularly economically distressed markets including areas identified in the Allocation Application; (iii) engage with local communities regarding investments; (iv) ensure that investments benefit Low-Income Persons and Low-Income Community Residents; and (v) involve community representatives in the governing board and/or advisory board in approving investment criteria or decisions.

An Applicant will generally score well under this section to the extent that, among other things: (a) it will generate clear and well supported community development outcomes; (b) it has a track record of producing quantitative and qualitative community outcomes that are similar to those projected to be achieved with an NMTC Allocation; (c) it commits to working in particularly economically distressed or otherwise underserved communities as identified in the Allocation Application; (d) its activities are part of a broader community or economic development strategy; (e) it demonstrates a track record of community engagement around past investment decisions; and (f) it ensures that an NMTC investment into a project or business is supported by and will be beneficial to Low-Income Persons and residents of Low-Income Communities, including how input received through community engagement and data analysis inform its investment decisions.

C. Phase 2 Evaluation:

1. *Application Ranking and Anomaly Reviews:* Using the numeric scores from Phase 1, Applicants are ranked on the basis of each Applicant's combined scores in the Business Strategy and Community Outcomes sections of the Application plus one half of the priority points. If, in the case of a particular Application, a reviewer's total base score or section score(s) (in one or more of the two Application scored sections) varies significantly from the other reviewer's total base scores or section scores for such Application, the CDFI Fund may, in its sole discretion, obtain the evaluation and numeric scoring of a third reviewer to determine whether the anomalous score should be replaced with the score of the third reviewer.

2. *Late Reports:* In the case of an Applicant or any Affiliates that have previously received an award or NMTC Allocation from the CDFI Fund through any CDFI Fund program, the CDFI Fund will deduct up to five points from the Applicant's rank score for the

Applicant's (or its Affiliate's) failure to meet any of the reporting deadlines set forth in any assistance, award or Allocation Agreement(s), if the reporting deadlines occurred during the period from December 20, 2023 to the Application deadline in this NOAA.

3. *Prior Year Allocatees:* In the case of Applicants (or their Affiliates) that are prior year Allocatees, the Applicant will complete Part V of the Application and the CDFI Fund will review the activities of the prior year Allocatee to determine whether the entity has: (a) effectively utilized its prior-year NMTC Allocations in a manner generally consistent with the representations made in the relevant Allocation Application (including, but not limited to, the proposed product offerings, business type, fees and markets served (*i.e.* service area) and notable relationships); (b) issued QEIs and closed QLICs in a timely manner; and (c) substantiated a need for additional NMTC Allocation authority. The CDFI Fund will use this information in determining whether to reject or reduce the allocation award amount of its NMTC Allocation Application.

An Applicant will be evaluated more favorably under Part V of the Application to the extent that it clearly explains: (i) how it ensures that the NMTCs allocated to QALICBs did not exceed the amount necessary to assure QALICB feasibility; (ii) the community outcomes or benefits that were generated as a result of the transactions; (iii) the source(s) and amount(s) of leveraged debt; (iv) the NMTC-related fees and third-party expenses paid by the QALICB or the QALICB's Affiliates, including actions taken to control expenses paid by QALICBs and investors; and (v) the quantified value of the investment acquired by the QALICBs at the end of the seven-year credit period, to the extent the Applicant's past transactions have been structured to allow QALICBs to acquire a portion of QLICs at the end of the seven-year credit period. An Applicant will also be evaluated favorably to the extent the activities undertaken with the NMTC dollars are consistent with the business strategy presented in the relevant Allocation Application (*e.g.* product offerings; business type; fees and markets served; notable relationships, etc.).

4. *Management Capacity:* In assessing an Applicant's management capacity, the CDFI Fund will consider, among other things, the current and planned roles, as well as qualifications of the Applicant's (and Controlling Entity's, if applicable): principals; board members; management team; and other essential

staff or contractors, with specific focus on: experience in providing loans; equity investments or financial counseling and other services, including activities similar to those described in the Applicant's business strategy; asset management and risk management experience; experience with fulfilling compliance requirements of other governmental programs, including other tax credit programs; and the Applicant's (or its Controlling Entity's) financial health. CDFI Fund evaluators will also consider the extent to which an Applicant has protocols in place to ensure ongoing compliance with NMTC Program requirements and the Applicant's projected income and expenses related to managing an NMTC Allocation.

An Applicant will be generally evaluated more favorably under this section to the extent that its management team or other essential personnel have experience in: (a) identifying and underwriting loans and/or equity investments or providing financial counseling and other services in Low-Income Communities, if applicable, particularly those likely to be served with QLICs from the Applicant; (b) asset and risk management; and (c) fulfilling government compliance requirements, particularly tax credit program compliance. An Applicant will also be evaluated favorably to the extent it demonstrates strong financial health and a high likelihood of remaining a going-concern, including support from the Controlling Entity, if applicable; it clearly explains its NMTC fees as well as levels of income and expenses; has policies and systems in place to ensure portfolio quality, ongoing compliance with NMTC Program requirements; and, if it is a Federally-insured financial institution, has its most recent Community Reinvestment Act (CRA) rating as "outstanding."

5. *Capitalization Strategy:* When assessing an Applicant's capitalization strategy, the CDFI Fund will consider, among other things: the key personnel of the Applicant (or Controlling Entity) and their track record of raising capital, particularly from for-profit investors; the extent to which the Applicant has secured investments or commitments to invest in NMTC (if applicable), or indications of investor interest commensurate with its requested amount of NMTC Allocations, or, if a prior Allocatee, the track record of the Applicant or its Affiliates in raising Qualified Equity Investments in the past five years; the Applicant's strategy for identifying additional investors, if necessary, including the Applicant's (or

its Controlling Entity's) prior performance with raising equity from investors, particularly for-profit investors; the distribution of the economic benefits of the tax credit; and the extent to which the Applicant intends to invest the proceeds from the aggregate amount of its QEIs at a level that exceeds the requirements of IRC § 45D(b)(1)(B) and the IRS regulations.

An Applicant will be evaluated more favorably under this section to the extent that: (a) it or its Controlling Entity demonstrate a track record of raising investment capital; (b) it has secured investor commitments, or has a reasonable strategy for obtaining such commitments, or, if it or its Affiliates is a prior Allocatee with a track record in the past five years of raising Qualified Equity Investments and; (c) it generally demonstrates that the economic benefits of the tax credit will be passed through to a QALICB; and (d) it intends to invest the proceeds from the aggregate amount of its QEIs at a level that exceeds the requirements of IRC § 45D(b)(1)(B) and the IRS regulations. In the case of an Applicant proposing to raise investor funds from organizations that also will identify or originate transactions for the Applicant or from Affiliated entities, said Applicant will be evaluated more favorably to the extent that it will offer products with more favorable rates or terms than those currently offered by its investor(s) or Affiliated entities and/or will target its activities to areas of greater economic distress than those currently targeted by the investor or Affiliated entities.

6. *Contacting Applicants:* As a part of the substantive review process, the CDFI Fund may permit the NMTC Allocation recommendation panel member(s) to request information from Applicants for the sole purpose of obtaining, clarifying or confirming Application information or omission of information. In no event shall such contact be construed to permit an Applicant to change any element of its Application. At this point in the process, an Applicant may be required to submit additional information about its Application in order to assist the CDFI Fund with its final evaluation process. If the Applicant (or the Controlling Entity or any Affiliate) has previously been awarded an NMTC Allocation, the CDFI Fund may also request information on the use of those NMTC Allocations, to the extent that this information has not already been reported to the CDFI Fund. Such requests must be responded to within the time parameters set by the CDFI Fund. The selecting official(s) will make a final allocation determination based on an Applicant's file, including,

without limitation, eligibility under IRC § 45D, the reviewers' scores and the amount of NMTC Allocation authority available.

7. *Award Decisions:* The CDFI Fund will award allocations in descending order of the final rank score, subject to Applicants meeting all other eligibility requirements; provided, however, that the CDFI Fund, in its sole discretion, reserves the right to reject an Application and/or adjust award amounts as appropriate based on information obtained during the review process.

D. Allocations serving Non-Metropolitan counties: As provided for under Section 102(b) of the Tax Relief and Health Care Act of 2006 (Pub. L. 109-432), the CDFI Fund shall ensure that Non-Metropolitan counties receive a proportional allocation of QEIs under the NMTC Program. The CDFI Fund will endeavor to ensure that 20 percent of the QLICIs to be made using QEI proceeds are invested in Non-Metropolitan counties. In addition, the CDFI Fund will ensure that the proportion of Allocatees that are Rural CDEs is, at a minimum, equal to the proportion of Applicants in the highly qualified pool that are Rural CDEs. A Rural CDE is one that has a track record of at least three years of direct financing experience, has dedicated at least 50 percent of its direct financing dollars to Non-Metropolitan counties over the past five years, and has committed that at least 50 percent of its NMTC financing dollars with this NMTC Allocation will be deployed in such areas. Non-Metropolitan counties are counties not contained within a Metropolitan Statistical Area, as such term is defined in OMB Bulletin No. 20-01 (Revised Delineations of Metropolitan Statistical Areas, Micropolitan Statistical Areas, and Combined Statistical Areas, and Guidance on Uses of the Delineations of These Areas) and applied using 2020 census tracts.

Applicants that meet the minimum scoring thresholds will be advanced to Phase 2 review and will be provided with "preliminary" awards, in descending order of final rank score, until the available allocation authority is fulfilled. Once these "preliminary" award amounts are determined, the CDFI Fund will then analyze the Allocatee pool to determine whether the two Non-Metropolitan proportionality objectives have been met.

The CDFI Fund will first examine the "preliminary" awards and Allocatees to determine whether the percentage of Allocatees that are Rural CDEs is, at a minimum, equal to the percentage of Applicants in the highly qualified pool

that are Rural CDEs. If this objective is not achieved, the CDFI Fund will provide awards to additional Rural CDEs from the highly qualified pool, in descending order of their final rank score, until the appropriate percentage balance is achieved. In order to accommodate the additional Rural CDEs in the Allocatee pool within the available NMTC Allocation limitations, a formula reduction may be applied as uniformly as possible to the allocation amount for all Allocatees in the pool that have not committed to investing a minimum of 20 percent of their QLICIs in Non-Metropolitan counties.

The CDFI Fund will then determine whether the pool of Allocatees will, in the aggregate, invest at least 20 percent of their QLICIs (as measured by dollar amount) in Non-Metropolitan counties. The CDFI Fund will first apply the "minimum" percentage of QLICIs that Allocatees indicated in their Applications would be targeted to Non-Metropolitan areas to the total NMTC Allocation award amount of each Allocatee (less whatever percentage the Allocatee indicated would be retained for non-QLICI activities) and total these figures for all Allocatees. If this aggregate total is greater than or equal to 20 percent of the QLICIs to be made by the Allocatees, then the pool is considered balanced and the CDFI Fund will proceed with the NMTC Allocation process. However, if the aggregate total is less than 20 percent of the QLICIs to be made by the Allocatees, the CDFI Fund will consider requiring any or all of the Allocatees to direct up to the "maximum" percentage of QLICIs that the Allocatees indicated would be targeted to Non-Metropolitan counties, taking into consideration their track record and ability to deploy dollars in Non-Metropolitan counties. If the CDFI Fund cannot meet the goal of 20 percent of QLICIs in Non-Metropolitan counties by requiring any or all Allocatees to commit up to the maximum percentage of QLICIs that they indicated would be targeted to Non-Metropolitan counties, the CDFI Fund may add additional highly qualified Rural CDEs (in descending order of final rank score) to the Allocatee pool. In order to accommodate any additional Allocatees within the allocation limitations, a formula reduction will be applied as uniformly as possible, to the allocation amount for all Allocatees in the pool that have not committed to investing a minimum of 20 percent of their QLICIs in Non-Metropolitan counties.

E. Right of rejection: The CDFI Fund reserves the right to reject any NMTC Allocation Application in the case of a prior CDFI Fund award recipient, if

such Applicant has failed to comply with the terms, conditions, and other requirements of the prior or existing assistance or award agreement(s) with the CDFI Fund or any other agreement under any CDFI Fund program. The CDFI Fund reserves the right to reject any NMTC Allocation Application in the case of a prior CDFI Fund Allocatee, if such Applicant has failed to comply with the terms, conditions, and other requirements of its prior or existing Allocation Agreement(s) with the CDFI Fund. The CDFI Fund reserves the right to reject any NMTC Allocation Application in the case of any Applicant, if an Affiliate of the Applicant has failed to meet the terms, conditions and other requirements of any prior or existing assistance agreement, award agreement, Allocation Agreement, or any other agreement under any CDFI Fund program with the CDFI Fund.

The CDFI Fund reserves the right to reject or reduce the allocation award amount of any NMTC Allocation Application in the case of a prior Allocatee, if such Applicant has failed to use its prior NMTC Allocation(s) in a manner that is generally consistent with the business strategy (including, but not limited to, the proposed product offerings, business type, fees, markets served (*i.e.* service area), and notable relationships) set forth in the Allocation Application(s) related to such prior NMTC Allocation(s) or such Applicant has been found by the IRS to have engaged in a transaction or series of transactions designed to achieve a result that is inconsistent with the purposes of IRC § 45D. The CDFI Fund also reserves the right to reject or reduce the allocation award amount of any NMTC Allocation Application in the case of an Affiliate of the Applicant that is a prior Allocatee and has failed to use its prior NMTC Allocation(s) in a manner that is generally consistent with the business strategy (including, but not limited to, the proposed product offerings, business type, fees, markets served (*i.e.*, service area), and notable relationships) set forth in the Allocation Application(s) related to such prior NMTC Allocation(s) or has been found by the IRS to have engaged in a transaction or series of transactions designed to achieve a result that is inconsistent with the purposes of IRC § 45D.

The CDFI Fund reserves the right to reject an NMTC Allocation Application if information (including, but not limited to, administrative errors; submission of inaccurate information; or omission of information) comes to the attention of the CDFI Fund that adversely affects an Applicant's

eligibility for an award, adversely affects the CDFI Fund's evaluation or scoring of an Application, adversely affects the CDFI Fund's prior determinations of CDE certification, or indicates fraud or mismanagement on the part of an Applicant, its Affiliate(s), or the Controlling Entity, if such fraud or mismanagement by the Affiliate(s) or Controlling Entity would hinder the Applicant's ability to perform under the Allocation Agreement. If the CDFI Fund determines that any portion of the Application is incorrect in any material respect, the CDFI Fund reserves the right, in its sole discretion, to reject the Application.

The CDFI Fund reserves the right to reject any NMTC Allocation Application if additional information is obtained that, after further due diligence and in the discretion of the CDFI Fund, would hinder the Applicant's ability to effectively perform under the Allocation Agreement.

In the case of Applicants (or the Controlling Entity, or Affiliates) that are regulated or receive oversight by the Federal government or a state agency (or comparable entity), the CDFI Fund may request additional information from the Applicant regarding Assurances and Certifications or other information about the ability of the Applicant to effectively perform under the Allocation Agreement. The NMTC Allocation recommendation panel or selecting official(s) reserve(s) the right to consult with and take into consideration the views of the appropriate Federal banking and other regulatory agencies. In the case of Applicants (or Affiliates of Applicants) that are also Small Business Investment Companies, Specialized Small Business Investment Companies or New Markets Venture Capital Companies, the CDFI Fund reserves the right to consult with and take into consideration the views of the Small Business Administration.

The CDFI Fund reserves the right to conduct additional due diligence on all Applicants, as determined reasonable and appropriate by the CDFI Fund, in its sole discretion, related to the Applicant, Affiliates, the Applicant's Controlling Entity and the officers, directors, owners, partners and key employees of each. This includes the right to consult with the IRS if the Applicant (or the Controlling Entity, or Affiliates) has previously been awarded an NMTC Allocation.

F. Allocation Announcement: Each Applicant will be informed of the CDFI Fund's award decision through an electronic notification whether selected for an allocation or not selected for an allocation, which may be for reasons of

Application incompleteness, ineligibility, or substantive issues. Eligible Applicants that are not selected for an allocation based on substantive issues may receive information on the score ranges of Applications that are selected for an allocation. This information will be provided in a format and within a timeframe to be determined by the CDFI Fund, based on available resources.

The CDFI Fund further reserves the right to change its eligibility and evaluation criteria and procedures, if the CDFI Fund deems it appropriate. If said changes materially affect the CDFI Fund's award decisions, the CDFI Fund will provide information regarding the changes through the CDFI Fund's website.

The CDFI Fund reserves the right, in its sole discretion, to rescind an allocation made under this NOAA, should an Allocatee or Affiliate be identified as ineligible due to pending or delinquent debt to the Federal government in the Do Not Pay database.

There is no right to appeal the CDFI Fund's NMTC Allocation decisions. The CDFI Fund's NMTC Allocation decisions are final.

VI. Award Administration Information

A. Allocation Award Compliance.

1. Failure to meet reporting requirements: If an Allocatee, or an Affiliate of an Allocatee, is a prior CDFI Fund award recipient or Allocatee under any CDFI Fund program and is not current on the reporting requirements set forth in the previously executed assistance, allocation, or award agreement(s) or any other agreement under any CDFI Fund program as of the date the CDFI Fund provides notification of an NMTC Allocation award or thereafter, the CDFI Fund reserves the right, in its sole discretion, to reject the Application, delay entering into an Allocation Agreement, and/or impose limitations on an Allocatee's ability to issue QELs to investors until said prior award recipient or Allocatee is current on the reporting requirements in the previously executed assistance, allocation, or award agreement(s) or any other agreement under any CDFI Fund program. Please note that the automated systems the CDFI Fund uses for receipt of reports submitted electronically typically acknowledges only a report's receipt; such an acknowledgment does not warrant that the report received was complete and therefore met reporting requirements.

2. Pending determination of noncompliance or default: If an Allocatee or an Affiliate of an Allocatee

is a prior award recipient or Allocatee under any CDFI Fund program and if: (i) it has demonstrated noncompliance with a previous assistance or award agreement or a default under an Allocation Agreement or any other agreement under any CDFI Fund program; and (ii) the entity has been given a timeframe to cure the noncompliance or default, the CDFI Fund reserves the right, in its sole discretion, to delay entering into an Allocation Agreement and/or to impose limitations on the Allocatee's ability to issue QELs to investors, during the time period given for the entity to cure the noncompliance or default and until such time as the CDFI Fund makes a final determination that the entity is in noncompliance or default, and determination of remedies related to the defaulted Allocation Agreement, if applicable, in the sole determination of the CDFI Fund. If the prior award recipient, Allocatee or Affiliate of the Allocatee in question is unable to satisfactorily resolve the issues of noncompliance or default, in the sole determination of the CDFI Fund, the CDFI Fund reserves the right, in its sole discretion, to terminate and rescind the award notification made under this NOAA.

3. Determination of noncompliance or default status: If after the Application deadline of this NOAA and prior to entering into an Allocation Agreement through this NOAA, the CDFI Fund has made a final determination that an Allocatee or an Affiliate of the Allocatee that is a prior CDFI Fund award recipient or Allocatee under any CDFI Fund program is (i) noncompliant with a previously executed assistance or award agreement, or is in default of a previously executed Allocation Agreement or any other agreement under any CDFI Fund program; and (ii) the CDFI Fund has provided written notification that the Recipient is ineligible to apply for or receive any future awards or allocations for a specified timeframe or, regardless of whether a sanction or remedy is imposed, the default on a prior Allocation Agreement of the Applicant or Affiliate occurs during the time period beginning 12 months prior to the Application deadline and ending with the execution of the CY 2024–2025 Allocation Agreement, the CDFI Fund reserves the right, in its sole discretion, to delay entering into an Allocation Agreement and/or to impose limitations on the Allocatee's ability to issue QELs to investors, or to terminate and rescind the NMTC Allocation made under this NOAA.

B. Allocation Agreement: Each Allocatee (including their Subsidiary Allocatees) must enter into an Allocation Agreement with the CDFI Fund. The Allocation Agreement will set forth certain required terms and conditions of the NMTC Allocation which may include, but are not limited to, the following: (i) the amount of the awarded NMTC Allocation; (ii) the approved uses of the awarded NMTC Allocation (e.g., loans to or equity investments in QALICBs, loans to or equity investments in other CDEs); (iii) the approved service area(s) in which the proceeds of QEIs may be used, including the dollar amount of QLICIs that must be invested in Non-Metropolitan counties; (iv) commitments to specific innovative investments discussed by the Allocatee in its Allocation Application; (v) the time period by which the Allocatee may obtain QEIs from investors; (vi) reporting requirements for the Allocatee; and (vii) a requirement to maintain certification as a CDE throughout the term of the Allocation Agreement. If an Allocatee represented in its NMTC Allocation Application that it intends to invest substantially all of the proceeds from its investors in businesses in which persons unrelated to the Allocatee hold a majority equity interest, the Allocation Agreement will contain a covenant to that effect.

In addition to entering into an Allocation Agreement, each Allocatee must furnish to the CDFI Fund an opinion from its legal counsel or a similar certification, the content of which will be further specified in the Allocation Agreement, to include, among other matters, an opinion that an Allocatee (and its Subsidiary Allocatees, if any): (i) is duly formed and in good standing in the jurisdiction in which it was formed and the jurisdiction(s) in which it operates; (ii) has the authority to enter into the Allocation Agreement and undertake the activities that are specified therein; (iii) has no pending or threatened litigation that would materially affect its ability to enter into and carry out the activities specified in the Allocation Agreement; and (iv) is not in default of its articles of incorporation, bylaws or other organizational documents, or any agreements with the Federal government.

If an Allocatee identifies Subsidiary Allocatees, the CDFI Fund reserves the right to require an Allocatee to provide supporting documentation evidencing that it Controls such entities prior to entering into an Allocation Agreement with the Allocatee and its Subsidiary Allocatees. The CDFI Fund reserves the

right, in its sole discretion, to rescind its NMTC Allocation award if the Allocatee fails to return the Allocation Agreement, signed by the authorized representative of the Allocatee, and/or provide the CDFI Fund with any other requested documentation, including an approved legal opinion, within the deadlines set by the CDFI Fund.

C. Fees: The CDFI Fund reserves the right, in accordance with applicable Federal law and, if authorized, to charge allocation reservation and/or compliance monitoring fees to all entities receiving NMTC Allocations. Prior to imposing any such fee, the CDFI Fund will publish additional information concerning the nature and amount of the fee.

D. Reporting: The CDFI Fund will collect information, on at least an annual basis from all Allocatees and/or CDEs that are recipients of QLICIs, including such audited financial statements and opinions of counsel as the CDFI Fund deems necessary or desirable, in its sole discretion. The CDFI Fund will require the Allocatee to retain information as the CDFI Fund deems necessary or desirable and shall provide such information to the CDFI Fund when requested to monitor each Allocatee's compliance with the provisions of its Allocation Agreement and to assess the impact of the NMTC Program in Low-Income Communities. The CDFI Fund may also provide such information to the IRS in a manner consistent with IRC § 6103 so that the IRS may determine, among other things, whether the Allocatee has used substantially all of the proceeds of each QEI raised through its NMTC Allocation to make QLICIs. The Allocation Agreement shall further describe the Allocatee's reporting requirements.

The CDFI Fund reserves the right, in its sole discretion, to modify these reporting requirements if it determines it to be appropriate and necessary; however, such reporting requirements will be modified only after due notice to Allocatees.

VII. Agency Contacts

The CDFI Fund will provide programmatic and information technology support related to the Allocation Application Mondays through Fridays, between the hours of 9:00 a.m. and 5:00 p.m. ET through the last day to contact the CDFI Fund in Table 1. The CDFI Fund will not respond to phone calls emails, or Service Requests in AMIS concerning the Application that are received after the last day to contact the CDFI Fund. The CDFI Fund will respond to such phone calls, emails, or Service Requests

in AMIS after the Allocation Application deadline in Table 1. Applications and other information regarding the CDFI Fund and its programs may be obtained from the CDFI Fund's website at <https://www.cdfifund.gov>. The CDFI Fund will post on its website responses to questions of general applicability regarding the NMTC Program.

A. Information technology support: Technical support can be obtained by calling (202) 653-0422 or by submitting a Service Request in AMIS. People who have visual or mobility impairments that prevent them from accessing the Low-Income Community maps using the CDFI Fund's website should call (202) 653-0422 for assistance. These are not toll free numbers.

B. Programmatic support: If you have any questions about the programmatic requirements of this NOAA, contact the CDFI Fund's NMTC Program Manager by submitting a Service Request in AMIS; or by telephone at (202) 653-0421. These are not toll free numbers.

C. Administrative support: If you have any questions regarding the administrative requirements of this NOAA, contact the CDFI Fund's NMTC Program Manager by submitting a Service Request in AMIS, or by telephone at (202) 653-0421. These are not toll free numbers.

D. IRS support: For questions regarding the tax aspects of the NMTC Program, contact James Holmes and Dillon Taylor, Office of the Chief Counsel (Passthroughs and Special Industries), IRS, by telephone at (202) 317-4137, or by facsimile at (855) 591-7867. These are not toll free numbers. Applicants wishing for a formal ruling request should see IRS Internal Revenue Bulletin 2020-1, issued January 4, 2020.

VIII. Information Sessions

In connection with this NOAA, the CDFI Fund may conduct one or more information sessions that will be produced in Washington, DC and broadcast over the internet via webcasting as well as telephone conference calls. For further information on these upcoming information sessions, please visit the CDFI Fund's website at <https://www.cdfifund.gov>.

Authority: 26 U.S.C. 45D; 31 U.S.C. 321; 26 CFR 1.45D-1.

Pravina Raghavan,

Director, Community Development Financial Institutions Fund.

[FR Doc. 2024-27029 Filed 11-20-24; 8:45 am]

BILLING CODE 4810-05-P

DEPARTMENT OF THE TREASURY**Office of Foreign Assets Control****Notice of OFAC Sanctions Action**

AGENCY: Office of Foreign Assets Control, Treasury.

ACTION: Notice.

SUMMARY: The U.S. Department of the Treasury's Office of Foreign Assets Control (OFAC) is publishing the names of one or more persons that have been placed on OFAC's Specially Designated Nationals and Blocked Persons List (SDN List) based on OFAC's

determination that one or more applicable legal criteria were satisfied. All property and interests in property subject to U.S. jurisdiction of these persons are blocked, and U.S. persons are generally prohibited from engaging in transactions with them.

DATES: This action was issued on November 18, 2024. See **SUPPLEMENTARY INFORMATION** for relevant dates.

FOR FURTHER INFORMATION CONTACT: OFAC: Associate Director for Global Targeting, 202-622-2420; or Assistant Director for Sanctions Compliance, 202-622-2490 or <https://ofac.treasury.gov/contact-ofac>.

SUPPLEMENTARY INFORMATION:**Electronic Availability**

The SDN List and additional information concerning OFAC sanctions programs are available on OFAC's website: <https://ofac.treasury.gov>.

Notice of OFAC Action

On November 18, 2024, OFAC determined that the property and interests in property subject to U.S. jurisdiction of the following persons are blocked under the relevant sanctions authorities listed below.

Entities

1. AMANA THE SETTLEMENT MOVEMENT OF GUSH EMUNIM CENTRAL COOPERATIVE ASSOCIATION LTD (a.k.a. BAR AMANA SOCIETY & ASSOCIATIONS; a.k.a. "AMANA" (Hebrew: "אמנה")), West Bank; Israel; Organization Established Date 18 Feb 1979; Company Number 570025742 (Israel) [WEST-BANK-EO14115].</PHOTO>

Designated pursuant to section 1(a)(i)(B)(4) of Executive Order 14115 of February 1, 2024, "Imposing Certain Sanctions on Persons Undermining Peace, Security, and Stability in the West Bank," 89 FR 7605 (Feb. 5, 2024) (E.O. 14115) for being a foreign person that is responsible for or complicit in, or has directly or indirectly engaged or attempted to engage in, planning, ordering, otherwise directing, or participating in seizure or dispossession of property by private actors, affecting the West Bank.

2. BINYANEI BAR AMANA LTD (a.k.a. BINYANEI BAR AMANA CONSTRUCTION AND DEVELOPMENT), West Bank; Israel; Organization Established Date 08 Feb 1990; Organization Type: Construction of buildings; Company Number 511454365 (Israel) [WEST-BANK-EO14115] (Linked To: AMANA THE SETTLEMENT MOVEMENT OF GUSH EMUNIM CENTRAL COOPERATIVE ASSOCIATION LTD).

Designated pursuant to section 1(a)(iv) of E.O. 14115 for being a foreign person that is owned or controlled by, or has acted or purported to act for or on behalf of, directly or indirectly, AMANA THE SETTLEMENT MOVEMENT OF GUSH EMUNIM CENTRAL COOPERATIVE ASSOCIATION LTD (a.k.a. BAR AMANA SOCIETY & ASSOCIATIONS, a person whose property and interests in property are concurrently blocked pursuant to E.O. 14115.

Lisa M. Palluconi,

Acting Director, Office of Foreign Assets Control.

[FR Doc. 2024-27323 Filed 11-20-24; 8:45 am]

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Part II

Department of Transportation

Federal Aviation Administration

14 CFR Parts 1, 11, 43, et al.

Integration of Powered-Lift: Pilot Certification and Operations; Miscellaneous Amendments Related to Rotorcraft and Airplanes; Final Rule

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration**

14 CFR Parts 1, 11, 43, 60, 61, 91, 97, 111, 135, 136, 141, 142, and 194

[Docket No. FAA–2023–1275; Amdt. Nos. 1–78, 11–69, 43–62, 60–8, 61–157, 91–379, 97–1340, 111–2, 135–147, 136–4, 141–26, 142–11, and 194–1]

RIN 2120–AL72

Integration of Powered-Lift: Pilot Certification and Operations; Miscellaneous Amendments Related to Rotorcraft and Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: This final rule adopts permanent amendments and a Special Federal Aviation Regulation (SFAR) for a period of ten years to: facilitate the certification of powered-lift pilots, clarify operating rules applicable to operations involving a powered-lift, and finalize other amendments which are necessary to integrate powered-lift into the National Airspace System (NAS). In this final action, the FAA finalizes its alternate framework to stand-up initial groups of powered-lift pilots and flight instructors. Most notably, the FAA adopts alternate frameworks to facilitate the certification of pilots seeking qualifications in a powered-lift with single functioning flight controls and a single pilot station. In response to commenters, the FAA provides clarification for certain operating rules and adopts a performance-based approach to certain operating rules to enable powered-lift operations. In addition to finalizing provisions for powered-lift, this action also makes changes to practical tests in aircraft that require type ratings, including airplanes and helicopters, training center rotorcraft instructor eligibility, training and testing requirements, and training center use of rotorcraft in flight training.

DATES: This final rule is effective January 21, 2025, except for amendatory instruction 52 which is effective July 21, 2025.

The incorporation by reference of certain publications listed in this final rule are approved by the Director of the Federal Register as of January 21, 2025.

ADDRESSES: For information on where to obtain copies of rulemaking documents and other information related to this final rule, see “How to Obtain Additional Information” in the **SUPPLEMENTARY INFORMATION** section of this document.

FOR FURTHER INFORMATION CONTACT: For technical questions concerning this action, contact Christina Grabill, AFS–810, Federal Aviation Administration, 800 Independence Ave. SW, Washington, DC 20591; telephone (202) 267–1100; email 9-FAA-Powered-Lift@faa.gov.

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List of Abbreviations and Acronyms Frequently Used in This Document

Abbreviations and Acronyms Used in This Document

ACO—Aircraft Certification Office
 ACS—Airman Certification Standards
 APD—Aircrew Program Designee
 AIH—Aviation Instructor’s Handbook
 AQP—Advanced Qualification Program
 ATC—Air Traffic Control
 ATP—Airline Transport Pilot
 ATO—Air Traffic Organization
 CAMP—Continuous Airworthiness Maintenance Program
 CFIT—Controlled Flight Into Terrain
 CFR—Code of Federal Regulations
 CLOA—Certificate and Letter of Authority
 CVR—Cockpit Voice Recorder
 DPE—Designated Pilot Examiner
 GPS—Global Positioning System
 GPWS—Ground Proximity Warning Systems
 ELT—Emergency Locator Transmitter
 ERT—Extended Review Team
 FDR—Flight Data Recorder
 FFS—Full Flight Simulator
 FSB—Flight Standardization Board
 FSB—Flight Standardization Board Report
 FSTD—Flight Simulation Training Device

FTD—Flight Training Device
 HAA—Helicopter Air Ambulance
 HTAWS—Helicopter Terrain Awareness Warning System
 ICAO—International Civil Aviation Organization
 IFR—Instrument Flight Rules
 IMC—Instrument Meteorological Conditions
 IOE—Initial Operating Experience
 IPC—Instrument Proficiency Check
 LOA—Letter of Authorization
 LOFT—Line Oriented Flight Training
 MDA—Minimum Descent Altitude
 MCTW—Maximum Certificated Takeoff Weight
 MEL—Minimum Equipment List
 MFD—Multifunction Display
 MGTOW—Maximum Gross Takeoff Weight
 MMEL—Master Minimum Equipment List
 NAS—National Airspace System
 NPRM—Notice of Proposed Rulemaking
 NM—Nautical Mile
 NSP—National Simulator Program
 NTSB—National Transportation Safety Board
 OEM—Original Equipment Manufacturer
 PA—Public Address System
 PDP—Professional Development Program
 PIC—Pilot in Command
 PFD—Primary Flight Display
 POI—Principal Operations Inspector
 PTS—Practical Test Standards
 QPS—Qualification Performance Standards
 RPA—Rules of Particular Applicability
 SARPs—Standards and Recommended Practices
 SFAR—Special Federal Aviation Regulation
 SIC—Second in Command
 SLF—Supervised Line Flying
 SOE—Supervised Operating Experience
 SVO—Simplified Vehicle Operations
 TAPL—Technically Advanced Powered-Lift
 TAWS—Terrain Awareness and Warning System
 TC—Type Certificate
 TCE—Training Center Evaluator
 TCDS—Type Certificate Data Sheet
 VFR—Visual Flight Rules
 VMC—Visual Meteorological Conditions
 VTOL—Vertical Takeoff and Landing

I. Executive Summary

This final rule establishes the requirements for pilot certification and operation of powered-lift. Powered-lift are defined in title 14 of the Code of Federal Regulations (14 CFR) part 1 as heavier-than-air aircraft capable of vertical takeoff, vertical landing, and low speed flight that depends principally on engine-driven lift devices or engine thrust for lift during these flight regimes and on nonrotating airfoil(s) for lift during horizontal flight. Powered-lift are capable of vertical takeoff and landing (VTOL) while being able to fly like an airplane during cruise flight. Currently, there are no type-certificated powered-lift in civil operations; however, there are several applicants seeking type certificates for such aircraft.

Several of the powered-lift that the FAA expects to enter the civilian market have complex and unique design, flight,

and handling characteristics with varying degrees of automation. The FAA anticipates that these aircraft will conduct an array of different operations, such as transporting crew and material to offshore oil rigs, transporting passengers from point-to-point as an air ambulance, and transporting passengers in concentrated urban environments.

To safely integrate powered-lift in the national airspace system (NAS), the FAA is making permanent changes to parts 61, 135, and 142 to train and certificate powered-lift pilots and instructors, as well as issuing a temporary Special Federal Aviation Regulation (SFAR) that supplements existing rules, creates temporary alternatives for airman certification, removes operational barriers, and mitigates safety risks for powered-lift. As discussed in section X of this preamble, the duration of the SFAR is 10 years.

Powered-lift will also be utilized to support the deployment of advanced air mobility (AAM) operations. AAM is an umbrella term for an air transportation system that moves people and cargo using revolutionary new aircraft. The AAM Coordination and Leadership Act defines AAM as “a transportation system that transports people and property by air between two points in the United States using aircraft with advanced technologies, including electric aircraft or electric vertical take-off and landing aircraft, in both controlled and uncontrolled airspace.”¹ The FAA Reauthorization Act of 2024 updated the definition to mean “a transportation system that is comprised of urban air mobility and regional air mobility using manned or unmanned aircraft.”¹ Congress directed the Department of Transportation to establish an advanced air mobility working group to plan for and coordinate efforts necessary for maturation of the AAM ecosystem in the United States through the Advanced Air Mobility Coordination and Leadership Act. This rulemaking is an important step in facilitating the integration of powered-lift and AAM into the NAS.

A. Purpose of the Regulatory Action

This final rule addresses regulatory barriers to introducing powered-lift as a new category of aircraft into operations in the NAS. The final rule creates an

alternate pathway for pilot certification and enables operations under parts 91 (General Operating and Flight Rules), 97 (Standard Instrument Procedures), 135 (Commuter and On-Demand Operations), and 136 (Commercial Air Tours).

The existing regulations in part 61 for training and certificating powered-lift flight instructors and pilots do not adequately address the unique challenges of introducing a new category of aircraft to civil operations. First, the existing regulations did not anticipate the diversity in design of the powered-lift that are working through the aircraft certification process. Second, there are challenges with applying existing aeronautical experience requirements to train and certificate the initial cadre² of powered-lift flight instructors and pilots. In addition, part 135 regulations for certain commercial operations do not contain specific requirements addressing the qualifications for powered-lift pilots. Therefore, current part 135 pilot qualification requirements that apply to pilots of airplanes and helicopters need to be amended to include powered-lift pilots to close the safety gap.

In addition, to address an operational safety risk that exists because the current regulatory framework governing operations does not contemplate powered-lift, changes had to be made to certain operational rules. There are myriad operational rules under parts 91, 97, 135, and 136 that currently apply to “airplanes,” “helicopters,” and/or “rotorcraft” that should also apply to powered-lift.

Industry has expressed its intent to introduce these aircraft immediately into passenger-carrying commercial operations under part 135, making the need to reconsider the existing airman certification standards and operating regulations for powered-lift and address the absence of specific regulations for pilots in part 135 more urgent. The FAA requires and the public expects that commercial operations be conducted with the highest regard for safety and by pilots who have the requisite experience flying the particular category of aircraft in which paying passengers will be transported. As a result, this rulemaking is necessary to ensure that pilots for these aircraft are properly trained and

¹ FAA Reauthorization Act of 2024, Pub. L. 118–63 (May 16, 2024). The media often refer to these operations as “air taxis”; however, this term is used only in the context of 14 CFR chapter II (pertaining to DOT-specific regulations). Consequently, throughout this preamble, the FAA refers to these operations as passenger-carrying operations or air carrier operations.

² The FAA uses the term “initial cadre” throughout this preamble. In some instances, initial cadre refers to a sufficient number of instructors and evaluators to train and qualify pilots for powered-lift ratings under an approved training program under part 135, 141, or 142. In other instances, the term refers to a sufficient number of pilots who are rated in powered-lift to meet the demands of the market.

that these rapidly developing aircraft can safely integrate and operate within the NAS.

The following sections discuss the provisions being adopted in this final rule.

B. Aircraft Certification

The FAA did not establish any new requirements for the type certification of powered-lift, nor did it revise existing type certification requirements. The FAA determined that existing aircraft certification requirements are sufficient to type certificate powered-lift as a special class under § 21.17(b). The special class process allows the FAA to address the novel features of unique and nonconventional aircraft without the need for additional processes such as special conditions or exemptions that would be required if the FAA used the airworthiness standards already in place. The aircraft certification requirements and comments the FAA received are discussed in more detail in section IV.A. of this preamble.

C. Airman Certification

To maintain a level of safety commensurate with that expected for airplanes and helicopters, the FAA adopts new requirements for pilots to hold type ratings for each powered-lift they fly and qualification requirements for powered-lift pilots serving in part 135 operations. To address the obstacles to airman certification, the FAA provides alternatives to certain requirements in part 61 through the establishment of a new part 194, Special Federal Aviation Regulation No. 120—Powered-Lift: Pilot Certification and Training; Operations Requirements, to facilitate the training and certification of the initial cadre of powered-lift instructors and pilots. In addition to this alternate framework, the FAA adopts several pathways to certificate powered-lift pilots utilizing aircraft with a single flight control and single pilot station. The FAA is facilitating this through three options: (1) recognition of a single flight control that is accessible by both the student and flight instructor and allows for the instructor to immediately intervene if necessary; (2) expanded use of simulators to allow an applicant to train in a simulator and gain necessary experience solo in the aircraft; and (3) deviation authority for consideration of future advancements in technology that is not currently validated at this time.

1. Type Rating

The FAA did not establish classes within the powered-lift category because each powered-lift can have different configurations, unique

inceptors, diversified flight controls, and distinctive operating characteristics. Further, the FAA lacks sufficient operational data to identify commonality to establish classes within the powered-lift category because powered-lift are still in the development phase. The FAA finds that reasons for not establishing class ratings persist, and the final rule adopts the proposal for all powered-lift pilot in commands (PICs) to hold a type rating.

2. Flight Instructors

The FAA recognizes that, once the first powered-lift achieve type certification, there will be an insufficient number of qualified flight instructors to provide training to the pilots who will need to obtain certificates and ratings necessary to serve in powered-lift operations. For this reason, the FAA is allowing certain pilots employed by the manufacturer to obtain the necessary training and experience for powered-lift through the test flights and crew training activities necessary for aircraft certification. Once the manufacturer's personnel obtain the necessary ratings, they would form the initial cadre of instructors who could conduct certification training in the manufacturer's aircraft for certain instructor personnel at part 141 pilot schools, part 142 training centers, and part 135 operators. These instructors under parts 141, 142, and 135 would then develop the curricula for the initial powered-lift training at their respective organizations and conduct certification training at their respective certificate holders. The FAA finalizes this alternate framework for test pilots and instructor pilots to facilitate certification training as proposed.

3. Alternate Framework for Pilot Certification

Even with sufficient qualified flight instructors, the existing airman certification rules for powered-lift present barriers for persons seeking to accomplish the training and experience necessary to obtain the certificates and ratings for commercial operations. In response to industry concerns, the FAA adopts alternate requirements for meeting PIC flight time and cross-country flight time requirements in part 61 and expanding the opportunity for pilots to obtain powered-lift ratings at the commercial pilot certificate level through part 135 training programs. Most of the alternative requirements would be available only to pilots who already hold a commercial pilot certificate and an instrument rating for another category of aircraft. In addition, although no flight simulation training

devices (FSTDs) representing powered-lift are currently qualified, the FAA anticipates near-term qualification of such devices and proposed allowing increased flight training opportunities through simulation. This final rule adopts the alternate aeronautical experience and cross-country requirements, as proposed, with some minor alterations.

In addition, as explained more fully in section V.F., this final rule reduces the PIC flight time in a powered-lift at the commercial pilot certificate level from 50 hours to 35 hours, of which 15 hours may still be in a Level C or higher full flight simulator (FFS).

4. Part 135 Qualifications

The FAA adopts permanent changes to training and qualification requirements for pilots to align with the requirements for powered-lift with those established for pilots of airplanes and rotorcraft in part 135. The proposals included Airline Transport Pilot (ATP) certification and operating experience in the make and model of powered-lift for PICs in commuter operations, part 121 Advanced Qualification Program (AQP) training requirements for pilots who serve in commuter operations in certain powered-lift, and instrument ratings for all powered-lift pilots in part 135 operations. In addition to allowing a part 135 operator to develop and provide training for powered-lift pilot certification at the commercial pilot level, the FAA is permitting successful completion of part 135 pilot checks to be used to meet the practical test requirements for powered-lift ratings subject to certain conditions.

Overall, the FAA finalizes the proposed requirements regarding integration of powered-lift pertaining to part 135 qualifications without substantial changes from what was proposed in the NPRM. In response to commenters, the FAA made certain editorial changes to add clarification and better enable powered-lift training and testing that would have otherwise created obstacles.

5. Dual Controls

The FAA noted in its proposal that it was retaining the powered-lift category and proposed alternate aeronautical experience and logging requirements to allow certain groups of pilots to attain the necessary aeronautical experience. In accordance with flight training requirements under § 91.109 and the requirements for supervised operating experience (SOE) in § 61.64, the powered-lift would be required to have a dual set of controls to accomplish the

aeronautical experience required in an aircraft and SOE.

After consideration of the comments received, the FAA is adopting several pathways to enable the use of a powered-lift without dual controls. The first pathway permits flight training in a powered-lift with a single set of flight controls accessible by both student and instructor (e.g., a throwover control). The second pathway allows all flight training to be conducted in an approved simulator, culminating in solo aeronautical experience in a powered-lift with a single set of flight controls subject to certain conditions and limitations set forth in a new appendix to part 194. This pathway allows an Original Equipment Manufacturer (OEM) to utilize a Level C or higher FFS to conduct the required flight training in accordance with part 61 and part 194. The pilot can gain the necessary experience through a series of demonstration flights and solo experience, complete a practical test in a Level C FFS, and then conduct abbreviated operating experience in the powered-lift to become fully qualified and fly in the NAS. Finally, the third pathway permits the FAA to issue deviation authority to facilitate flight training in a powered-lift with a single set of flight controls in the NAS based on future demonstrated and validated advancements in technology.

The FAA makes conforming amendments in light of these alternate pathways to the supervised operating experience requirements and in part 135. Specifically, this final rule adopts certain alternate provisions to facilitate supervised operating experience in a powered-lift with a single set of controls and a single pilot seat. Additionally, this final rule revises current requirements for instructor training that is accomplished from either pilot station to provide a feasible pathway for approved part 135 training programs, pilots, instructors, and check airman operating only with one pilot station and/or set of flight controls.

6. Impacts to Rotorcraft Training at Part 142 Training Centers

The FAA adopts permanent changes that, in addition to establishing requirements for powered-lift, would affect certain part 142 training in FSTDs for rotorcraft. These proposed changes would harmonize requirements for airplanes, powered-lift, and rotorcraft in part 142, specifically for pilot training in an FSTD that represents an aircraft requiring a type rating. This final rule applies the ATP aeronautical experience requirements to FSTD instructors in airplanes and helicopters requiring a

type rating, powered-lift weighing over 12,500 pounds, and turbojet powered powered-lift rather than all aircraft requiring a type rating. In some instances, these adopted changes provide additional flexibility to training and qualification for rotorcraft instructors consistent with allowances for airplane instructors and provide training and testing for rotorcraft instructors that is more specifically focused on rotorcraft, instead of airplanes.

D. Operational Requirements

To mitigate the safety gaps that exist due to the absence of operational regulations specifically applicable to powered-lift, the FAA proposed, through the SFAR, to apply specific airplane, rotorcraft, and helicopter rules contained in parts 43, 91, 97, 135, and 136 to powered-lift as appropriate. In the proposal, the FAA determined that applying the airplane rules in most instances was a safer, more conservative approach, especially given the lack of powered-lift operational data. Notwithstanding, in some instances, for example under part 136, the FAA determined that applying the helicopter or rotorcraft rules were appropriate and provided an equivalent level of safety.

Specifically, the FAA initially proposed using the visual flight rules (VFR) fuel requirements specified for airplanes for both operations conducted under parts 91 and 135. After considering comments received, the FAA is adopting different requirements than proposed related to fuel reserves when conducting VFR operations. The SFAR now stipulates helicopter minimums for powered-lift capable of conducting a landing in the vertical-lift flight mode along the entire route of flight. Powered-lift that are not capable of conducting a landing in the vertical-lift flight mode along the entire route of flight must meet airplane minimums.

In addition, the FAA initially proposed using the instrument flight rules (IFR) fuel requirements specified for airplanes for operations conducted under parts 91 and 135. The SFAR now permits the use of helicopter minimums stipulated for powered-lift that are authorized to conduct Copter Procedures and that have the performance capability, as provided in the Aircraft Flight Manual (AFM), to conduct a landing in the vertical-lift flight mode for the entire flight. Powered-lift that do not meet these criteria will be required to meet the airplane minimums.

The FAA also proposed using the VFR visibility requirements prescribed for airplanes. The final rule states that

helicopter minimums are applicable if the powered-lift is operated in the vertical-lift flight mode and is operated at a speed that allows the pilot adequate opportunity to see any other traffic or obstructions in time to avoid a collision. If either of those requirements are not met, then the airplane minimums apply.

Finally, the FAA proposed using the general aircraft minimum safe altitudes for operations conducted under parts 91 and 135, rather than allowing powered-lift to utilize helicopter exclusions. The final rule provides that powered-lift operating in vertical-lift flight mode that have demonstrated a capability to autorotate or conduct an approved equivalent maneuver are allowed the same minimum safe altitudes as those afforded to helicopters. However, for part 135 operations, it is important to note that the minimum altitude cannot be lower than 300 feet above the surface. When a powered-lift is operating in the vertical-lift flight mode and is certificated to conduct an autorotation or an approved equivalent maneuver to a landing, then helicopter minimum safe altitudes or lowest altitude published in the AFM apply.

Under part 136, the FAA proposed applying the operational requirements specific to helicopter operations within part 136 to powered-lift operations because the FAA anticipated powered-lift will hover and operate similarly to helicopters when conducting air tours, except when relying on wing-borne flight. In the final rule, as addressed in section V.I.E. of this preamble, "Part 136 Rules for Powered-Lift," the FAA applies some provisions in part 136 to powered-lift regardless of the flight mode in which the aircraft is operating because the FAA determined those provisions—such as requiring flotation equipment—should apply to powered-lift regardless of whether they are operating in the vertical-lift or wing-borne flight mode.

The FAA will allow powered-lift operators to use Copter Procedures as defined in part 97 if the aircraft has been type-certificated and equipped to utilize those procedures. That capability will be identified in the limitations section of the AFM along with any other specific limitations and procedures necessary for safe operation of the aircraft.

The FAA has made a permanent change to the regulatory requirements for the Pilot Records Database contained in part 111 to include powered-lift as a qualifying aircraft to meet the threshold requirement of whether a person operating in furtherance of a business needs to report pilot records to the Pilot Records Database.

For purposes of maintenance, preventive maintenance, rebuilding, and alteration, the FAA proposed to apply the current requirements under part 43, with only two modifications. First, the FAA proposed to apply the preventive maintenance requirements available to certificate holders operating rotorcraft under part 135 in remote areas to certificate holders similarly operating powered-lift. Second, the FAA proposed that in lieu of complying with § 43.15(b), each person performing an inspection required by part 91 on a powered-lift, must inspect “critical parts” (as defined under §§ 27.602 and 29.602) in accordance with the maintenance manual or Instruction for Continuous Airworthiness, or as otherwise approved by the Administrator. The FAA is adopting these requirements as proposed.

The operational requirements and comments the FAA received are discussed in more detail in section VI.F. of this preamble.

E. International Operation of Powered-Lift

In keeping with U.S. obligations under the Convention on International Civil Aviation, it is FAA policy to conform to International Civil Aviation Organization (ICAO) Standards and Recommended Practices (SARPs) to the maximum extent practicable. In this final rule, the FAA amends part 61 to require powered-lift pilots to have a type rating, which meets the standards outlined in ICAO Annex 1, Personnel Licensing. Under parts 91 and 135, the FAA requires U.S. operators to comply with ICAO Annex 2, Rules of the Air, when operating over the high seas or when operating within a foreign country.³ ICAO Annex 8, Airworthiness of Aircraft, is silent on powered-lift; however, the FAA designates powered-lift as special class aircraft for type certification in accordance with § 21.17(b) and applies airworthiness criteria that meet an equivalent level of safety to the FAA’s existing airworthiness standards and are consistent with the intent of ICAO Annex 8 to the Chicago Convention. Accordingly, U.S. operators of powered-lift that are type-certificated with a standard airworthiness certificate and conduct their operations in accordance

with the standards outlined in Annex 2 would be eligible to operate over the high seas. The requirements for the international operation of powered-lift and comments the FAA received are discussed in more detail in section VIII.B. of this preamble.

F. Summary of the Costs and Benefits

Operations with powered-lift are anticipated to offer benefits over traditional airplanes and rotorcraft. A report published by the U.S. Government Accountability Office (GAO) stated that many of these newer kinds of aircraft could be easier to design, simpler to construct, less complicated to maneuver, quieter to fly, and more economical to operate compared to traditional aircraft.⁴ Many use cases for these aircraft are envisioned, and this rulemaking is a step toward those use cases coming to realization.

Several problems exist absent this rulemaking. The first is that only operating rules applicable to powered-lift are those specific to “aircraft,” which introduces a substantial safety gap in part 91 and part 135 operations. This safety gap does not exist for parts 91 and 135 operations conducted with airplanes, helicopters, and rotorcraft because decades of FAA rulemaking has resulted in a continuum of rules establishing minimum safety standards for operations conducted with these aircraft. A similar suite of category-specific rules simply does not exist for powered-lift because these are new and novel aircraft that have yet to be type-certificated for operations in the NAS. Consequently, powered-lift would not be required to operate at the level of safety required of operations conducted with airplanes, helicopters, or rotorcraft.

The second problem is challenges presented by the existing airmen certification regulations. Unlike the extensive infrastructure in place for the training and certification of airplane and rotorcraft pilots and instructors, the resources to scale powered-lift training and certification of pilots and instructors is scant due to the lack of powered-lift flight instructors and FAA-certificated aircraft available for airman training and testing (and operations). Without this rulemaking, civilian pilots will be unable to obtain powered-lift ratings necessary for industry to scale operations intended for these new and novel aircraft.

The third problem absent this SFAR are the requirements for acting as PIC of

a powered-lift operation. Should type-certificated powered-lift become available before this rule is finalized, individuals holding an airman certificate with a powered-lift category rating would be permitted to act as PIC of powered-lift operations. Taking into consideration the variation in operating characteristics for each powered-lift coming to the civilian market, a powered-lift category rating would not adequately prepare an individual to act as PIC of a powered-lift operation.

While operators choosing to conduct operations with powered-lift will incur costs to comply with regulations in this SFAR, these costs are on a scale equivalent to those incurred by operators choosing to conduct operations with airplanes or rotorcraft under similar regulations. Likewise, costs imposed on individuals that choose to accomplish the training and testing required to hold an airman certificate with a type rating in the powered-lift category are on a scale equivalent to those incurred by individuals accomplishing training and testing to hold an airman certificate with a type rating in the airplane or rotorcraft category. In other words, the costs imposed on operators and individuals that choose to comply with regulations finalized by this rule will be no more burdensome than the costs incurred by entities and individuals complying with corresponding airplane and rotorcraft regulations that are already in effect. Additionally, the FAA has provided some performance-based options in certain rules that could reduce the burden on industry as compared to the comparable prescriptive requirements of the proposed rule.

The provisions in this SFAR can generally be grouped by those rules affecting airman certification and those rules enabling powered-lift to conduct operations under parts 91, 97, 135, and 136. For certification of airmen with a type rating in powered-lift, the FAA allows alternative aeronautical experience and logging requirements. For the operational rules, the FAA applies specific airplane, rotorcraft, or helicopter rules to powered-lift, as appropriate. The FAA has considered each finalized regulation in the SFAR to determine its economic impact. An overview of this analysis is included in the Regulatory Evaluation portion of this preamble. A regulatory impact analysis has also been prepared for the finalized SFAR and can be found in the docket for this rule.

The following table presents a summary of the primary estimate for which data was available to monetize

³ See 14 CFR 91.703. To note, § 91.703(a)(2) requires each person operating a civil aircraft of U.S. registry outside the U.S. when within a foreign country to comply with the regulations relating to the flight and maneuver of aircraft there in force and, with narrow exceptions, comply with 14 CFR part 91 so far as it is not inconsistent with the applicable regulations of the foreign country where the aircraft is operating or Annex 2.

⁴ Transforming Aviation: Stakeholders Identified Issues to Address for ‘Advanced Air Mobility’ | U.S. GAO, www.gao.gov/assets/gao-22-105020.pdf.

the costs of this rule, as well as estimates for a pessimistic and optimistic scenario. The monetized costs include incremental costs for individuals to hold an airman’s certificate with a type rating for the powered-lift flown, costs for the

minimum fuel reserve requirement, and costs for the provision of dual-control aircraft and full flight simulators for training. For the primary estimate, over a 10-year period of analysis, this rule would result in present value costs of about \$914.2 million at a two percent

discount rate with annualized costs of about \$101.8 million.⁵ Additional details are provided in the Regulatory Evaluation section of this SFAR and in the regulatory impact analysis available in the docket for this rulemaking.

TABLE 1—MONETIZED COSTS OF SFAR
[Millions \$]

Forecast scenario	10-Year present value	Annualized
Base—Primary Estimate	\$914.2	\$101.8
Pessimistic	865.5	96.4
Optimistic	966.1	107.6

G. SFAR Framework and Duration

This final rule enables powered-lift operations for a limited duration and provides the FAA an opportunity to assess the operations and establish a comprehensive regulatory scheme. This final rule adopts both limited permanent changes and a time-limited SFAR to facilitate powered-lift operations. The SFAR permits the FAA to gather data—via established approved information collections, regulatory requirements, and informal anecdotal information and observations—and better understand what a comprehensive permanent regulatory framework should look like.

Further, the FAA notes that section 955(c) of the FAA Reauthorization Act of 2024 (Pub. L. 118–63) mandates that the FAA establish an aviation rulemaking committee (ARC) no later than three years after the FAA issues the first commercial operating certificate to a powered-lift, to provide the Administrator with specific findings and recommendations for, at a minimum, the creation of a standard pathway for the performance-based certification of powered-lift aircraft; the certification of airmen capable of serving as pilot-in-command of a powered-lift; and operation of powered-lift in commercial service and air transportation. Section 955(d) requires the FAA to initiate a rulemaking no later than 270 days after the ARC submits its report. Not only does this language impose a timeline for establishing the ARC and subsequent rulemaking, it acknowledges that an ARC will first need real-world operational data from commercial powered-lift operations before it can provide informed

recommendations for a permanent rulemaking.

Because the SFAR will affect several parts of 14 CFR, the FAA has determined that the most clear and comprehensive regulatory approach is through the creation of a new part to wholly contain the SFAR. Specifically, the FAA is adding a new part 194, titled “Special Federal Aviation Regulation No. 120—Powered-Lift: Pilot Certification and Training; Operations Requirements,” to 14 CFR under new subchapter L, titled “Other Special Federal Aviation Regulations.” New part 194 utilizes the traditional regulatory structure to supplement existing rules, creates temporary alternatives for airman certification, removes operational barriers, and mitigates safety risks for powered-lift. As a result, requisite applicability revisions are made to parts 43, 60, 61, 91, 97, 111, 135, 136, 141, and 142 to clearly communicate that current regulations are intended to operate in tandem with part 194, as subsequently discussed in this preamble.

This SFAR will remain in effect for ten years after this final rule becomes effective. In selecting ten years as the appropriate duration for this SFAR, the FAA considered a number of factors including the time it will take to initiate operations after this final rule becomes effective and the type certification status of the powered-lift that are commercially viable. As discussed in section I.G. of this preamble (“SFAR Framework and Duration”), the FAA has determined that a ten-year period is an appropriate length of time to collect operational data from powered-lift operations. This data will inform a

subsequent rulemaking to implement permanent amendments.

II. Authority for This Rulemaking

The FAA’s authority to issue rules on 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 FAA’s authority.

The FAA is issuing this final rule under the authority described in Subtitle VII, Part A, Subpart i, Section 40113, Administrative, and Subpart iii, Section 44701, General Requirements; Section 44702, Issuance of Certificates; Section 44703, Airman Certificates; Section 44704, Type Certificates, Production Certificates, Airworthiness Certificates, and Design and Production Organization Certificates; Section 44705, Air Carrier Operating Certificates; and Section 44707, Examination and Rating Air Agencies. Under these sections, the FAA prescribes regulations and minimum standards for practices, methods, and procedures necessary for safety in air commerce, including the authority to examine and rate civil schools and prescribe regulations to ensure the competency of instructors. The FAA is also authorized under these sections to issue certificates, including airman certificates, type certificates, and air carrier operating certificates, in the interest of safety.

This rulemaking is also issued under the authority described in Subtitle VII, Part A, Subpart iii, Section 44712, Emergency Locator Transmitters; Section 44713, Inspection and Maintenance; Section 44715, Noise and Sonic Boom; Section 44716, Collision

⁵ Monetized costs for the rule stem from the cadence of aircraft deliveries. In the optimistic scenario, aircraft deliveries are forecast to begin in year 1 and continue through year 10. Aircraft deliveries for the base scenario are forecast to occur during years 2–10, and in the pessimistic scenario during years 3–10. As a result, costs for the optimistic scenario accumulate over a period of 10 years versus the base and pessimistic scenarios, over which costs accumulate for a period of 9 years and 8 years, respectively.

Avoidance Systems; and Section 44722, Winter conditions. These sections direct the Administrator to prescribe regulations to govern the use of emergency locator transmitters and collision avoidance systems, the standards for inspecting and performing maintenance on aircraft, and regulations to control aircraft noise and safety risks related to winter conditions, respectively.

Section 955 of the FAA Reauthorization Act of 2024 (Pub. L. 118–63) requires that, within seven months of the date of enactment of the Act, the FAA publish a final rule finalizing the notice of proposed rulemaking entitled “Integration of Powered-Lift: Pilot Certification and Operations; Miscellaneous Amendments Related to Rotorcraft and Airplanes.” Section 955 requires that, with respect to any powered-lift aircraft type certificated by the FAA, the regulations must provide a practical pathway for pilot qualification and operations; establish performance-based requirements for energy reserves and other range- and endurance-related requirements that reflect the capabilities and intended operations of the aircraft; provide for a combination of pilot training requirements, including simulators, to ensure the safe operation of powered-lift; and to the maximum extent practicable, align powered-lift pilot qualifications with section 2.1.1.4 of Annex 1 to the Chicago Convention. Additionally, as required by section 955(a)(3)(B), the FAA must ensure coordination with the Department of Defense (DoD).

In this rule, the FAA provides practical pathways for pilots to qualify to operate powered-lift, establishing pathways for pilots with military experience, airline transport pilot and commercial experience, and flight instruction experience to gain experience in the operation of these aircraft, providing them with sufficient foundations to safely conduct passenger-carrying operations. These multiple pathways will give pilots of diverse backgrounds and prior experience opportunities to enter this emerging aviation sector. For further information on pilot pathways see section V. of this preamble.

Also, in recognition of the comments received, the FAA has revised requirements related to fuel and energy reserves to provide greater flexibility for operations conducted under certain parameters. Specifically, the SFAR outlines performance-based requirements that allow powered-lift operators to use certain helicopter operating rules as long as the operator

complies with the appropriate risk mitigations that are detailed in the rule. For example, an operator may use the helicopter fuel requirements under § 91.151 if the powered-lift is continuously capable of conducting a landing in the vertical-lift flight mode along the entire route of flight. For further information, see section VI. of this preamble.

Further, based on comments received to the NPRM, the FAA has significantly expanded the ability of manufacturers and operators to use flight simulation training devices in the training and qualification of pilots, recognizing the significant advancements in flight simulation technology and pilot training. This includes providing an opportunity for a pilot applicant to credit certain experience in a simulator in addition to outlining a pathway for pilot certification greatly expanding the use of simulation when a powered-lift has a single functioning flight control. For further information on these provisions, see sections IV. and V. of this preamble.

The FAA has considered the provisions of section 2.1.1.4 of Annex 1 to the Chicago Convention and ensured that the requirements in this rule related to pilot certification and operations are responsive to the intent of that section of the Annex. The FAA carefully considered implementation of section 2.1.1.4 and found it impracticable to disrupt the FAA’s traditional airman certification framework by the addition of a type rating within a wholly different aircraft category to an existing certificate with a different category rating. However, through this SFAR, the FAA chose to facilitate alternative measures for a pilot to directly receive a powered-lift category rating and a powered-lift type rating. Similar to the conditions set forth in ICAO’s transitional recommendation, these alternative measures to receive a powered-lift category and type rating would be completed during training provided under an approved or proposed training curriculum and would take previous experience of an applicant in an airplane or helicopter into account. Considering the flexibilities extended in the final rule, FAA believes it has aligned with section 2.1.1.4 to the maximum extent practicable while maintaining safety and consistency with its existing regulatory structure. For further discussion, see section V.A. of this preamble.

Based on the foregoing authorities, the FAA makes amendments to clarify the rule and corrects inadvertent errors contained in the NPRM. These are

explained in more detail throughout this final rule. Amendments correcting for clarity, correctness, and grammar are not substantive in nature and are a logical outgrowth of the NPRM.

The FAA also makes minor technical amendments to its regulations that are discussed throughout this preamble. The FAA finds that notice and comment is unnecessary for these technical changes.⁶

Additionally, in this final rule, the FAA revised certain sections of the proposed rule to account for FAA Test Pilots and Aviation Safety Inspectors (ASIs). Providing notice and seeking comment on these changes is not required as they are rules of agency organization, practice, or procedure under 5 U.S.C. 553(b)(A).

Finally, in accordance with § 955(a)(3)(B), the FAA has consulted with the DoD on a host of issues regarding powered-lift, including the United States Air Force Agility Prime program; powered-lift that are used for military purposes; and commonalities, differences, and handling qualities of various types of powered-lift. In addition to direct consultation, the FAA notes that because this final rule was designated significant under Executive Order 12866, it was coordinated with the DoD as well as other agencies during interagency coordination.⁷ This coordination serves as another opportunity for the FAA to consult with the DoD on this rule.

III. Background

A. General

Powered-lift are unique in their ability to take off and land vertically like helicopters and fly like an airplane during cruise flight. They can operate in different flight regimes utilizing features of helicopters or airplanes or both. The flight controls for such aircraft are also often unique to the individual aircraft design and can incorporate both traditional helicopter and airplane controls, or control systems that are dissimilar to either helicopters or airplanes. Likewise, the flight characteristics for powered-lift vary depending on the aircraft design and the different modes in which they operate.

⁶ Further, technical amendments are “a routine determination, insignificant in nature and impact, and inconsequential to the industry and to the public.” See *Mack Trucks, Inc. v. EPA*, 682 F.3d 87, 94 (D.C. Cir. 2012) (quotation marks and citation omitted); See also *United States v. Mullins*, 2012 WL 3777067, at *4 (D. Vt. Aug. 29, 2012) (explaining that public comment is unnecessary if minor or merely technical amendments in which the public is not particularly interested were involved).

⁷ Section 3(f) of Executive Order 12866, issued on Sept. 30, 1993 (58 FR 51735).

Currently, the FAA has several powered-lift in the type certification process. The powered-lift coming to the civilian market have varied greatly in design, flight, and handling characteristics with varying degrees of automation.

While none of the powered-lift for which type certification is being sought have yet been approved for civilian use, the powered-lift industry has identified many potential uses for these aircraft. The FAA anticipates the introduction of aircraft that vary in size and passenger seating configuration and employ both new and traditional kinds of propulsion systems into the civilian market.

Manufacturers and initial operators of powered-lift indicate operations with powered-lift could offer many benefits over rotorcraft. For example, some powered-lift may be capable of transporting heavier loads at higher altitudes and faster cruise speeds than rotorcraft. Such capability may increase efficiency in transporting crew and material to remote locations such as offshore oil rigs and add diversity when considering landing points that are currently available to helicopters and not airplanes. Certificate holders seeking to take advantage of these capabilities may also seek to use powered-lift for transporting passengers from point-to-point; for example, such transportation could occur from a heliport and proceed at airplane airspeeds and ranges. Other opportunities may also exist in concentrated urban environments, where short point-to-point distances coupled with VTOL capability may allow for more efficient transportation of passengers than existing ground transportation methods.

B. Summary of the NPRM

In the NPRM, the FAA proposed permanent changes to the Code of Federal Regulations and a temporary SFAR to facilitate the safe integration of powered-lift operations into the NAS. Under this comprehensive approach, the FAA proposed to incorporate changes to pilot certification rules, operating rules, air agency rules, as well as other conforming proposals to maintenance requirements, pilot records database requirements, and FSTD qualification requirements. This section provides a broad summary of the NPRM.

Although the FAA did not propose any new type certification requirements or noise standards applicable to powered-lift, the FAA clarified that it would follow its existing aircraft certification process under § 21.17(b) to type certificate powered-lift. The FAA proposed a new process for an OEM to

attain qualification of an FSTD in accordance with part 60. Because the existing deviation authority in part 60 cannot be used to qualify an FSTD that represents a category of aircraft for which there is no standard under part 60, the FAA proposed to mirror the aircraft certification process under § 21.17(b) to similarly allow an applicant seeking to qualify a powered-lift FSTD to use a combination of requirements in appendices A through D to part 60 to form a basis to qualify an FSTD under that part.

Part 61 sets forth the aeronautical experience requirements to attain a pilot certificate, as well as a flight instructor certificate, with powered-lift ratings. The FAA noted in the NPRM that the broader powered-lift category requirement, without an established class rating or type rating, would not adequately prepare a pilot to fly the specific powered-lift moving through FAA aircraft certification, thus potentially creating a safety gap. To address this concern, the FAA proposed to require pilots in command hold a type rating for the powered-lift they seek to fly. Most significantly, the FAA proposed alternate aeronautical experience and logging requirements from the existing powered-lift requirements in part 61. These alternate requirements would be applicable to certain pilot groups that the FAA deemed have the most relevant experience to establish a base of powered-lift pilots and instructors. As proposed, the experience and logging provisions would create an alternative pathway to powered-lift certification for (1) OEM instructor pilots and test pilots; (2) initial cadres of flight instructors from certificate holders under parts 135, 141, and 142 receiving training at an OEM; and (3) pilots receiving training from the initial cadres of flight instructors under approved training programs under part 135, 141, or 142. Alternate aeronautical experience proposed by the FAA focused on giving allowances for flight training, including allowing the logging of PIC time when an applicant is the sole manipulator of the flight controls, and reduced distances to meet cross-country aeronautical experience. This experience, combined with meeting the alternate experience and logging provisions set forth in the FAA's proposed SFAR, would result in pilots attaining the required experience necessary to hold a commercial pilot certificate.

The FAA sought comment on existing requirements that dictate an aircraft used for flight instruction must have dual controls. The FAA outlined

expectations regarding these rules as they are currently applicable to all aircraft (except manned free balloons) and, therefore, are applicable to powered-lift. The FAA also discussed how the dual control requirement would affect a pilot's ability to act as PIC when the PIC has no access to flight controls (*i.e.*, supervised operating experience). The FAA acknowledged that manufacturers were in the midst of developing single flight control powered-lift and sought comment from the public on facilitating flight training and supervised operating experience in those aircraft.

In addition to the proposed revisions to part 61 and the temporary alternatives proposed in part 194, the FAA proposed changes to part 135, which does not currently stipulate which training requirements and experience requirements are applicable to powered-lift.⁸ Additionally, to further facilitate the certification of powered-lift pilots for the expected commercial operations, the NPRM proposed to allow part 135 operators to conduct training for their pilots seeking to obtain powered-lift category and type ratings for a commercial pilot certificate.⁹ The FAA also incorporated permanent and temporary amendments to pilot experience requirements, curriculum content, and part 135 instructor requirements to address the absence of powered-lift specific regulations in part 135. Finally, the NPRM proposed changes to parts 141 and 142 to facilitate the training of powered-lift pilots in accordance with those parts as well as the amendments set forth in the SFAR.

The FAA proposed in the SFAR which operating rules apply to powered-lift on a temporary basis under parts 91 ("General Operating and Flight Rules"), 135 ("Operating Requirements: Commuter and On Demand Operations"), and 136 ("Commercial Air Tours"). The FAA noted that this would enable the FAA to gather additional information and determine the most appropriate permanent rulemaking path for these aircraft. The FAA proposed the requirements that should be applicable to powered-lift based on its phase of operation, current requirements for

⁸ The FAA recently published a final rule amending the regulatory definitions of certain air carrier and commercial operations to enable powered-lift operations under part 135. See 88 FR 48072 (July 26, 2023).

⁹ After an initial cadre of instructors have completed training at the OEM, the FAA proposed that operators use their instructors to train and test additional pilots according to their approved part 135 training program.

airplanes and helicopters, and safety intent of the current rule.

Under parts 91 and 135, generally the FAA proposed applying the operating rules pertaining to airplanes; however, in some instances, the FAA proposed applying certain helicopter rules based on whether a powered-lift is anticipated to operate similar to a helicopter and subject to some performance-based standards. The FAA proposed exceptions, however, to account for the different modes of flight and applicable operational requirements. Under part 91, the FAA proposed applying helicopter rules during some instances of vertical flight. Under part 135, the FAA proposed applying helicopter rules related to overwater equipment and briefing, specified IFR and VFR requirements, operations in icing conditions, airport requirements, and operations in remote areas.

The FAA proposed to permanently amend part 111 (“Pilot Records Database”) to apply to operators and pilots of large powered-lift. Pilots of large powered-lift may go on to work for an air carrier in the future. Reporting these pilot records would be relevant to a future hiring air carrier.

The FAA determined that part 43 (“Maintenance, Preventive Maintenance, Rebuilding, and Alteration”) was applicable to powered-lift but proposed other amendments to clarify preventative maintenance requirements considering that powered-lift can operate outside of the airport environment.

Part 97 (“Standard Instrument Procedures”) outlines the current requirements for standard instrument approach procedures, obstacle departure procedures, and weather minimums for IFR takeoffs and landings at U.S. civil airports. Copter procedures are also outlined in this part. The FAA proposed that, as with airplanes and helicopters, powered-lift could also utilize these standard procedures during IFR operations if the powered-lift was capable in accordance with its type certification.

C. General Overview of Comments

The FAA received 81 comments in response to the NPRM from a variety of commenters, including aircraft manufacturers and operators, aviation training companies, other aviation companies, trade associations, civil aviation authorities, and individuals. Powered-lift manufacturers and operators commenting on the NPRM included: AIR VEV; Archer Aviation (Archer); Augusta-Westland Philadelphia Corporation (AWPC), a subsidiary of Leonardo Helicopters ;

BETA Technologies, Inc. (BETA); Bristow Group Inc. (Bristow); a joint comment from Eve Air Mobility and Embraer S.A. (Eve); Joby Aviation (Joby); Lilium GmbH (Lilium); Supernal LLC (Supernal); Vertical Aerospace Group LTD (Vertical Aerospace Group); Wisk Aero (Wisk); and XTI Aircraft Company (XTI). Other aviation companies commenting on the NPRM included: Airbus Helicopters, Alakai Technologies Corporation, ASR-Pioneer, CAE, Electra.aero, Ferrovial Vertiports, L3Harris Commercial Aviation Solutions—Advanced Air Mobility (L3Harris), Sabrewing Aircraft Company (SACO), and UPS Flight Forward (UPS FF). Trade association commenters included: Advanced Air Mobility Institute, Air Line Pilots Association International (ALPA), Aircraft Owners and Pilots Association (AOPA), Airlines for America (A4A), Association for Uncrewed Vehicle Systems International (AUUSI), FlightSafety International Inc., General Aviation Manufacturers Association (GAMA), Helicopter Association International (HAI),¹⁰ National Air Transportation Association (NATA), National Business Aviation Association (NBAA), and Vertical Flight Society (VFS). SAE International, a consensus standards-setting organization, commented on the NPRM. Civil aviation authorities, governmental agencies, and industry associations located outside the United States commenting on the NPRM included: ADS Group (ADS); European Aerospace, Security and Defence Industries (ASD); the European Union Aviation Safety Agency (EASA); and the National Civil Aviation Agency of Brazil (ANAC).

While the FAA received only 81 comments, each comment detailed a wide array of discrete issues and recommendations. Some commenters provided general, high-level comments on the NPRM. Archer applauded the FAA’s progress in its proposed powered-lift regulations, while Bristow said the proposed rules are a good start and will have a positive impact. An individual supported the proposed regulatory framework, which they said would enhance safety, efficiency, and innovation. Electra.aero stated the FAA should be proactive in powered-lift standards development to “help[] preclude unrealistic expectations of commercial market introduction of these technologies.”

¹⁰ The FAA notes that on February 26, 2024, the commenter announced the renaming of Helicopter Association International (HAI) to Vertical Aviation International (VAI).

Overall, the majority of commenters expressed general support for the FAA’s approach to integrating powered-lift into the NAS through expeditious rulemaking. However, they also recommended a number of revisions to the FAA’s proposal that they believed would provide greater ability to quickly and safely integrate powered-lift into the NAS. The following provides a high-level overview of key issues raised by commenters. Detailed discussions of comments received and FAA responses are found throughout this preamble.

Alignment With ICAO Requirements for Powered-Lift Airman Certification Category

The FAA received numerous comments on the proposal to retain the category requirement for powered-lift pilots. Commenters requested the FAA align its requirements with ICAO Annex 1 recommendations by requiring only a powered-lift type rating on an existing commercial pilot certificate with an airplane category or helicopter class rating (*i.e.*, no powered-lift category rating).

Aircraft Dual Controls Requirement

The FAA received many comments in response to the request for information on the existing requirement for dual controls to be installed on training aircraft and those used for supervised operating experience (SOE). Commenters requested: (1) no requirement for dual controls regardless of how the powered-lift will be used; (2) 100 percent simulator training, which would relieve any requirement for dual controls/aircraft training; and (3) non-traditional methods to accomplish SOE. However, EASA’s comment supported a requirement for dual controls/access as currently required by §§ 61.195 and 91.109.

Other Pilot Certification Comments of Note

Commenters broadly suggested aligning pilot certification requirements for powered-lift with those of helicopters.

Amount of FSTD Time Allowed for a Powered-Lift Rating

Commenters requested the use of a flight training device (FTD) instead of an FFS and requested to utilize the FTD to perform all 50 hours of PIC flight time required for a powered-lift category rating at the commercial pilot level. Several commenters expressed the need for FSTDs that are not Level C or higher FFS, stating the need for more avenues by which an equivalent level of training may be accomplished. Commenters

noted additional burdens of both time and resources to meet the proposed FSTD requirements. Other comments suggested using preexisting deviation authority mechanisms to achieve an equivalent level of safety.

VFR and IFR Fuel Requirements

The FAA received comments on parts 91 and 135 VFR and IFR fuel requirements. Commenters requested different variations of two comment themes: (1) performance-based fuel reserves, and (2) use of fuel requirements specified for helicopters. Several commenters noted that powered-lift incorporating innovative power sources could offer greater operational capability if they were able to use energy reserves lower than those currently prescribed for airplanes or helicopters. They asserted that by enforcing the requirements proposed in the NPRM, the FAA would limit the capability and scope of operations. Other commenters suggested applying helicopter fuel requirements to powered-lift, asserting that powered-lift, like helicopters, have the maneuverability and operational

flexibility to land in more varied locations.

Visibility Requirements

The FAA received comments on visibility requirements. Commenters requested to utilize the helicopter provisions existing in the regulations, as well as the adoption of a performance-based approach. Several commenters suggested applying helicopter weather minima rather than the airplane requirements. Several commenters also noted that technological advancements could enable powered-lift to safely operate in visibilities lower than currently prescribed for airplanes or helicopters. Furthermore, several commenters contended that since powered-lift could operate at speeds and maneuverability comparable to helicopters, they should be permitted to use the visibility requirements prescribed for helicopters or a performance-based visibility requirement.

Minimum Safe Altitudes for Operations Conducted Under Parts 91 and 135

The FAA received comments on parts 91 and 135 minimum safe altitudes.

Commenters requested: (1) the use of VFR minimum altitudes specified for helicopters (one variation proposed), and (2) performance-based minimum safe altitudes. Commenters suggested the FAA consider the operational capabilities of powered-lift, which are able to operate at low speeds and have the maneuverability similar to helicopters, and therefore apply the VFR minimum altitudes prescribed for helicopters. Commenters also suggested the FAA permit a performance-based approach when applying VFR minimum altitude requirements to powered-lift.

SFAR Duration (10 Years)

Commenters supported the temporary adaptability of the SFAR but stated that an approach with 2 to 3-year reviews within the 10-year period would ensure dynamic rather than static regulations.

D. Differences Between the NPRM and the Final Rule

The following table summarizes key changes from the NPRM made in this final rule.

TABLE 2—SUMMARY OF KEY CHANGES FROM NPRM

Proposed action in the NPRM	Adopted by this Final Rule	Regulatory citation (14 CFR)	Additional discussion in section of preamble
The NPRM did not propose to revise the definition of autorotation.	This final rule adds powered-lift to the definition of autorotation.	§ 1.1	XIV.D.
The NPRM proposed to revise § 61.64(a)(1) to specify the ratings that must be sought when using an FSTD representing an aircraft requiring a type rating.	This final rule does not adopt the proposed revision.	§ 61.64(a)(1)	V.I.5.
The NPRM proposed revising § 91.113 as a temporary change under part 194 and grouped powered-lift in the same right-of-way category with airplanes and rotorcraft.	The final rule adopts the proposed § 91.113 temporary change as a permanent change.	§ 91.113(d)(2)–(4)	VI.B.1.
The NPRM proposed amending the note in § 135.100 to replace the word “airplane” with “aircraft”.	The regulation now clarifies the definition of taxi to include VTOL aircraft and specifies the airspeed and height above ground level.	§ 135.100(d)	VI.D.2.
The NPRM did not address § 135.165, which contains an incorrect cross-reference to part 119.	The final rule corrects the cross-reference in § 135.165(d) to reference part 110 rather than part 119.	§ 135.165(d)	VI.D.3.
The NPRM did not propose revisions to § 135.339.	This final rule revises certain training regulations for check airmen to account for flight training in powered-lift with a single set of controls.	§ 135.339(e)(3) and (4)	V.J.11.
The NPRM did not propose revisions to § 135.340.	This final rule revises certain training regulations for instructors to account for flight training in powered-lift with a single set of controls.	§ 135.340(e)(3) and (4)	V.G.1.iv. & V.J.11.
The NPRM did not propose changing § 136.75(a) to reference “single-engine” rotorcraft.	The final rule corrects § 136.75(a) by adding “single-engine” before “rotorcraft” as a permanent change.	§ 136.75(a)	VI.E.5.ii.

TABLE 2—SUMMARY OF KEY CHANGES FROM NPRM—Continued

Proposed action in the NPRM	Adopted by this Final Rule	Regulatory citation (14 CFR)	Additional discussion in section of preamble
The NPRM did not propose revisions to § 141.37.	This final rule corrects the ratings that may be held on a ground instructor certificate.	§ 141.37(a)(3)(ii)	V.F.2.ii., V.G.2., & V.I.5.
The NPRM proposed to replace “airplane” requiring a type rating with “aircraft” requiring a type rating, thereby including all powered-lift, in regard to certain instructor qualifications under part 142.	This final rule applies the ATP aeronautical experience requirements to FSTD instructors in airplanes and helicopters requiring a type rating, powered-lift over 12,500 pounds, and turbojet powered powered-lift rather than all aircraft requiring a type rating.	§ 142.47(a)(5)	V.F.2.ii.
The NPRM did not propose any changes to the minimum aeronautical experience requirements in § 142.47(a)(5).	This final rule adds a qualification option of holding a commercial pilot certificate with the appropriate ratings or an unrestricted ATP with the appropriate ratings rather than meeting certain aeronautical experience requirements.	§ 142.47(a)(5)(ii) and (ii)	V.G.3.
The NPRM did not include FAA test pilots or ASIs in the population of pilots able to utilize the alternate requirements set forth by part 194.	This final rule adds FAA test pilots and ASIs to the alternate requirements for test pilots, accounts for both groups of pilots as it pertains to instructor pilots, and adds definitions for both groups of pilots.	§§ 194.103, 194.203(a)(3), 194.213(a)(1)(iii), 194.217, 194.219(b)(1)(i), 194.219(b)(3)(iii), 194.225, 194.227(b)(1)(i).	V.F.2.i.d., V.F.2.ii., V.F.7., V.D.3.ii., V.F.2.i.a.–d., V.F.7., V.F.3.i.a.–c., & V.F.3.i.
The NPRM did not account for persons receiving flight training in powered-lift type certificated for more than one pilot.	This final rule excepts applicants receiving flight training from § 61.55(a)(1), (a)(2), and (b)(2) in order to serve as Second in Command (SIC) in a powered-lift type certificated for more than one required pilot flight crewmember.	§ 194.209(c)	V.C.
The NPRM did not propose any relief to § 61.129(e)(2)(i), which requires 50 hours of PIC time in a powered-lift.	This final rule reduces the amount of required PIC time in a powered-lift to 35 hours for pilots under the SFAR.	§ 194.216(a)	V.F.2., V.F.2.iii.a., & V.G.3.
The NPRM proposed to only permit pilots at approved training programs to credit a maximum of 15 hours in an FSTD toward the PIC flight time requirement of § 61.129(e)(2)(i).	This final rule permits any applicant under the SFAR to credit a maximum of 15 hours towards the 35-hour PIC flight time requirement of § 194.216(a).	§ 194.216(b)	V.F.2. & V.F.2.iii.b.
The NPRM proposed to permit certain pilots to log up to 40 hours of PIC flight time as sole manipulator of the controls when the person is not rated.	This final rule reduces the number of hours that may be logged from 40 hours to 25 hours to account for the reduction in required PIC flight time in a powered-lift (see § 194.216(a)).	§§ 194.221(c), 194.223(c)	V.F.2.ii.b.
The NPRM proposed to mirror a part 141 section prescribing certain ratings that may be held on a ground instructor certificate.	This final rule corrects the ratings that may be held on a ground instructor certificate, mirroring the correction to § 141.37(a)(3)(ii).	§ 194.241(b)	V.I.5.
The NPRM did not contemplate retraining requirements for unsatisfactory performance on part 135 checks in lieu of a practical test.	This final rule adopts training and endorsement requirements mirroring § 61.49 for certain unsatisfactory part 135 checks under the SFAR.	§ 194.243(b)(4)	V.G.1.v.
The NPRM referenced the Aircraft Flight Manual as determining when two pilots are required.	This final rule corrects the reference to the type certificate as dictating when two pilots are required.	§ 194.247(b)	V.J.3.

TABLE 2—SUMMARY OF KEY CHANGES FROM NPRM—Continued

Proposed action in the NPRM	Adopted by this Final Rule	Regulatory citation (14 CFR)	Additional discussion in section of preamble
The NPRM proposed to require a certificate holder conducting commuter operations with powered-lift in which two pilots are required to comply with subpart Y to part 121.	This final rule specifies §§ 121.903(c) and 121.921(a) in subpart Y will apply to powered-lift, notwithstanding use of the term “airplane” in the regulations.	§ 194.247(b)(1)	V.J.3.
The NPRM did not propose any relief to the requirement that a powered-lift must have dual controls for flight training.	This final rule adopts three options for flight training in powered-lift with a single set of controls.	§ 194.253, Appendix A to part 194	V.D.3.ii. & V.D.3.iii.
The NPRM proposed not allowing powered-lift to use the helicopter/rotorcraft criteria stipulated in the following part 91 sections: § 91.119 (minimum safe altitudes), § 91.151 (VFR fuel requirements), §§ 91.155 and 91.157 (VFR weather minimums), § 91.167 (IFR fuel requirements), § 91.169 (IFR flight plan), and § 91.175 (IFR takeoff and landing).	The final rule allows some powered-lift to use the helicopter/rotorcraft provisions as long as they meet the performance-based criteria outlined in part 194.	• § 194.302(d) (pertaining to § 91.119).	VI.B.1., VI.B.2., VI.B.4., & VI.B.5.
The NPRM proposed not allowing powered-lift to use the helicopter/rotorcraft criteria stipulated in the following part 135 sections:	The final rule allows some powered-lift to use the helicopter/rotorcraft provisions as long as they meet the performance-based criteria outlined in part 194.	• § 194.302(l) (pertaining to § 91.151). • § 194.302(m) and (n) (pertaining to § 91.155). • § 194.302(p) (pertaining to § 91.157). • § 194.302(q) (pertaining to § 91.167). • § 194.302(r) (pertaining to § 91.169). • § 194.302(s) (pertaining to § 91.175). • § 194.306(c) (pertaining to § 135.93).	VI.D.2., VI.D.4., & VI.D.8.
§ 135.93 (Autopilot minimum altitudes), 135.203 (VFR minimum altitudes), 135.205 (VFR visibility requirements), 135.209 (VFR fuel supply), 135.221 (IFR alternate airport weather minimums), 135.223 (IFR alternate airport requirements), 135.609 (VFR visibility requirements for Class G airspace), 135.613 (approach/departure IFR transitions), and 135.615 (VFR flight planning).	• § 194.306(ss) (pertaining to § 135.209).	• § 194.306(nn) (pertaining to § 135.203). • § 194.306(pp) (pertaining to 135.205). • § 194.306(tt) (pertaining to § 135.221). • § 194.306(uu) (pertaining to § 135.223). • § 194.306(qqq) (pertaining to § 135.609). • § 194.306(sss) and (ttt) (pertaining to § 135.613). • § 194.306(uuu) (pertaining to § 135.615).	

TABLE 2—SUMMARY OF KEY CHANGES FROM NPRM—Continued

Proposed action in the NPRM	Adopted by this Final Rule	Regulatory citation (14 CFR)	Additional discussion in section of preamble
The NPRM proposed applying the requirements of § 135.158 (pitot heat indication systems) to powered-lift. The NPRM did not address powered-lift that experience a “critical change of thrust.”	The final rule applies § 135.158 to powered-lift but allows the indication light to be other than an amber light. The final rule revises some language in part 194, pertaining to parts 135 and 136, to reference powered-lift that experience a “critical change of thrust” and adopts a definition for this term.	§ 194.306(t) • § 194.306(z) (pertaining to § 135.168). • § 194.306(ii) and (jj) (pertaining to § 135.181). • § 194.306(kk) (pertaining to § 135.183). • § 194.308(d)(1) (pertaining to § 136.9). • § 194.308(d)(2)(ii) (pertaining to § 136.11(a)(2)). • § 194.308(d)(6) (pertaining to § 136.75(c)). § 194.306(nnn) (pertaining to § 135.603).	VI.D.3. VI.D.3., VI.E.2., VI.E.3., & VI.E.5.i.
The NPRM did not clarify the instrument and ATP certificate requirements under § 135.603.	The final rule outlines the instrument and ATP certificate requirements for powered-lift conducting air ambulance operations.		VI.D.8.
The NPRM did not apply the flotation requirements under § 136.11 to single-engine powered-lift and applied the requirements only to powered-lift operating in vertical-lift flight mode while conducting operations beyond the auto-rotational or gliding distance from the shoreline.	The final rule applies § 136.11(a)(1) to single-engine powered-lift. It also applies § 136.11 to powered-lift operating in both vertical-lift and wing-borne flight modes. Finally, the final rule removes the redundant and unnecessary language pertaining to auto-rotational and gliding distances.	§ 194.308(d)(2) (pertaining to § 136.11).	VI.E.3.

IV. Powered-Lift Type Certification and FSTD Qualification

A. Type Certification

In the NPRM, the FAA did not propose any new requirements for the type certification of powered-lift. The FAA determined it will use its existing regulatory process to type certificate powered-lift as a special class under § 21.17(b).

The FAA uses a tiered safety approach for minimum certification standards, with different levels for airplanes and rotorcraft. For certain unique aircraft for which the FAA has not established airworthiness standards in its regulations (e.g., gliders, airships, powered-lift), the FAA uses the special class aircraft process. For powered-lift, the FAA will designate airworthiness requirements and other criteria that match the safety levels of existing standards by considering factors like aircraft size, seating, and performance. The FAA will publish the proposed airworthiness criteria, along with an explanation of its equivalency determination, in the **Federal Register**

for public notice and comment for each powered-lift project.¹¹

In some cases, specific airworthiness requirements for issuance of type certificates might not fulfill the requirements of operational rules. Applicants seeking powered-lift type design approval should identify areas needing additional approvals to meet anticipated operational needs. Operational rules often reference airworthiness standards in part 23, 25, 27, or 29, but adaptations might be necessary for unique designs.

In the NPRM, the FAA proposed that powered-lift weighing more than 12,500 pounds would be required to meet

¹¹ E.g., see: Airworthiness Criteria: Special Class Airworthiness Criteria for the Joby Aero, Inc. Model JAS4–1 Powered-Lift, 87 FR 67399 (Nov. 8, 2022); 89 FR 17230 (March 8, 2024). Alternatively, the FAA may designate acceptable airworthiness criteria as the certification basis for powered-lift by publishing a future advisory circular (AC), as the agency has done for airships (AC 21.17–1A, *Type Certification—Airships*, dated Sept. 25, 1992), gliders (AC 21.17–2A, *Type Certification—Fixed Wing Gliders (Sailplanes), Including Powered Gliders*, dated Feb. 10, 1993), and very light airplanes (AC 21.17–3, *Type Certification of Very Light Airplanes Under FAR 21.17(b)*, dated Dec. 21, 1992).

certain operating regulations that currently apply to large transport category airplanes. The FAA also stated that this specific weight point would be an appropriate weight at which to apply certain transport category certification standards when type certifying powered-lift under § 21.17(b). The FAA further requested comments on whether the public believes there is a more appropriate weight at which to apply transport category regulations to powered-lift.

Two commenters generally supported the FAA’s proposed approach for type certification. HAI commented that older powered-lift designs are significantly different from those proposed by recent applicants and supported the FAA’s intended use of § 21.17(b) for the type certification of unique and novel designs. The commenter also recommended collecting information during the certification process of novel AAM aircraft before requiring type ratings for each make and model. SAE International generally supported the FAA’s intended use of performance-based regulations for powered-lift type certification airworthiness criteria.

An individual commenter highlighted specific concerns regarding powered-lift type certification and recommended that the FAA consider the unique aspects of each design when developing the type certification requirements. The commenter highlighted the need to consider all the various flight-mode unique aspects and that the regulations should focus on control law development instead of prescribing specific regulations based on specific design configurations. The commenter also identified technical areas that the FAA should consider when developing powered-lift airworthiness criteria. The FAA agrees that the novel aspects of powered-lift require an alternate approach to existing prescriptive airworthiness standards for airplanes and rotorcraft, which is why the FAA expects to largely employ performance-based airworthiness criteria. The FAA also agrees that the novel features identified by the commenter require evaluation during powered-lift type certification; however, this is beyond the scope of this SFAR and will instead be covered in each powered-lift airworthiness criteria publication.

An individual commenter requested clarification as to how the FAA would determine which airworthiness standards would be appropriate for use in the type certification of powered-lift and what criteria would be used to make this decision.

As described in the NPRM, when conducting the evaluation for determining an equivalent level of safety to existing standards, the FAA will consider the powered-lift's specific type design features (aircraft's size, passenger seating configuration, performance, etc.) and evaluate them against the applicable airworthiness requirements contained in parts 23, 25, 27, 29, 33, and 35. In addition, certain transport category (*i.e.*, 14 CFR parts 25 and 29) certification standards will be appropriate for powered-lift weighing more than 12,500 pounds.

EASA noted discrepancies in the type certification section of the NPRM. EASA stated that while the NPRM stated that no changes to type certification requirements were proposed, the FAA has separately published airworthiness criteria for two companies that propose changes to part 23 requirements and establish new requirements.

To clarify the FAA's statement in the NPRM regarding no new/changed type certification requirements, the FAA noted that the existing regulatory structure in 14 CFR part 21 already provides the means by which powered-lift can receive a type certificate. Specifically, § 21.17(b) provides for the

ability to type certificate powered-lift as a special class aircraft. As stated in the NPRM, under § 21.17(b), the FAA designates the applicable airworthiness requirements, which may include requirements from the existing airworthiness standards applicable to normal category and transport category airplanes, normal category and transport category rotorcraft, aircraft engines and propellers (parts 23, 25, 27, 29, 33, and 35), and it may also include unique airworthiness criteria developed specifically for the individual product.

Alakai Technologies Corporation stated the proposed entrants into the AAM industry include "special class rotorcraft"¹² and powered-lift, both of which would be type certificated under § 21.17(b). However, the commenter noted the proposed rule provides a framework for airman certification and operation only for powered-lift, and not for special class rotorcraft. The commenter contended that without providing a framework for airman certification and operation for special class rotorcraft, special class rotorcraft will be prohibited from operating in the NAS, thereby limiting the market to powered-lift special class aircraft AAM technology.

The commenter referred to a developing policy the FAA has not yet finalized that would designate certain rotorcraft as "special class rotorcraft." Although special class rotorcraft would be type certificated under the special class process in § 21.17(b), they still meet the regulatory definition of a rotorcraft in § 1.1. As such, special class rotorcraft would fall under the operating and airmen rules for rotorcraft (helicopter) in parts 61, 91, 135, etc. and would not need the same accommodations that were necessary for powered-lift. The FAA determined that the inclusion of special class rotorcraft in this SFAR was not needed for enabling those aircraft and that including special class rotorcraft is beyond the scope of this rulemaking to enable powered-lift.

¹² "Special class rotorcraft" are rotorcraft, as defined in § 1.1, that meet three or more of the following criteria: (1) for its support in flight, the rotorcraft depends principally on the lift generated by three or more rotors and creates directional control by varying the power at each rotor; (2) the rotorcraft utilizes electric or hybrid-electric propulsion; (3) the rotorcraft's design includes an advanced flight control system (*e.g.*, a fly-by-wire flight control system) that uses electronically operated controls such that the pilot has no direct mechanical link to the control surfaces or swashplate; and (4) the rotorcraft is not capable of traditional autorotation, but instead provides an alternate method of safe landing following loss of engine power. See *definition of rotorcraft in 1.1 and FAA Policy Statement PS-AIR 21.17-02*.

EASA asked how the FAA would consider operational alleviations for these type-certificated aircraft in the context of AAM. The FAA reviewed the SFAR language to determine where operational alleviations could be provided for powered-lift that meet certain performance criteria and made changes to the minimum safe altitude, visibility, and fuel reserves requirements. These accommodations are addressed within the respective sections of this preamble for each rule as applicable for powered-lift.

Vertical Aerospace Group commented that powered-lift should be built to the highest safety standards and that the combination of complex aircraft systems and complex commercial operating environment require a design safety target of 10⁻⁹ and Design Assurance Level (DAL) A for systems, software, and complex hardware, with respect to failure conditions classified as catastrophic. Additionally, the commenter requested the FAA provide details on what transport category airworthiness criteria would be used for powered-lift, including crashworthiness, gust loads, wind speeds, and performance criteria.

Currently, airplanes and rotorcraft type certificated in the normal category are permitted to perform commercial operations transporting passengers without meeting the more stringent transport category design requirements. As stated in the NPRM, for powered-lift, which are type certificated under § 21.17(b), the safety targets for each product are based on meeting an equivalent level of safety to the existing airworthiness standards. Rather than establishing a rigid "one size fits all" safety target or DAL for all powered-lift, which will be used in varied types of operations, the FAA separately considers each aircraft's unique design characteristics to ensure the selected airworthiness criteria are appropriate to the design, intended operations, and safety. The FAA will publish the proposed airworthiness criteria for each powered-lift, including an explanation of its equivalency determination, in the **Federal Register** for public notice and comment before issuing final airworthiness criteria.

ALPA responded to the FAA's request for comments on applying transport category regulations to large powered-lift, those weighing more than 12,500 pounds. ALPA disagreed with the FAA's proposal to use 12,500 pounds as the weight threshold for large powered-lift because ALPA asserted this cutoff is arbitrarily based on historical aircraft safety records that are not relevant to new aircraft being proposed in the

powered-lift industry. ALPA recommended that 7,500 pounds would be more appropriate for first-generation powered-lift, noting that this would allow the FAA to apply more appropriate sections of existing parts 135 and 136 to the majority of the first-generation powered-lift.

The FAA disagrees with the ALPA recommendation that 7,500 pounds should be used instead of 12,500 pounds as the weight at which transport category airworthiness standards would be appropriate. The FAA has determined that 12,500 pounds provides the appropriate level of safety and places the weight threshold between the weight limits for transport category airplanes and transport category rotorcraft.¹³ Imposing part 25/29 airworthiness requirements on powered-lift weighing 12,500 pounds or less would decrease the useful payload of the powered-lift and increase the cost of type certification.

XTI said that, in addition to wing-borne flight and vertical lift, some powered-lift will also operate in an intermediate configuration utilizing vectored thrust and wing-borne flight during takeoff and landing. This short takeoff and landing (STOL) mode, the commenter said, provides significant performance benefits and improves ranges. XTI requested clarification whether required runway distances would be calculated differently for powered-lift operating in STOL mode than the required distances for fully wing-borne flight.

The method by which the required runway distance is calculated would be the same for powered-lift and conventional takeoff and landing aircraft; however, the distance for powered-lift would be shorter. The specific configuration for takeoff and landing would need to be defined in the flight manual along with the respective takeoff and landing performance for those configurations. However, the particular details in calculating runway distances for a certain powered-lift are beyond the scope of this SFAR.

A helicopter pilot recommended that the FAA review its bird strike certification procedures when certifying powered-lift. The commenter cited concerns that powered-lift will be more prone to bird strikes than helicopters given they operate at lower altitudes and environments prone to more bird

activity, generate less noise and rotor downwash that would normally keep birds away, and may travel at faster speeds. The commenter suggested powered-lift test pilots should use their experience to recommend methods of bird strike avoidance through training, emergency procedures, and system designs like detect-and-avoid systems.

The commenter's recommendations are beyond the scope of this SFAR. However, the agency notes that, to date, the FAA has included bird strike protection requirements in the proposed airworthiness criteria for the first three powered-lift applicants the agency has published for notice and comment under § 21.17(b).¹⁴

The remaining comments on type certification requested clarification on language used in the NPRM preamble or specific information on the type certification process or specific safety objectives required during type certification. These comments are beyond the scope of this rulemaking. As stated previously, the specific airworthiness criteria for each powered-lift project will be published in the **Federal Register** for public notice and comment.

B. Noise Certification

The FAA did not propose any new requirements for the noise certification of powered-lift. The FAA is mandated to establish noise standards and regulations that ensure public safety regarding aircraft noise. Recent advancements in electric motors and control systems have led manufacturers to develop novel aircraft that differ significantly from conventional ones covered by existing noise certification standards. The FAA will examine each application and determine whether the existing part 36 requirements are appropriate as a noise certification basis, as it does for all noise certification applicants. If the FAA determines that the part 36 rules are not sufficient for a particular powered-lift, the FAA may create rules of particular applicability for that powered-lift. Due to potentially diverse designs of these aircraft and limited data on their noise signatures, the FAA has not yet established broad noise standards for all powered-lift. However, powered-lift that are tilt-rotors

are currently subject to the noise regulations of appendix K of part 36.

If a manufacturer seeks certification for a powered-lift which could not be certificated using appendix K of part 36, the FAA would propose amending the SFAR to include operating noise limits in subpart I of part 91, which would be applicable to that powered-lift.¹⁵

HAI said that the certification process could reveal that AAM vehicles emit less noise than traditional aircraft, referencing the GAO report cited in the NPRM.¹⁶ HAI said that current standards may need adjustment but that the certification process should reveal any requirements and inform future rulemaking in this area. The FAA contemplated the need for future rulemaking in the NPRM. Rather than use the existing requirements for small propeller airplanes, jet transport airplanes, helicopters, or tiltrotors in part 36, such diverse conceptual designs and new aircraft types may require tailored noise certification requirements. As stated in the NPRM, the FAA will examine each application and determine whether existing part 36 requirements are appropriate as a noise certification basis, as it does for all noise certification applicants. If the current regulations cannot be applied appropriately, the FAA may promulgate a rule of particular applicability to establish a noise certification basis for these new aircraft designs. The noise sources from these aircraft have been shown to be complex, and the FAA does not yet have sufficient data on the aircraft types and noise signatures expected from these new entrants. Accordingly, until sufficient data are collected, the FAA would not be able to promulgate standards of general applicability for these aircraft.

C. Qualification of Powered-Lift Flight Simulation Training Devices (FSTDs)

Part 60 prescribes the rules governing the initial and continuing qualification of all aircraft FSTDs, which includes full flight simulators (FFS) and flight training devices (FTDs)¹⁷ used to meet the training, evaluation, or flight experience requirements for flightcrew member certification or qualification. In accordance with § 60.15, the FAA qualifies each FSTD at a specific level

¹⁵ Appendix K to part 36 outlines noise requirements for tiltrotors utilized by a powered-lift. The FAA notes that these would be applicable to powered-lift if it is determined during the aircraft certification process.

¹⁶ U.S. Government Accountability Office, GAO-22-105020, Transforming Aviation: Stakeholders Identified Issues to Address for "Advanced Air Mobility", published, May 9, 2022. Publicly released, May 9, 2022.

¹⁷ See 14 CFR 1.1.

¹³ The NPRM included a typographical error that identified the normal category weight limits for rotorcraft and airplanes as 7,500 lbs. and 19,500 lbs., respectively. The correct weight limits for those airworthiness standards are 7,000 lbs. and 19,000 lbs., respectively.

¹⁴ See Airworthiness Criteria: Special Class Airworthiness Criteria for the Joby Aero, Inc. Model JAS4-1 Powered-Lift, 87 FR 67399 (Nov. 8, 2022); Airworthiness Criteria: Special Class Airworthiness Criteria for the Archer Aviation Inc. Model M001 Powered-Lift, 87 FR 77749 (Dec. 20, 2022); Airworthiness Criteria: Special Class Airworthiness Criteria for the AgustaWestland Philadelphia Corporation Model AW609 Powered-Lift, 88 FR 37805 (June 9, 2023).

if that FSTD meets the applicable Qualification Performance Standards (QPS). The QPS are published in the following appendices to part 60: appendix A for airplane FFSs, appendix B for airplane FTDs, appendix C for helicopter FFSs, appendix D for helicopter FTDs, appendix E for the quality management system for all FSTDs, and appendix F for definitions and abbreviations applicable to part 60. While appendices E and F will apply to powered-lift FSTDs, as discussed in the NPRM, part 60 does not set forth a powered-lift QPS similar to what exists for airplanes and helicopters. As discussed later in this section, the FAA maintains that creation and adoption of a new appendix as a permanent fixture in part 60 is premature given the wide variation of powered-lift and rapid pace of development. Additionally, as discussed in this preamble, one intent of the SFAR is to equip the FAA with operational data to implement future permanent regulations, to include that data necessary to develop a powered-lift QPS in the future.

In general, FSTDs qualified under part 60 are typically used to replace an aircraft for required air carrier or pilot certification training and proficiency checking. Because FSTDs are used for applications such as air carrier training and type rating training, detailed validation requirements are defined in the part 60 QPS to ensure that the FSTD performs equivalently to a specific make, model, and series of aircraft. Depending upon the qualification level of the FSTD, it may completely replace an aircraft for all training and proficiency checking events. As mentioned by one commenter who recommended caution on the use of simulators to replace an aircraft due to the ability to replicate complex aerodynamic environments, the FAA notes that rigorous objective validation requirements are applied to ensure the FSTDs perform equivalently to the aircraft in similar training and proficiency checking events. These validation requirements cover a wide range of training tasks, including takeoff, landing, hovering/low speed operations, and various other flight maneuvers that are required for pilot training and qualification. As described in the NPRM, the qualification of powered-lift FSTDs would be validated similarly in an objective manner to ensure the FSTD performs equivalently to the aircraft in required training and checking events.

Therefore, the FAA proposed the addition of new requirements in § 194.105 of the SFAR to enable the qualification of powered-lift FSTDs. The

FAA contended that § 194.105 would function to add flexibility to part 60 in proposed § 194.105 to permit qualification of FSTDs of powered-lift using components of existing standards for airplanes and helicopters in appendices A through D to part 60, where applicable and as determined by the FAA, that would provide an equivalent level of safety to existing QPS components. As written in the NPRM, the proposal was intended to follow the established process in § 21.17(b) for the certification of special classes of aircraft. This addition facilitates the FSTD qualification process by enabling FSTD sponsors to propose FSTD qualification standards where the current standards do not apply to new and novel aircraft designs. Particularly with objective validation testing, the ability to propose alternate testing methods is necessary to fully evaluate the FSTD's capability to provide pilot training for powered-lift.

The FAA received several comments on the proposed FSTD qualification process, to which it responds in the subsequent sections, and FAA adopts the rule text as proposed.

1. Publication of Proposed FSTD Standards

Several commenters noted the urgency to enable a means to ensure safety and efficiency of FSTDs. Specifically, several commenters disagreed with publication of the proposed powered-lift standards to the **Federal Register** for notice and comment. The primary concern was that adding a notice and comment process would introduce an unnecessary delay in approving such standards and qualifying FSTDs. Commenters suggested alternatives such as: expediting an independent SFAR consisting only of a powered-lift QPS for part 60; creating an alternate means of compliance for interim certification; allowing FAA principal operations inspectors (POIs) to approve FSTDs for use within the training organization they oversee; developing an expert panel with approving authority who would conduct a technical review; and providing notice and an opportunity to comment only for the first QPS, then utilizing it as a baseline for future QPSs absent **Federal Register** publication.

As discussed in the NPRM, the requirements proposed in § 194.105 will follow similar processes that are used to certify special classes of aircraft. The FAA understands commenters' concerns regarding the potential for delays; FAA is not required to, and does not plan to, adhere to all of the requirements for issuing generally applicable rules. The

notice and comment process for a project of this nature, a rule of particular applicability, does not necessitate a full regulatory impact analysis or going through the same level of review as a rule of general applicability. Rather, the FAA anticipates working closely and directly with the FSTD sponsor and manufacturer to develop the QPS, after which the FAA would announce the availability of, and request comment on, the proposed QPS. FAA would solicit comment for a shorter timeframe than it typically does for a generally applicable rule, consistent with the time required to complete the comment consideration and adjudication process for the certification of special classes of aircraft. Additionally, the FAA does not intend to publish every proposed QPS for those FSTDs/QPS that have already been published. In other words, the FAA intends to leverage precedent for similarly situated FSTDs. For example, if Sponsor A qualified FSTD A under § 194.105 (after notice, comment, and comment adjudication), and FSTD A was identical to FSTD B that Sponsor B wished to qualify, the FAA would apply FSTD A's QPS without public notice and comment, but after providing Sponsor B notice of the QPS and an opportunity to comment.

To effectuate this process, while also recognizing there are instances (like the previously described scenario) where the FAA will find it unnecessary to provide public notice and seek comment, the FAA adopts a new paragraph in § 194.105. Specifically, § 194.105 as it was proposed will be designated as paragraph (a), and new paragraph (b) will set forth the FAA's intent to publish proposed QPSs in the **Federal Register** for comment. Additionally, paragraphs (b)(1) and (2) will acknowledge that the FAA may find public notice and comment to be unnecessary in certain circumstances. The FAA finds this regulatory approach will address commenters concerns with timeliness in publication where extenuating circumstances exist and when similar simulators seek to enter into service.

The FAA anticipates that much of the existing FSTD standards in appendix A through appendix D to part 60 are applicable to powered-lift FSTDs with minor changes, including current general requirements, functions and subjective requirements, and certain cueing requirements for airplane and helicopter FSTDs. Additionally, portions of existing validation testing requirements may potentially be applied to powered-lift with adjustments of testing maneuvers, modification of applicable parameters, and the addition

of testing conditions to cover unique aircraft characteristics and associated training requirements. The FAA already maintains a framework for adjudication of special class airworthiness comments and intends to leverage that existing framework in the adjudication of comments after QPS notice.

While the FAA acknowledges that the notice and comment process may introduce some administrative burden and time delays, the transparent process and public participation benefits both the industry and the FAA. First, as previously mentioned, the FAA intends to use the SFAR to inform a permanent rulemaking to part 60 (*i.e.*, likely the addition of appendices to part 60 for powered-lift FFS and FTD QPSs). By treating QPSs under the same framework as special classes of aircraft, the FAA foresees the accumulation of requisite information to propose the most appropriate permanent amendment to part 60. This information may stem from industry, sponsors, FAA inspectors and subject matter experts, and the general public; public notice provides an efficient and familiar platform for such input. The FAA recognizes that public commenters may have limited technical and proprietary information on the design of these new and novel aircraft designs but maintains the benefit of improving efficiency over time for new aircraft entry into the NAS. Additionally, the nature of public notice, adjudication of comments, and issuance of final QPS will establish precedent whereby interested stakeholders will be able to view past approved proposals and base future proposals upon them. Rather than addressing multiple individual proposals in a non-transparent manner through a deviation process, the FAA anticipates that the public notice and comment process could have a converging effect on the powered-lift FSTD standards over time.

The FAA considered the various alternatives suggested by commenters. First, the creation of fixed QPS standards to part 60 through a permanent generally applicable rulemaking or through an expedited SFAR is premature given the lack of any certificated powered-lift and presentation of any powered-lift FSTD to the FAA. Primarily, the FAA lacks requisite information to develop a universal FSTD QPS applicable to the array of unique configurations of powered-lift. The SFAR approach facilitates a flexible and transparent process tailored to the specific powered-lift FSTD. The information and expertise accumulated during the pendency of the SFAR will position the

FAA and its industry counterparts in a more conducive position to future permanent regulations. Furthermore, under the SFAR public comment process, feedback from the well-established airplane and helicopter simulation and training industry and other interested parties can be leveraged in proposed powered-lift FSTD standards to incorporate past lessons learned in utilizing simulation to improve simulator fidelity, pilot training, and, ultimately, aviation safety.

Next, while POIs already approve the use of FSTDs for training,¹⁸ their responsibilities do not extend to the base qualification of the simulator. Rather, the Training and Simulation Group within the FAA's Office of Safety Standards is the office of primary responsibility for FSTD qualification and certification. The FAA Training and Simulation Group is comprised of aeronautical engineers, aviation safety inspectors, and analysts who specialize in the highly technical qualification activities for FSTDs. This existing branch and process resembles one commenter's suggestion to convene an expert panel with approving authority. Conversely, POIs and training center program managers (TCPM) maintain expertise in ensuring certificate holders apply appropriate regulations, policies, and procedures pertaining to use of the FSTD for training rather than the evaluation, approval, and oversight of QPS specifications. Where the Training and Simulation Group qualifies and assigns a specific level of qualification to the FSTD, the POI approves the FSTD for use by a certificate holder for a specific maneuver, procedure, or crewmember function. Due to the differing functions, training, and experience of the persons performing these separate job responsibilities, the FAA declines to expand POI responsibilities to include FSTD qualification as they do not have the specialized expertise required for such a duty.

The FAA comprehensively addresses alternate means of compliance and interim certification in subsequent sections.

2. Use of Deviation Authority

Several commenters stated that the FAA could incorporate powered-lift into part 60 through the already-existing mechanism of deviation authority set forth in § 60.15(c)(5). These commenters explained that the FAA erroneously excluded deviation authority as an option, indicating that § 60.1 gives the Administrator authority to designate an

appendix as applicable to a powered-lift and then to utilize deviation authority to amend that designation. Other commenters, such as GAMA, expressed concern that the FAA had previously approved part 60 deviations for FSTD projects, and the new proposed process could result in regulatory risk and might delay these projects.

The FAA acknowledges that some commenters believe there already exists a path to powered-lift FSTD qualification through part 60 deviation authority. However, the NPRM preamble explained why § 60.15(c)(5) deviation authority is inapplicable; the FAA maintains this position. Section 60.15(c)(5) states that an FSTD sponsor or manufacturer may submit a request for approval of a deviation from the QPS requirements as defined in appendices A through D to part 60. Thus, the deviation authority is explicitly applicable to the already existing appendices for airplanes and helicopters only. To further support this narrowly scoped authority, as explained in the preamble to the final rule adopting § 60.15(c)(5), the FAA added deviation authority to allow for FSTD sponsors to deviate from technical requirements in the part 60 QPS.¹⁹ Deviation may only be considered from minimum requirements tables, objective testing tables, the functions and subjecting testing tables, and other supporting tables and requirements in the part 60 QPS.²⁰ Therefore, the deviation authority was never intended to be utilized to create a brand new QPS for a new class of aircraft, nor does the plain language of the regulation support such a use. Rather, deviation authority in § 60.15(c)(5) is utilized for those unique instances where novel airplane or rotorcraft characteristics do not precisely fit within the common and technical criteria set forth in the respective appendices or where a published FSTD standard, such as ICAO Document 9625,²¹ may be substituted for the part 60 QPS.

Commenters are correct in noting that the FAA previously issued a deviation in accordance with § 60.15(c)(5) for a powered-lift FSTD. Specifically, the FAA approved one deviation for a set of powered-lift FSTD standards under § 60.15(c)(5) in 2018; however, an FSTD has not yet been qualified under this

¹⁹ *Flight Simulation Training Device Qualification Standards for Extended Envelope and Adverse Weather Event Training Tasks* final rule, 81 FR 18178 (Mar. 30, 2016); corrected at 81 FR 32016 (May 20, 2016).

²⁰ § 60.15(c)(5)(ii).

²¹ Manual of Criteria for the Qualification of Flight Simulation Training Devices—Volume I—Aeroplanes (9625-1).

¹⁸ FAA Order 8900.1, Vol 3, Ch. 54, Sec. 5.

approved deviation. While the FAA has since determined that the deviation authority is not the appropriate mechanism to approve FSTD standards for powered-lift, the FAA intends to work directly with that operator to facilitate FSTD qualification under this adopted process.²²

The FAA acknowledges that the adopted SFAR process may result in less timely decision-making by the FAA as compared to using a deviation process without public notice and comment. However, what commenters are proposing would essentially be establishing new standards, because the existing appendices are not appropriate for these new FSTDs. The establishment of new standards must comply with the informal rulemaking requirements of the Administrative Procedure Act. In addition, the FAA believes that public input will provide value in helping to ensure the safe and efficient integration of powered-lift into the NAS and that this regulatory approach is designed to be as broad and open to innovation as possible without sacrificing safety and effectiveness.

3. Interim FSTD Qualification

Lilium, CAE, NBAA, and others commented on the need for an interim FSTD qualification process for powered-lift FSTDs and advocated for the use of engineering/predicted data to support FSTD qualification. Some commenters urged the FAA to accept the engineering simulations and predicted engineering data from aircraft OEMs to expedite an interim qualification process.

Part 60 supports interim FSTD qualifications, which would be equally applicable in the case of a powered-lift FSTD. Specifically, § 60.21 sets forth the requirements for the interim qualification of FSTDs for new aircraft types or models and requires the sponsor to provide: (1) the aircraft manufacturer's data consisting of at least predicted data validated by a limited set of flight test data, (2) the aircraft manufacturer's description of the prediction methodology used to develop the predicted data, and (3) the Qualification Test Guide test results.²³ Because this regulation applies to all aircraft, interim qualification is an available option to powered-lift FSTDs even within the alternate qualification

framework set forth in the SFAR. As discussed in the NPRM preamble that adopted § 60.21, the intent of interim qualification is to facilitate training before final flight test data is available so the operator can put the aircraft into service swiftly, while maintaining necessary safety standards.²⁴ The regulation enables the use of the aforementioned predictive and/or engineering data that meets the reliability parameters set forth in § 60.21(a) to support interim FSTD qualification and properly trained flightcrew in accordance with FAA pilot training and qualification standards. The FAA notes that engineering simulation and predicted engineering data may be accepted for airplanes and helicopters as an alternative to flight test data in accordance with appendices A and C to part 60; however, this concept is not succinctly applicable to powered-lift interim qualification because powered-lift and their corresponding FSTDs are new and novel entrants into the aviation market.

Established practice and additional regulatory requirements in airplane and helicopter QPS clearly require the applicant to demonstrate past success by providing such data to support FSTD qualification.²⁵ While the SFAR utilizes a non-traditional mechanism of QPS formation, establishing past success at providing predictive data that will support FSTD qualification continues to be a necessary deliverable for interim qualification so pilots will be adequately trained and checked in an interim qualified FSTD. Particularly with new and emerging aircraft designs, the FAA anticipates significant challenges with establishing past success in predicting the behavior of these aircraft for the purposes of developing real-time simulation models for pilot training.

In sum, new § 194.105 does not prohibit a sponsor or manufacturer from pursuing interim qualification of an FSTD. The interim qualification requirements of § 60.21 apply to all aircraft, including powered-lift. While the FAA predicts challenges in the accumulation of powered-lift FSTD flight test data sufficient to meet the requirements for interim qualification, if

a sponsor or manufacturer could meet the standard as set forth in § 60.21(a), the SFAR does not foreclose interim qualification.

4. Emerging Technological Advances in FSTDs

Several commenters, including AWPC, CAE, Vertical Flight Society, Advanced Air Mobility Institute, and GAMA, stated that the FAA must consider new and innovative simulation technologies, such as virtual reality (VR), extended reality (XR), and mixed reality (MR) systems. The commenters emphasized that these technologies provide opportunities for safe, immersive training, as well as offer the potential to significantly reduce the hardware footprint of an FSTD flightdeck and visual system. Additionally, the commenters stated that integrating new and novel technology would reduce associated material cost to the operator. These commenters urged the FAA to update part 60 to account for novel technology, use "acceptability" standards to account for novel technology, or use § 61.4(c) to approve the novel devices that provide comparable fidelity and representation. The Advanced Air Mobility Institute recommended collaborating with the U.S. Armed Forces to understand their training regime, which includes desktop avionics trainers, mixed reality part-task trainer, and common software flight training devices. ALPA further commented that virtual reality and mixed reality technologies should only be used after qualification standards have been established and should not replace the in-aircraft training or minimum FFS used.

The FAA acknowledges the potential benefit of immersive simulation technologies like virtual reality, extended reality, and mixed reality in improving FSTD quality and reducing the overall cost of simulation for pilot training. In addition to powered-lift FSTDs, the use of immersive simulation technologies is an issue currently being addressed by the FAA under existing airplane and helicopter standards. The FAA is actively working toward encompassing these tools into the qualification regime for all aircraft, not just powered-lift. Because the current part 60 standards do not specifically address immersive technologies, such as virtual reality systems, the FAA recognizes the need to facilitate these technologies. Additionally, while the current part 60 standards do not yet address the use of such immersive technologies for FSTDs, this does not necessarily prevent an operator or training provider from using such

²² The FAA notes that commenters' concerns regarding regulatory risk did not include the specific regulations where risk would exist. As stated, the FAA intends to work directly with the operator issued a deviation in light of this final rule to avoid any noncompliance issues.

²³ Appendix F to part 60 defines the following terms: flight test data, predicted data, and qualified test guide.

²⁴ *Flight Simulation Device Initial and Continuing Qualification* NPRM, 67 FR 60284 (Sept. 25, 2002).

²⁵ E.g., "... based on acceptable aeronautical principles with proven success history and valid outcomes for aerodynamics, engine operations, avionics operations, flight control applications, or ground handling," appendix A to part 60, Attachment 2, paragraphs 8 (Additional information about flight simulator qualification for new or derivative airplanes) and 9 (Engineering Simulator—Validation Data). See similar language in appendix C, Attachment 2, Paragraph 9.

technologies for training that does not require the use of an FSTD, such as for classroom instruction or providing flightdeck familiarization training to prepare students for formal flight training.

The FAA notes, however, a survey of past research work on virtual reality systems as applied to pilot training simulators has shown instances of significant degradation of pilot performance and increased simulation sickness in virtual reality-equipped simulators.²⁶ The FAA must understand the effectiveness, benefits, and shortcomings of these systems in conducting pilot training and evaluation before memorializing FSTD qualification with such systems in part 60, not just for powered-lift, but for any aircraft. The FAA recognizes that the aforementioned study likely does not represent the state of the art in virtual reality systems and that additional study on the latest advancements is needed. To inform future policy decisions and potential rulemaking, the FAA recently initiated an immersive simulation research study²⁷ to examine, for example, human factors, potential use cases, and technical standards for virtual reality and other systems. Currently, the FAA is engaging with sponsors and manufacturers to work toward qualification of lower-level helicopter FSTDs with virtual reality systems, as well as maintaining awareness of EASA's recent FSTD qualification with a virtual reality system.²⁸ In sum, the FAA remains committed to staying apprised of new and novel technology that serves as a benefit in pilot training and preparation.

Further, the QPS process adopted by this final rule will not prohibit a manufacturer or sponsor from proposing a QPS that includes new and novel technologies. For powered-lift FSTDs, applicants may propose the use of virtual reality systems under the SFAR process, similar to how airplane and helicopter FSTD manufacturers may propose, use, or require a deviation to facilitate these systems within their airplane or helicopter FSTD. Because

the FAA has well-established standards for conventional simulation in appendices A through D to part 60, the applicant must include sufficient supporting data and justification that the virtual reality-equipped FSTD can satisfactorily provide relevant fidelity to an equivalent level or better than that of a conventional FSTD at the same qualification level to facilitate satisfactory pilot training and checking. In developing this justification, piloted experiments comparing performance, workload, simulation sickness, and transfer of training between a virtual reality FSTD and a conventional FSTD acceptable to the FAA should be considered.

5. Use of Consensus Standards

SAE International and CAE both urged the FAA to recognize consensus standards for powered-lift FSTDs when published. As discussed in the NPRM, the FAA intends to consider consensus standards during the qualification of powered-lift FSTDs under part 60. The FAA is aware of, and participates in, certain consensus standards subcommittees tasked with examining FSTD qualification standards for powered-lift. At the time of the publication of the NPRM, no publicly available consensus standards existed to reference; therefore, the FAA declined to include them as a compulsory basis for qualification. However, under the SFAR process, an applicant may propose the use of an industry consensus standard to support the qualification of a powered-lift FSTD.

While the FAA intends to leverage consensus standards as efficiently as possible for both industry and the FAA, the broad array of powered-lift features and inability to identify similar operating characteristics²⁹ render a universal approval akin to part 23 consensus standards challenging. However, the FAA intends to review proposed consensus standards for approval and determine the application of any necessary conditions or limitations upon availability. Because the FAA does not currently have a proposed consensus standard to review, consideration on the applicability of a future consensus standard will likely initially be made on a project-by-project basis. If a proprietary consensus standard is submitted for consideration, the FAA would not publish this standard in full to the **Federal Register** but would publish a summary of the proposed action and any applicable

differences or conditions and limitations.

6. Levels of FSTD Qualification

Archer, CAE, VFS, and others commented that there will be a need for FSTDs other than a Level C or higher FFS. The FAA agrees that many levels of FSTDs are currently necessary and available for both airplane and helicopter pilot training, and there will likely be a similar need for additional FSTD levels for powered-lift pilot training. For FSTD qualification purposes, § 194.105 will not limit FSTD qualification to only Level C FFS and above.³⁰ Under the FSTD qualification process in the SFAR, an applicant may propose standards for any FSTD qualification level in part 60 using the standards in appendices A through D to part 60 as a baseline. Where an applicant proposes unique FSTD configurations that are not consistent with established part 60 FSTD appendices, such as with virtual reality-equipped FSTDs or alternative motion platform, the sponsor or manufacturer must provide justification and supporting data demonstrating the capability of the FSTD to conduct approved pilot training and evaluation at the requisite level of qualification sought.

V. Certification of Powered-Lift Pilots

As outlined in the Executive Summary, the introduction of powered-lift as a new category of civil aircraft creates unique challenges for pilot training and certification, particularly when considering the lack of available certificated powered-lift in which a flight instructor would conduct flight training and the difficulty in obtaining flight training itself due to a lack of qualified flight instructors.

To address these barriers, the FAA finalizes alternate aeronautical experience requirements and expanded logging provisions, in section V.F. of this preamble. Additionally, section V.F.6. of this preamble provides tables summarizing the requirements for pilot certification to facilitate readability of the alternate experience and logging provisions.

A. Establish a Type Rating Requirement for Persons Seeking To Act as PIC of Powered-Lift

Part 61 prescribes the requirements for issuing pilot and flight instructor certificates and ratings, the conditions under which those certificates and ratings are necessary, and the privileges and limitations of those certificates and

²⁶ E.g., Oberhauser, M., Dreyer, D., Braunstingl, R., & Koglbauer, I. (2018). "What's real about virtual reality flight simulation? Comparing the fidelity of a virtual reality with a conventional flight simulation environment." *Aviation Psychology and Applied Human Factors*, 8(1), 22–34.

²⁷ The FAA's Tech Center Acquisition & Grants Division in the Office of Finance and Management published an RFI to complete a feasibility assessment and to develop the requirements for Immersive Flight Simulation CRADA(s) on December 14, 2022. See *Government RFI for Immersive Flight Simulation Cooperative Research and Development Agreement*, available at SAM.gov.

²⁸ www.easa.europa.eu/en/downloads/137723/en.

²⁹ See section V.A.

³⁰ See Section IV.C.6.

ratings.³¹ The FAA issues six levels of pilot certificates (student, sport, recreational, private, commercial, and ATP) and assigns category, class, and type ratings on each pilot certificate.³² To act as PIC of any aircraft, a person must hold the category, class, and type rating (if class and type are applicable) on their pilot certificate.³³ Part 61 sets forth the requirements (*e.g.*, aeronautical experience, practical test) to obtain such certificates and ratings.

Part 1 of 14 CFR, which provides definitions and abbreviations for Title 14, defines category and class for the purposes of airmen ratings. Specifically, “category” is defined as a broad classification of aircraft (*e.g.*, airplane, rotorcraft, powered-lift), while “class” is defined as a group of aircraft within a category having similar operating characteristics (*e.g.*, single engine, multiengine, helicopter).³⁴

In 1997, when the FAA established the powered-lift category in part 61, the FAA declined to create powered-lift classes or require type ratings for powered-lift beyond those established in § 61.31(a) (*i.e.*, large aircraft or as specified by the Administrator under aircraft type certificate procedures).³⁵

During the development of the NPRM, the FAA reconsidered whether (1) classes of powered-lift could be established and (2) type ratings should be required. In this final rule, the FAA maintains its position on the infeasibility of establishing powered-lift classes at this time and adopts the requirement for the PIC of a powered-lift to hold a type rating on their pilot certificate. This section briefly discusses the amendment and responds to comments.

Currently, pursuant to § 61.31(a), a person must hold a type rating to act as PIC of (1) a large aircraft³⁶ (except lighter-than-air), (2) a turbojet-powered airplane, and (3) other aircraft as specified by the Administrator through aircraft type certificate procedures.³⁷ To

obtain a type rating, a person must receive aircraft-specific training and pass a practical test in the aircraft for the type rating sought.³⁸ Currently, the FAA’s regulatory framework in part 61 allows for the issuance of a powered-lift category rating on a pilot certificate and does not specifically require a type rating to act as PIC of a powered-lift operation (unless a powered-lift specifically meets one of the parameters in § 61.31(a)).

In the NPRM, the FAA extensively discussed the lack of commonality between each design of powered-lift.³⁹ For example, powered-lift types are expected to vary in configuration from tilt-wing, tilt-propeller, lift plus cruise, and tilt plus cruise designs, as well as varying degrees of automation. Further, powered-lift have unique flight and handling qualities managed with indirect flight controls, meaning movement of the inceptor does not directly correlate to the movement of a specific flight control surface.⁴⁰ The divergence of characteristics between powered-lift drives, first, the infeasibility to create classes because there is not a discernable group of similar operating characteristics with which the FAA can create classes at this time. Secondly, it drives the need for specific training and testing in the powered-lift that a PIC intends to operate. Generalized training requirements based on a broad categorization of powered-lift alone would not adequately address the unique characteristics and operating requirements of each individual aircraft.

Therefore, to establish an appropriate level of safety by ensuring persons receive adequate training and are tested on the unique design and operating characteristics of each powered-lift, the FAA proposed to require a person who acts as PIC of a powered-lift to hold a type rating⁴¹ in new § 61.31(a)(3).⁴²

type rating and develop training objectives for the type rating.

³⁸ § 61.63(d), 61.157(b).

³⁹ 88 FR 38946 at 38956 (June 14, 2023).

⁴⁰ For purposes of this preamble, the term “inceptor” refers to a wide variety of non-traditional pilot controls through which pilot inputs are managed for the purpose of operating the powered-lift.

⁴¹ The FSB will evaluate each powered-lift on a case-by-case basis to determine whether the training recommended by the manufacturer will enable the pilot to safely operate the aircraft in the NAS. Additionally, the FSB will identify the unique characteristics of each powered-lift that require special training, which will be documented in the Flight Standardization Board Report (FSBR). Subsequently, these findings are utilized to determine the applicability of tasks within the appropriate powered-lift Airman Certification Standards for training, testing, and checking.

⁴² The FAA also proposed to redesignate current § 61.31(a)(3), which requires a type rating for other

These proposals necessitated conforming amendments within part 61. Section 61.5(b)(7) sets forth the aircraft type ratings that may be placed on a pilot certificate when the applicant satisfactorily accomplishes the training and certification requirements for the rating sought. These type ratings include the aircraft currently identified in § 61.31(a), as well as the SIC pilot type rating for aircraft that are type-certificated for operations with a minimum crew of at least two pilots. The FAA proposed to revise paragraph (b)(7)(iii) to reflect the proposed aircraft type rating for a powered-lift and to redesignate current § 61.5(b)(7)(iii) as new § 61.5(b)(7)(iv). The FAA also determined current § 61.5(b)(7)(iv), which allows for the issuance of a SIC pilot type rating, does not belong under § 61.5(b)(7). Section 61.5(b)(7) contains aircraft type ratings; however, a pilot type rating subject to “SIC Privileges Only” is not an “aircraft” type rating. To more accurately capture the SIC pilot type rating as a pilot rating independent of “aircraft,” the FAA proposed to relocate this provision to stand independently in new § 61.5(b)(9).

Comments in Support of a Type Rating

Several commenters expressed support for the FAA’s proposal to require a type rating for each powered-lift a PIC seeks to operate. AgustaWestland Philadelphia Corporation (AWPC),⁴³ BETA, Lilium, and Joby agreed with the proposed type rating requirement, citing the lack of commonality between powered-lift designs and their diverse capabilities. Likewise, ALPA and A4A endorsed the FAA’s proposed approach to require a type rating to recognize the uniqueness of powered-lift, diversity of aircraft handling characteristics, and operations relative to evolving aircraft designs. ALPA added that some reports list over 500 different designs of powered-lift under manufacturer development and stated that pilots cannot rely on the transferability of skills between powered-lift types. An individual commenter noted that, because powered-lift systems are complex and quite different from one another, pilots should be qualified similarly to jet type ratings, specifically emergency recovery procedures. HAI expressed general support for the type rating requirement at this time but urged a cautious

aircraft specified by the Administrator through aircraft type certificate procedures, as new § 61.31(a)(4).

⁴³ AgustaWestland Philadelphia Corporation is a subsidiary of Leonardo S.p.A Helicopter Division.

³¹ § 61.1(a)(1).

³² § 61.5.

³³ § 61.31(d).

³⁴ § 1.1.

³⁵ Flight Instructor, Ground Instructor, and Pilot School Certification Rules; NPRM, 60 FR 41160 at 41165 (Aug. 11, 1995).

³⁶ Section 1.1 defines “large aircraft” as “aircraft of more than 12,500 pounds, maximum certificated takeoff weight.”

³⁷ As discussed in the NPRM, FSBs are normally established when the responsible FAA Aircraft Certification Office issues a Type Certificate for large aircraft, turbojet powered airplanes, and other aircraft specified by the Administrator through the aircraft certification process (see § 61.31(a)). Powered-lift will be evaluated under the existing FSB process by the Aircraft Evaluation Division, which will determine the requirements for a pilot

approach, as subsequently discussed in this section.

ICAO Recommendation: Powered-Lift Type Rating on Existing Airplane or Rotorcraft Certificate

While these commenters supported a type rating, many supported the type rating framework specifically as recommended by ICAO Annex 1, section 2.1.1.4,⁴⁴ which permits a Licensing Authority to endorse a type rating for aircraft of the powered-lift category on an airplane or helicopter pilot license. Commenters supporting this position included: NATA, CAE, Eve, AWPC, Lilium, BETA, Supernal, the Vertical Flight Society, ADS Group, Vertical Aerospace Group, FlightSafety International, AUVSI, Ferrovial Airports, GAMA,⁴⁵ Joby, NBAA, Aerospace Industries Association, Helicopter Association International, L3Harris, and EASA.

Many commenters supported § 2.1.1.4 on two premises. First, commenters agreed with the premise that all powered-lift are unique enough to require a type rating which renders a category rating unnecessary. Therefore, given the similarity to airplanes and helicopters, commenters stated that removing the powered-lift category rating requirement and fully aligning with § 2.1.1.4 in the simple addition of the powered-lift type rating to an existing airplane or helicopter certificate would maintain an equivalent level of safety to the traditional certification framework. Second, commenters stated that alignment with § 2.1.1.4 would facilitate training and checking in Level C or higher simulators,⁴⁶ which commenters emphasized would standardize training and data collection

to support continuous training improvement.

ICAO Annex 1 contains a recommended transitional measure in section 2.1.1.4 that permits a licensing authority to endorse a type rating for a powered-lift category on an existing airplane or helicopter category pilot license (*i.e.*, certificate). Application of this optional transitional measure would require the endorsement of the rating on the license to indicate that the aircraft is part of the powered-lift category and the training for the type rating must have been completed during an approved training course incorporating all relevant aspects of operating an aircraft of the powered-lift category, taking previous experience of the applicant into account as appropriate.

Joby stated the FSB operational evaluation process is adaptable within the type rating framework by providing appropriate consideration of new technologies or unique training needs, including special emphasis areas (training requirements) and specific flight characteristics (checking requirements) unique to a type. Supernal said ICAO would add category and class ratings at a later date when such additions could be supported by data. L3Harris posited that once sufficient experience is gathered, the FAA could reevaluate the category requirement and implement permanent rules as needed.

GAMA resubmitted the “GAMA Manufacturer Consensus Recommendations for the FAA’s Powered-Lift Special Federal Aviation Regulation (SFAR)” providing insights from the powered-lift industry to the FAA regarding SFAR regulation.⁴⁷ Participants in the letter highly encouraged the FAA to reconsider the GAMA member consensus initiative aligned with ICAO,⁴⁸ as it promotes adaptability, harmonization with international standards, and

collaboration with other aviation authorities. The commenters supported the ICAO guidance as recognizing that pilot qualification and training shall be based on an aircraft’s capabilities. GAMA further commented that the type rating for powered-lift should be defined in accordance with FAA’s existing Operational Evaluation Board Process in a manner appropriate for each aircraft. In sum, given the global nature of the eVTOL industry, GAMA stated adopting an approach that reflects the ICAO framework is imperative. The Advanced Air Mobility Institute suggested that harmonization and coordination with EASA would reduce bureaucratic hurdles and minimize duplication of efforts. Additionally, the Advanced Air Mobility Institute asserted that through a joint approach, seamless training and certification procedures can be facilitated, leading to enhanced efficiency and benefits for all stakeholders involved.

The FAA first notes that the transitional measure is a recommendation⁴⁹ and not a standard. Under Articles 37 and 38 of the Chicago Convention, the U.S. is required to comply with ICAO standards or notify ICAO of differences. However, because section 2.1.1.4 is a permissive recommendation, the FAA is neither required to comply with the transitional measure nor file a difference with ICAO when deviating from recommended practices.

As discussed in the NPRM, the FAA duly considered implementation of section 2.1.1.4 and declined to disrupt FAA’s traditional airman certification framework by the addition of a type rating within a wholly different aircraft category to an existing certificate with a different category rating. Since 1997, part 61 has included regulations for powered-lift pilot and flight instructor certification. The FAA concedes that those regulations do not adequately address the unique challenges of introducing a new category of aircraft to civil operations; therefore, through this SFAR, the FAA chose to facilitate alternative measures for a pilot to directly receive a powered-lift category rating and a powered-lift type rating. Similar to the conditions set forth in ICAO’s transitional recommendation, these alternative measures to receive a powered-lift category and type rating would be completed during training

⁴⁴ ICAO Annex 1, 14th Ed. (July 2022). ICAO sets forth Section 2.1.1.4 until March 5, 2025.

⁴⁵ GAMA suggested amending part 194 (and revising SFAR references as appropriate) to say that the appropriate category and class for powered-lift is that found by the Administrator to be appropriate, as designated by the type certificate data sheet and FSB report. GAMA noted there was precedent for this approach when the FAA provided relief to Wing from § 135.243 rules with respect to “appropriate category and class ratings” for the operation of its powered-lift unmanned aircraft. See, Exemption No. 18163 issued to Wing Aviation, LLC (Mar. 28, 2019). Since the issuance of Exemption No. 18163 in 2019, the FAA has determined that it erroneously tied having a type certificate to the ability to define the appropriate category, class and type of aircraft. In actuality, the FAA has the ability to determine definitionally under 14 CFR 1.1 what category and class of aircraft it is. Additionally, the FAA notes that unmanned aircraft were not contemplated in the FAA regulations when they were conceived, and that unmanned operations are unique—autonomy, airspace, capability, people on board, etc.—and do not fit into the traditional category and class framework.

⁴⁶ § 61.63(d).

⁴⁷ As noted in the NPRM, on July 21, 2022, GAMA submitted a letter to the FAA providing its recommendations regarding consensus standards for powered-lift. The FAA has placed a copy of this letter in the docket for this rulemaking. On August 17, 2022, the FAA met with GAMA to discuss eVTOL Entry Into Service. The FAA did not take the recommendations contained in the letter or the contents of the meeting into consideration while developing the NPRM. GAMA resubmitted the letter and information related to the listening session to the docket in response to the NPRM. The FAA has incorporated responses throughout this preamble appropriate to the respective subject matter. FAA–2023–1275–0086.

⁴⁸ The FAA interprets GAMA’s broad reference to “ICAO guidance” in their comments, subsequently referenced throughout this preamble, as a reference to ICAO Doc. 10103 and recommendations in the applicable ICAO Annex.

⁴⁹ Annex 1 defines Recommended Practices, in pertinent part, as any specification of which the uniform application is recognized as desirable in the interest of safety, regularity, or efficiency of international air navigation, and to which Contracting States will endeavor to conform in accordance with the Convention.

provided under an approved or proposed training curriculum⁵⁰ and would take previous experience of an applicant in an airplane or helicopter into account, as appropriate.⁵¹

The FAA acknowledges commenters' suggestions to more strictly align with ICAO's recommended transitional measure in section 2.1.1.4, reiterated in section 955 of the 2024 FAA Reauthorization. The FAA notes that commenters generally disagreed with the FAA's proposal to keep the powered-lift as a separate category of aircraft. These commenters stated that ICAO's standard provides an equivalent or higher level of safety but failed to provide supporting rationale as to why the FAA should deviate from its generalized airman certification framework in existence or how the transitional measure would provide an equivalent or higher level of safety to meeting the longstanding aeronautical experience requirements specific to a category of aircraft. Additionally, the FAA notes that ICAO Annex 1 does not forego the powered-lift category completely but gives the temporary option of an alternate means for a member state to implement the powered-lift category.

The FAA maintains that while powered-lift vary widely within the respective category, they are essentially a hybrid between an airplane and a helicopter with a distinct foundational set of characteristics.⁵² Therefore, assurance of proficiency in those characteristics is an essential element of airman training that may be lost if a type rating, with no minimum flight hour or flight training requirement before testing for such rating,⁵³ is simply added to an existing airplane or helicopter rating, thereby rendering it impracticable for the FAA to wholly align with ICAO Recommendation 2.1.1.4, as explained throughout this section. While these pilots have significant prior experience operating in the NAS by virtue of holding a certificate with an airplane category rating or rotorcraft category, helicopter class rating, the experience is not tailored to powered-lift operations (the subsequent section of this preamble

explains the FAA's finding on the value of the category rating).

The FAA recognizes there is a fine line between a powered-lift being so unique that none resemble each other, thereby eliminating the similarities associated with a category of aircraft, and all powered-lift possessing similar fundamental characteristics such that a category rating remains essential. The subsequent section discusses additional comments received on the FAA's proposal to retain the powered-lift category and the safety benefit of doing so. This preamble also provides discussion of simulator time in section V.D. of this preamble.

Value of the Powered-Lift Category

Several commenters discussed the powered-lift category. As previously stated, the predominant position identified a perceived inconsistency between the FAA's statements about the uniqueness of powered-lift to support a universal type rating requirement and those statements supporting the powered-lift category rating as foundational. Additionally, commenters discussed the burden and barriers that a powered-lift category rating requirement would bestow on operators. CAE, NBAA, and Eve stated that a powered-lift category rating would create challenges in developing an initial cadre because it would require an FSB team to spend several months with the manufacturer to receive training compared to a type rating, which would only require a few weeks, according to the commenters. Joby and NBAA stated the category-based approach is potentially unsafe because it could lead to a negative transfer of skills between aircraft.⁵⁴ Similarly, an individual commenter noted that pilots of aircraft that operate primarily in wing-borne flight mode (e.g., F-35, AV-8) may not be properly trained to fly aircraft that possess the unique aerodynamic and handling qualities-related effects of aircraft that generate thrust via proprotors.

Lilium suggested that, should the FAA maintain the requirement for a powered-lift category rating, the FAA should credit commercial pilot and ATP flying experience toward the powered-lift category rating. Specifically, Lilium stated an approach should focus on powered-lift type rating specifics with a combined check at the end of training. Finally, HAI generally expressed that the FAA should credit time logged in

both airplanes and helicopters in the qualification framework.

The FAA considers the aircraft category rating to be a key element of airman certification for ensuring persons exercising the privileges of their pilot certificate possess a common level of competency. To be eligible to obtain a category rating, a person must complete set hours of flight time and flight training in the category of aircraft. Moreover, unlike class ratings within a category, a pilot who holds a category rating and seeks to add a new category to their pilot certificate must meet all of the flight time and flight training as would be required for an initial category rating.⁵⁵ Nearly 30 years ago, the FAA identified the need to establish a new powered-lift category for emerging technology.⁵⁶ At that time, the FAA explained that these regulations were necessary to respond to the future needs of aviation because industry was developing powered-lift and the pilot certification standards did not adequately reflect the certification requirements for powered-lift.⁵⁷ Like airplanes and rotorcraft, modern powered-lift vary significantly in terms of operational capabilities and complexity. However, like airplanes and rotorcraft, the FAA has determined that the wide range of current powered-lift in development share enough design attributes to establish a common aircraft category and ensure that a new powered-lift pilot has the necessary aeronautical experience to safely operate that category of aircraft in the NAS.

The FAA notes that, for purposes of airman certification, an aircraft category groups similar aircraft that are designed to produce lift in a certain way. The characteristics of each category and how it produces lift lends itself to unique conditions a pilot would experience exclusive to the category of aircraft being operated. Powered-lift pilots operating a powered-lift may conduct operations that are similar to airplanes and helicopters, but the pilot's experience in either category is unique to that category and would not (1)

⁵⁰ See §§ 194.217, 194.219, 194.221, 194.223, 194.225, 194.227, 194.229, 194.231.

⁵¹ I.e., by virtue of the proposed eligibility prerequisites for pilots to utilize the relieving alternate framework that will be set forth in part 194.

⁵² See 14 CFR 1.1, *Powered-lift* definition: a heavier-than-air aircraft capable of vertical takeoff, vertical landing, and low speed flight that depends principally on engine-driven lift devices or engine thrust for lift during these flight regimes and on nonrotating airfoil(s) for lift during horizontal flight.

⁵³ § 61.63(d).

⁵⁴ The FAA acknowledges difficulties with entry into service for aircraft with single controls. Section V.D. of this preamble addresses these challenges.

⁵⁵ Under § 61.63(c)(3), a person who seeks to add a class rating in the same category of aircraft is not required to complete the prescriptive flight training requirements for an initial class rating but rather must only have a logbook or training record endorsement from an authorized instructor attesting that the person was found proficient in the appropriate areas of operation. Under § 61.63(b)(1), a person adding a category rating must complete all of the aeronautical experience requirements for the certificate level.

⁵⁶ *Pilot, Flight Instructor, Ground Instructor, and Pilot School Certification Rules*, NPRM, 60 FR 41160 (Aug. 11, 1995); final rule, 62 FR 16220 (Apr. 4, 1997).

⁵⁷ 62 FR 16220 at 16230 (Apr. 4, 1997).

completely prepare the pilot for what may be encountered in a totally unique category of aircraft and (2) would not have the same unique conditions as a result of the production of lift by just wings or engine or just a rotor system.

Pilots maintain proficiency on specific flight characteristics based on these differing categories of aircraft (e.g., their unique production of lift), such that category flight experience is not a comprehensive fit to another category. For example, unique conditions specific to only an airplane or only a helicopter include engine failures and vortex ring state. During a loss of power in a multiengine airplane, a pilot must be cognizant of the speeds at which they are flying because a pilot of a multiengine airplane could encounter a loss of directional control attributed to operations below the airplanes published V_{MC} .⁵⁸ In a multiengine airplane, operations below V_{MC} result in a loss of directional control because the thrust is provided directly by the multiple engines. In a helicopter, the engines power a drive train that provides thrust through a rotor system. Since the thrust is not being directly provided by the engines in a helicopter there is no published V_{MC} . Therefore, a helicopter would not experience loss of directional control because of operations below V_{MC} as outlined for a multiengine airplane. Likewise, a pilot of a helicopter must be proficient in recovering from a vortex ring state, which is a transient condition of downward flight in which an aircraft descends through the air after previously ingested by the rotor system causing portions of the rotor blade to stall. If not corrected, the pilot experiences significant descent rates that require immediate intervention unique to a helicopter.⁵⁹ This condition is the result of the operation of a helicopter's rotor system producing downwash. As an airplane does not have a rotor system, this condition would not occur in an airplane.

These examples are specific to the category of aircraft in which they are encountered, of which, a powered-lift may or may not ever experience. Moreover, powered-lift are operationally capable of both vertical takeoffs and landings as well as horizontal flight. This increased transitional complexity means an aircraft, while perhaps having some similar characteristics as an

airplane or helicopter, has very unique and more novel conditions that may arise that would preclude crediting airplane or rotorcraft hours to count as comparable experience.

Given these characteristics, a pilot operating a powered-lift must be proficient in adverse conditions related to both horizontal flight and vertical take-off and landings (i.e., certain airplane and helicopter characteristics), as all powered-lift have these capabilities regardless of the size, and any other powered-lift specific condition that may arise. A pilot who holds only a pilot certificate with an airplane category rating would lack proficiency in vertical takeoffs or landings and wouldn't be familiar with unique characteristics of flight that may be similar to a helicopter. Likewise, a pilot who holds a pilot certificate with only a rotorcraft category with helicopter class rating could lack proficiency in conditions related to horizontal flight similar to that of an airplane. Proficiency in both is required for any powered-lift, regardless of size, that may not be sufficiently covered in type rating training focused on a specific aircraft rather than universal category-shared characteristics. Therefore, the FAA disagrees with the notion that requiring a powered-lift category introduces safety risks into the NAS and maintains that the foundational characteristics necessitate a generalized powered-lift category rating.

In making this determination, the FAA also examined the areas of operation and tasks required to be performed to obtain a powered-lift category rating versus those required for a powered-lift type rating. The FAA found that the areas of operation covered when an applicant takes a practical test for a commercial pilot certificate with a powered-lift category rating are more expansive and include foundational concepts and skills necessary to operate any powered-lift in the NAS. In comparison, the areas of operation that are covered for a powered-lift type rating tend to be more narrowly tailored to a particular powered-lift, assuming the applicant would have the foundational category skills (or be concurrently attaining such proficiency). For example, broader Areas of Operation (AOO) such as airport and heliport operations (III), rapid deceleration/quick stop (AOO VI, Task A), slow flight and stalls (AOO VIII); high altitude operations (AOO X); and special operations (AOO XI) appear on the powered-lift category rating test

as foundational category elements,⁶⁰ but are not covered on the powered-lift type rating test, nor would some of these foundational elements be covered on an airplane category or rotorcraft category, helicopter class practical test.⁶¹ Comprehensive proficiency to facilitate safe operations in the NAS must include these foundational elements, among others set forth in the applicable ACS, that may be overlooked given a type-rating only training and practical test.

Additionally, the FAA also notes the practical complexities of subjective assignment of an aircraft category as suggested by GAMA. Without a clearly communicated standard under which powered-lift would be certificated, the regulated community would be at a disadvantage in (1) lack of advanced notice of certification requirements (e.g., if a powered-lift was assigned in the airplane category during the type certification process, but the manufacturer only employed helicopter pilots), (2) arbitrary determination frameworks (e.g., how close a powered-lift would be required to align with the helicopters or rotorcraft to be in that category, whether it was a key system determination driver, etc.), and (3) potential absence of consistency in operational requirements (e.g., minimum safe altitude requirements⁶² and emergency equipment for overwater operations⁶³ differ for helicopters and airplanes).

Joby provided two examples of how the FAA's proposal to maintain a powered-lift category rating would introduce unanticipated safety risks. In Joby's first example, a person intends to operate a large, turbine-engine powered-lift. The individual seeks to meet the requirements of § 61.129(e)(1)⁶⁴ by

⁶⁰ Commercial Pilot for Powered-lift Category ACS (FAA–S–ACS–2).

⁶¹ The FAA notes that the Commercial Pilot for Powered-Lift Category ACS sets forth a table indicating the required tasks for each area of operation tested in accordance with the ACS for the addition of a powered-lift category rating to an existing commercial pilot certificate, which results in an abbreviated test for SFAR pilots where there is overlap in foundational elements between categories. For example, pilots who possess a commercial pilot certificate with an airplane category rating (and any airplane class rating) are not required to test again on high altitude operations (AOO X).

⁶² Section 91.119(d) permits a helicopter to operate at less than the minimums prescribed in § 91.119(b) or (c) provided the operation is conducted without hazards to persons or property on the surface and that each person operating the helicopter complies with any routes or altitudes specifically prescribed by the FAA for helicopters.

⁶³ §§ 135.167 and 135.168.

⁶⁴ Section 61.129(e)(1) requires an applicant for a powered-lift rating at the commercial pilot certificate level to obtain 100 hours of flight time in powered aircraft of which 50 hours must be in powered-lift.

⁵⁸ V_{MC} is a calibrated airspeed at which following the sudden critical loss of thrust the pilot would still be able to maintain directional control of the multiengine airplane. See Airplane Flying Handbook, FAA–H–8083–3C (2021), page 13–2.

⁵⁹ FAA Helicopter Flying Handbook FAA–H–8083–21B at 11–9.

operating a small powered-lift with a significantly dissimilar pilot interface, for economic considerations. Joby posits there is a negative transfer of piloting skills from the operation of the dissimilar aircraft. In Joby's second example, a person has obtained a powered-lift instrument rating in a powered-lift with airplane-like controls. The person then seeks to operate a powered-lift with helicopter-like controls. When the pilot encounters instrument meteorological conditions (IMC), they do not have the piloting skills or experience to operate the aircraft safely or experience negative transfer of pilot skills from operation of the dissimilar aircraft. Joby stated that the powered-lift instrument rating may give a pilot the confidence to fly in IMC when they are not prepared for the piloting task.

The central safety risk at issue in these two examples is cured by virtue of a type rating. If a person utilized a small powered-lift to build time for a powered-lift category rating to eventually fly a large, turbine-engine powered-lift, they will still be required under adopted § 61.31(a)(3) to obtain a type rating for the large powered-lift. The required type rating training and testing for a type rating intends to cover any operational proficiency gap between powered-lift types. Similarly, in Joby's second example, the person will be required to obtain a type rating both in a powered-lift with airplane-like controls and in a powered-lift with helicopter-like controls. While the instrument-powered-lift rating is not type-specific within the powered-lift category,⁶⁵ the type rating, which requires training and testing, will establish the pilot's proficiency in the specific aircraft which thereby addresses any possible safety gap.⁶⁶

In developing the NPRM, the FAA reconsidered whether to utilize the long-established powered-lift category as a means to integrate pilot certification of powered-lift pilots. The FAA determined that enabling the existing powered-lift category was the most logical means of establishing an existing cadre of powered-lift pilots without relying solely on pilots who received certification through existing military competency provisions. Therefore, the FAA will retain the requirement to obtain a powered-lift category rating as proposed.

Relatedly, as discussed in the NPRM, the FAA notes that some powered-lift have been issued special airworthiness certificates for experimental purposes in accordance with § 21.191 and foresees a need to continue this kind of certification in the future. In general, experimental aircraft are not subject to the same airworthiness standards as those aircraft holding standard airworthiness certificates (*e.g.*, regulatory design, build, maintenance, and inspection requirements). In accordance with § 91.319(i), the Administrator may prescribe additional operating limitations for experimental aircraft where necessary for safety and risk mitigation with various hazards inherently introduced by experimental aircraft. The FAA has employed the operating limitations issued with an experimental airworthiness certificate to require pilots to hold category and class ratings for all experimental aircraft and additional authorizations for certain experimental aircraft even when no passengers are carried on board.⁶⁷ As with experimental airplanes and experimental rotorcraft, the FAA will apply category ratings and other authorizations (*e.g.*, the authorization to act as PIC) through operating limitations for experimental powered-lift, as warranted.

Establishment of Powered-Lift Classes

Some commenters disagreed with the FAA's conclusion that the creation of powered-lift classes is infeasible at this time. One individual stated there is potential for different classes within powered-lift, expressing concern that restricting powered-lift and pilot designations to only a type within the category could impede progressive growth. The commenter suggested a basic class structure, such as a tiltrotor class. Another individual commenter added that it would be useful to have the option to delineate classes because powered-lift can have broadly similar characteristics (*e.g.*, utilizing proprotors for thrust, fly by wire, and similar operating characteristics and performance).

The FAA contemplated establishment of powered-lift classes both in the 1997 rulemaking and in this rulemaking. Specifically, similar to the commenters' suggestions, the FAA considered tilt-rotor, tilt-wing, ducted fan, and vectored thrust classes. However, the FAA maintains that, given the lack of certificated powered-lift in the civilian market, establishing classes of powered-lift is infeasible because the powered-lift

anticipated to enter the civilian market vary in unique configurations, or possibly a combination of configurations (*e.g.*, tilt-wing, tilt-propeller, lift plus cruise, tilt plus cruise). The purpose of a class is to establish enough commonality of operating characteristics⁶⁸ and flight controls to allow for pilot skills to transfer from one aircraft of that class to another.

For example, a multiengine airplane possesses ailerons, rudder, and elevator, all of which are controlled by flight controls in the flightdeck. Regardless of the make and model of the multiengine airplane being flown, these lifting surfaces will react similarly to flight control inputs by the pilot. This commonality of operating characteristics specific to airplanes allows for the transfer of pilot skills from one multiengine airplane to another. Additionally, many multiengine airplanes have feather propellers, propeller synchronization, fuel crossfeed, and other similar systems that pilots would recognize when operating a multiengine airplane from a broad perspective. Moreover, a pilot with proficiency in certain conditions arising from piloting an airplane with two engines would be similarly situated across this all-multiengine class of airplanes. For example, a pilot with a multiengine class rating would understand a published V_{MC} , which is a calibrated airspeed that is marked on an airspeed indicator with a blue line, to indicate a critical airspeed a pilot must avoid if encountering an engine failure regardless of the multiengine airplane the pilot operates within the class (*i.e.*, a transfer of skills and knowledge within the common set of characteristics).⁶⁹ Unlike the multiengine airplane class example, the FAA is unable to identify commonalities, outside of those category-based characteristics, that will allow for transfer of pilot skills from one powered-lift to another within that group with certainty at this time.

The FAA acknowledges the suggestions of classes by commenters (*e.g.*, tilt-wing, tilt-propeller, etc.). However, the FAA maintains that the lack of civilian powered-lift at this time impedes the FAA determining that common characteristics of two powered-lift overcome drastically different characteristics in another area. For example, under the commenter's suggestion, the Bell-Boeing V-22 Osprey

⁶⁵ The FAA notes that the instrument rating is, likewise, not type specific within the airplane category or rotorcraft category, helicopter class.

⁶⁶ For example, AOO V in the ATP and Type Rating for Powered-Lift Category ACS requires the applicant to demonstrate certain instrument procedures.

⁶⁷ See FAA Order 8130.2J, Appendix D, Table D-1, Operating Limitations.

⁶⁸ See 14 CFR 1.1, Class (1).

⁶⁹ For additional information on V_{MC} see the FAA Airplane Flying Handbook, FAA-H-8083-3C (2021), page 13-2.

and the AW609 would be of a common tiltrotor class; yet differences in inceptor arrangement, motion and effect of flight controls, and envelope protection strategies would result in substantially deviated operating characteristics such that a pilot's knowledge, skills, and proficiency may not transfer.

Therefore, because each powered-lift can have different configurations, unique inceptors, diversified flight controls, and complicated and distinctive operating characteristics, which are not traditionally present in overarching classes of aircraft to such a degree, the FAA maintains that type ratings best address the distinctive characteristics. A type rating will ensure the PIC possesses the requisite training and proficiency on each unique and central element of the powered-lift, regardless of broad characteristics that may be shared amongst certain powered-lift category. The FAA notes that this does not foreclose the possibility that classes could emerge at a later time.

Type Rating Determination

CAE stated that airman certification through the type rating, as determined by ICAO, should be tailored to the flight characteristics for each powered-lift as the aircraft may vary considerably depending on the aircraft design and the different modes in which they operate. Additionally, an individual requested that the FAA provide additional information as to the factors or standards that would be considered for type rating determinations. Specifically, the commenter asked how similarities or differences will be evaluated between two powered-lift, and what criteria will be used to deny or grant a type rating. The commenter provided a hypothetical, asking whether two powered-lift with different propulsion systems, control systems, or performance characteristics would require separate type ratings or whether they could be covered by a common type rating with differences training.

As discussed in the NPRM, the FAA initiates a Flight Standardization Board (FSB) during the aircraft certification process for aircraft that require a type rating. Since each powered-lift will require a type rating, as set forth by adopted § 61.31(a)(3), an FSB will be formed to evaluate each powered-lift to make recommendations for the pilot type rating training (*i.e.*, whether the training recommended by the manufacturer will enable the pilot to safely operate the aircraft in the NAS). Should a manufacturer later introduce a derivative or variant (*e.g.*, model, series) of a type-certificated aircraft, the FAA

will conduct another FSB of the new aircraft and make recommendations to determine whether certain aircraft warrant the same type rating and for any differences training and checking or special training necessary to operate the aircraft in the NAS. Difference levels specify FAA requirements proportionate to, and corresponding with, increasing differences between related aircraft.⁷⁰ These processes apply equally to all aircraft, including powered-lift. Therefore, in sum, the FAA notes that it is possible that a common type rating could emerge in the future if a single manufacturer produced multiple powered-lift sharing similar designs and operating characteristics; the FAA will procedurally apply the same steps to powered-lift as is currently implemented for the establishment of a common type rating.

As previously discussed, the FAA proposed that all PICs seeking to operate a powered-lift would be required to receive a type rating. A type rating is a one-time, permanent endorsement on a pilot certificate indicating that the holder of the certificate has completed the appropriate training and testing as required by the applicable section of the Code of Federal Regulations.⁷¹ Section 1.1 of 14 CFR provides the definition of "type," as it pertains to a rating, as a specific make and basic model of aircraft, including modifications thereto that do not change its handling or flight characteristics. Therefore, in some cases, a type rating includes the series of aircraft (*e.g.*, Boeing 747–400), if applicable, and in other cases the type ratings only apply to one aircraft. The § 1.1 definition of type will apply to powered-lift as it applies to any other type of aircraft in the establishment of a type rating. Therefore, if during the type certification process the FAA determined that a make and basic model of powered-lift was modified, but to a degree so as not to change its handling or flight characteristics, that type rating might include the series of powered-lift. In addition, the FAA has procedures to establish a common type rating. A "common type rating" is a term used in FSB reports to describe a relationship between type ratings for aircraft with

⁷⁰ Specifically, the FAA's differences training framework constitutes five levels, in order of the increasing training and checking requirements necessary to address the necessary knowledge, skills, and abilities a pilot must demonstrate as applicable to an aircraft for which a pilot is already qualified and current during the initial transition or upgrade training for other related aircraft at a commercial operator. See AC 120–53, as revised, for additional information on difference levels.

⁷¹ "Rating" is defined in 14 CFR 1.1 as a statement that, as a part of a certificate, sets forth special conditions, privileges, or limitations.

different type certificates that have no greater than Level D training differences. For example, the B–757 and the B–767 are separate type ratings determined to have commonality and, therefore, have a common type rating.⁷² The type rating for a certificated aircraft can be determined to be related to another type rating of another certificated aircraft of the same make provided the aircraft meet the criteria of the T1 (equivalence) or the T2 (handling characteristics) and T3 (core pilot skills with no greater than Level D differences).⁷³

Opposition to Removal of § 61.5(b)(7)(iii)

Airbus Helicopters expressed concern regarding the proposed replacement of current § 61.5(b)(7)(iii), which sets forth the ratings that may be placed on a pilot certificate when an applicant satisfactorily accomplishes the training and certification requirements for other aircraft type ratings specified by the Administrator through the aircraft type certification procedures. Airbus Helicopters stated that replacing current § 61.5(b)(7)(iii) with "Powered-lift" could impact the normal category helicopter requiring a type rating and is not consistent with the proposal in "Chapter V."⁷⁴ The commenter proposed replacing the current content of § 61.5(b)(7)(iv) (SIC pilot type rating) with "powered-lift" instead.

While the commenter did not clearly describe what consequences may result from the proposed changes, the FAA disagrees with the commenter that the proposed language will have consequences on normal category aircraft. The provisions are simply re-ordered; current § 61.5(b)(7)(iii) will move to paragraph (b)(7)(iv) and current § 61.5(b)(7)(iv) will move to paragraph (b)(9).

Simplified Flight Controls and Advanced Air Mobility

Several commenters raised the topic of AAM⁷⁵ aircraft and powered-lift with

⁷² See Flight Standardization Board Report, Revision 11 (12/07/2020).

⁷³ See, Advisory Circular, 120–53, as revised, Guidance for Conducting and Use of Flight Standardization Board Evaluations Appendix 1, Definitions and References.

⁷⁴ Given the context of the comment, the FAA believes that commenter intended to refer to the FAA's proposal in the NPRM preamble (88 FR 38946, June 14, 2023), specifically section V. Certification of Powered-lift Pilots.

⁷⁵ Public Law 17–203 defines the terms "advanced air mobility" and "AAM" as "a transportation system that transports people and property by air between two points in the United States using aircraft with advanced technologies, including electric aircraft or electric vertical take-off and landing aircraft, in both controlled and

simplified flight controls⁷⁶ as it relates to type ratings. HAI stated that many AAM aircraft will not need type ratings to be operated safely and that many aircraft used in air taxi⁷⁷ operations today generally do not require type ratings. HAI recommended a cautious approach to type ratings when considering aircraft under development to serve the AAM market, specifically comparing aircraft used in air taxi operations flying in low altitude, dense urban environments, and congested airspace, where pilots are not generally required to hold a type rating.

CAE generally echoed HAI's statements regarding AAM. Additionally, CAE stated that aircraft designs with later introductions to the NAS might be semi-autonomous and use more of a push-button interface, simplifying demands on the pilot. CAE cited discussion from the FAA's recently published NPRM commonly known as MOSAIC, where the FAA proposed to account for certain aircraft to use simplified flight controls.⁷⁸ CAE emphasized that this concept could apply to all aircraft, advancing operations toward uncrewed operations.

Similarly, AIR VEV disagreed with the type rating proposal as burdensome, specifically as it would apply to private pilots (discussed in the following section) operating simple powered-lift that do not possess complex characteristics and safety risk aspects of existing aircraft that require a type rating. AIR VEV disagreed with the FAA's assumption that all manufacturers intend to produce powered-lift for commercial purposes. Specifically, AIR VEV noted that, as an OEM, they seek to develop a powered-lift to be utilized for initial pilot certification at the private pilot certificate level and that their powered-

lift will not possess the same characteristics underlying the reason for a type rating as currently set forth by § 61.31. AIR VEV claimed that the type rating requirement is at odds with the MOSAIC NPRM because this powered-lift rulemaking would require a type rating for the entire category of light sport aircraft. AIR VEV urged the FAA to follow the MOSAIC proposal of training and an endorsement for those powered-lift with simplified flight controls rather than the type rating requirement.

An individual also supported a case-by-case type rating determination, citing a variety of autonomous factors including, in pertinent part: complexity and uniqueness of control laws (CLAWs), level of automation, control strategies, and ease or difficulty of recovery from failure modes and automation response to such failures. The individual stated that most machines employ highly automated flight controls, which would make it easier for pilots to operate different powered-lift once they understand the underlying system. The individual stated that several manufacturers are working on platform-independent CLAWs that are highly automated and inquired how the FAA would respond if industry standardization dominated powered-lift designs (e.g., a single type rating under this commonality).

In the MOSAIC NPRM, the FAA recognized the rapid advancements in aircraft automation and flight control technology and noted that interfaces and flight controls may no longer resemble those found in traditional flight decks specifically in the context of light-sport aircraft.⁷⁹ Section 1.1 of 14 CFR currently sets forth a definition for light-sport aircraft; the MOSAIC NPRM proposed to eliminate the definition in § 1.1 and instead proffer performance-based standards for aircraft, including powered-lift, to be certificated as light-sport category aircraft. To commenters' points, MOSAIC proposed § 22.180, which would facilitate the certification of aircraft designed with simplified flight controls subject to certain conditions.⁸⁰

⁷⁹ See 88 FR 47650 (July 24, 2023), see proposed § 22.180.

⁸⁰ Specifically, for an aircraft to be designated as having simplified flight controls, proposed § 22.180 would require: (1) the pilot could only control the flight path of the aircraft or intervene in its operation without direct manipulation of individual aircraft control surfaces or adjustment of the available power, (2) the aircraft would be required to be designed to prevent loss of control, regardless of pilot input, and (3) the aircraft would need to have a means to enable the pilot to discontinue the flight quickly and safely. See 88 FR 47674 (July 24, 2023) for additional discussion.

Additionally, in the MOSAIC NPRM, the FAA proposed certain part 61 qualification requirements to address pilots and flight instructors qualified to operate simplified flight control systems. Thus, the FAA proposed additional training specific to the particular make and model of aircraft with a simplified flight controls designation to ensure a pilot would be sufficiently proficient in the operation of that aircraft. Therefore, the FAA proposed qualification for simplified flight controls be attained by training and an endorsement and, in some cases, a practical test. Specifically, MOSAIC would permit any certificated pilot, regardless of certificate level,⁸¹ who holds the appropriate category and class to operate a simplified flight control-designated aircraft only after receiving the model-specific training and endorsement from an authorized flight instructor specific to the safe operation of each simplified flight control designated aircraft.

As stated in the MOSAIC NPRM, simplified flight control designs will vary from one aircraft to another (*i.e.*, model to model), necessitating the model-specific training. Similarly, powered-lift will vary from one aircraft to another (*i.e.*, type to type), regardless of whether they possess simplified flight controls. Where MOSAIC proposed to address the variance of simplified flight control handling characteristics via training and an endorsement, this final rule requires a type rating of all powered-lift to ensure proficiency in the aircraft. The FAA finds that applying only a vague amount of training verified by an endorsement requirement mirroring that proposed in MOSAIC, as urged by some commenters, would vastly underprepare a pilot to operate a wholly new category of aircraft. The FAA notes that the training and endorsement regime proposed by MOSAIC relies on the premise that a pilot would already hold a pilot certificate in that specific category. For example, should MOSAIC be finalized as proposed, a person who holds a sport pilot certificate with rotorcraft-helicopter simplified flight controls privilege with the model-specific limitation who seeks to operate another model of rotorcraft-helicopter with simplified flight controls would complete the training and endorsement required by the proposal. This scenario is not applicable to the emergence of a new category of aircraft for commercial,

⁸¹ The FAA chose not to consider powered-lift privileges for sport pilots, given the complexity and ongoing development of powered-lift designs and associated pilot certification considerations herein.

uncontrolled airspace." Public Law 17–203 (Oct. 17, 2022).

⁷⁶ "Simplified flight controls" here has the same meaning as the proposed definition contained and in the Modernization of Special Airworthiness Criteria (MOSAIC) NPRM. An aircraft with simplified flight controls meets three criteria: (1) the pilot can only control the flight path without direct manipulation of individual aircraft control surfaces or adjustment of the available power; (2) the aircraft is designed to prevent loss of control regardless of pilot input; and (3) the aircraft must have a means of enabling the pilot to discontinue flight quickly and safely and the means by which flight is discontinued is designed to prevent inadvertent activation. See MOSAIC NPRM: www.federalregister.gov/documents/2023/07/24/2023-14425/modernization-of-special-airworthiness-certification.

⁷⁷ The term "air taxi," as used by this commenter refers to AAM operations. It is not a reference to operations by an air taxi operator as defined in 14 CFR 298.3.

⁷⁸ Modernization of Special Airworthiness Certification NPRM, 88 FR 47650 (July 24, 2023).

passenger-carrying operations such that training and an endorsement establishes an acceptable level of safety in the NAS.

Furthermore, although many powered-lift coming to market employ some simplified flight controls, none have currently made it through the aircraft certification process. Based upon the understanding of the current industry and market, the FAA maintains that the powered-lift that are coming to market are sought to be used in commercial passenger-carrying operations. Considering the FAA's safety continuum,⁸² a higher expectation of safety exists for commercial operations with transport aircraft than for a 2- or 4-passenger general aviation aircraft, such as a light sport aircraft, for a variety of factors, including, but not limited to, complexity and performance, number of passengers, risk to persons and property on the ground, risk assumed by the pilot and flightcrew, and risk assumed by the passenger. Therefore, a powered-lift with simplified flight controls would still necessitate training and operational rules applicable to other similarly situated operators using helicopters and airplanes to achieve this level of safety (e.g., the level of aeronautical experience, skill, and knowledge expected of a pilot engaging in commercial operations).

The FAA agrees that it has established a type rating for purposes other than are normally considered under § 61.31(a) and recognizes that a type rating for a private pilot certificate will result in a dissimilar training footprint for those operators who seek to provide training at the initial private pilot certificate level (i.e., in airplanes and helicopters). However, as previously discussed, the FAA is unable to establish a class of powered-lift at this time and determined that a type rating is necessary, even at the private pilot certification level, to carry out the privileges of that certificate.

Additionally, the FAA sought to remove barriers and to ensure pilot groups training outside of the SFAR could take advantage of the distance reduction for aeronautical experience at the private pilot certificate level as discussed in section V.F.4. of this

preamble and does not mandate a private pilot also hold or concurrently obtain an instrument rating as discussed in section V.F.4. of this preamble to balance those operational considerations typical of a private pilot.

The FAA seeks to glean data and information from this approach to inform a future rulemaking. Once a base of pilots emerges via the flexibility enabled in this SFAR, pilots will be joining the industry through more conventional means and, if necessary, the FAA will be able to alter its approach when it pursues permanent regulations.

Miscellaneous Type-Rating Comments

HAI stated that the length of the SFAR, while intended to be temporary, indirectly creates a permanent type rating requirement because the implementation cost and company reliance on a 10-year regulation may not be recovered and may be used to justify the type rating in perpetuity. The FAA notes that it proposed to permanently amend § 61.31(a) to include powered-lift as a type rating that a pilot would need on his or her pilot certificate. Although the FAA is adopting this permanent change, this doesn't foreclose further amendments within the time frame of the SFAR. Future advancements in technology within the lifecycle of the SFAR, or possible emergence of a class, could prompt the FAA to initiate a rulemaking to enable that effect.

CAE stated that some powered-lift, particularly those intended for part 91 operations by private operations,⁸³ might not require a type rating at all because the FSB would determine that no type rating is necessary. Instead, CAE suggested that the FSB could require manufacturer-required training, mandated by the AFM, and developed in accordance with AC 61-137B through existing authority in § 61.31(h), which requires "type specific" training and endorsement. NBAA echoed CAE's comments.

The FAA's intent is to use the SFAR structure to provide enough time and operational experience to consider whether type ratings will be necessary for future AAM aircraft. At present, no powered-lift have obtained the amount of operating experience necessary to provide the FAA with enough information to justify an alternate approach from that which was proposed. However, the SFAR structure will provide the FAA the flexibility to reconsider the type rating approach to

certification in the future after aircraft certification and operational experience deem it possible to remove the requirement for a type rating without an adverse effect on operational safety. With respect to CAE's suggestion for the FSB to require manufacturer-required training utilizing the authority contained in § 61.31(h) rather than determine the applicability of a type rating, the FAA disagrees. Using § 61.31(h) to impose type-specific training requirements for all powered-lift would result in the imposition of requirements on industry outside the regulatory process without providing an opportunity for notice and comment. Furthermore, the FAA disagrees that requiring manufacturer required training mandated through the powered-lift flight manual would be an appropriate avenue to require type-specific training. A manufacturer is free to outline training in an AFM; however, there would be no regulatory requirement to ensure this training remained in the respective powered-lift flight manual past initial type certification. Requiring compliance with a training program in this manner would be a novel concept requiring FAA approval and oversight, which was not proposed in this rulemaking. While the FAA notes that part 91 operations are required to comply with the operating limitations set forth in the AFM, pursuant to § 91.9(a), the standing regulations do not require continued compliance or alignment with training programs or parameters should they be set forth in an AFM.

Amendment to § 61.31(l)

As discussed, § 61.31 sets forth requirements for type ratings, additional training, and certain authorizations. Paragraph (l) specifically provides exceptions to, first, the section as a whole in § 61.31(l)(1) and, second, the rating limitations of § 61.31(c) and (d) specifically in § 61.31(l)(2). Currently, § 61.31(l)(1) excludes operators of aircraft not type-certificated as airplanes, rotorcraft, gliders, lighter-than-air aircraft, powered-lift, powered parachutes, or weight-shift-control aircraft from § 61.31 applicability (i.e., the requirement to hold category and class ratings). This provision is meant to create an exception for aircraft for which there is no established category or class rating (e.g., hoverboards, jetpacks). The FAA determined that use of the term "type-certificated" could create confusion since not all aircraft that meet the regulatory definition of airplane or rotorcraft will be type-certificated. Further, the FAA determined the provision could be read as conflicting with more specific

⁸² The FAA evaluates hazards and risk, balancing between safety and societal burden. The FAA then determines its safety oversight responsibilities considering factors, such as complexity and performance, number of passengers, risk to people and property on the ground, risk assumed by the pilot/flightcrew, risk assumed by the passenger(s), engineering judgment. See www.faa.gov/sites/faa.gov/files/about/office_org/headquarters_offices/avs/AIR_principles.pdf, The Safety Continuum—A Doctrine for Application, September 2014, FAA Docket No. FAA-2015-1621-0018.

⁸³ By using "part 91 private operations" the FAA interprets the commenter to refer to operations conducted under part 91 by private pilots.

exceptions for experimental aircraft in § 61.31(l)(2). Therefore, the FAA proposed to clarify the intent of this exception in paragraph (l)(1) by specifying that the section does not require a category and class rating for operators of aircraft that are not identified as an aircraft under § 61.5(b). The FAA did not receive comments on this proposal and adopts § 61.31(l)(1) as proposed with minor non-substantive edits for clarity.

The FAA further analyzed this revision during the pendency of this rulemaking and determines that a conforming amendment is necessary to implement paragraph (l)(1) as intended and as it applies to the facilitation of powered-lift pilot certification. Many experimental aircraft have not yet achieved type-certification. As such, prior to removing the term “type-certificated” from paragraph (l)(1), the category and class exception in that paragraph would have applied to those experimental aircraft “not type-certificated.” Therefore, pilots utilizing experimental aircraft are excepted from holding a category and class rating for those aircraft “not type-certificated” set forth in current § 61.31(l)(1), provided no other rule or aircraft operating limitation requires them. The adopted revision to § 61.31(l)(1) clarifies that pilots of such experimental aircraft will, indeed, be required to hold category and class ratings, unless one of the exceptions noted in § 61.31(l)(2) applies. Specific to experimental aircraft, § 61.31(l)(2)(iii)(B) excepts a person operating an aircraft under the authority of an experimental certificate from the rating limitations of § 61.31(c) and (d), provided the person holds a pilot certificate and no passengers are carried. Effectively, a certificated pilot could operate without the relevant category, class, or type, if applicable, provided no passengers are carried, and provided no other rule or operating limitation requires them.

One purpose of the SFAR is to develop a pool of rated powered-lift pilots and instructors. As discussed in section V.F. of this preamble, test pilots and instructor pilots will operate the experimental powered-lift to provide the flight training set forth in new part 194. The FAA reviewed whether the revision to § 61.31(l)(1) could have an unintended consequence requiring the operator of an experimental powered-lift to hold category, class, and comply with any other ratings limitations of § 61.31, adversely impacting the development of the powered-lift fleet and initial pilot cadre by requiring instructors to hold a powered-lift category rating to provide flight training. Specifically, even though

the powered-lift will be experimental, it will still be identified as an aircraft under § 61.5(b) (*i.e.*, a powered-lift). While § 61.31(l)(2)(iii)(B) states that the rating limitations of § 61.31(c) and (d) do not apply to the holder of a pilot certificate when operating an aircraft under the authority of an experimental certificate, this exception only applies specifically when the operation does not involve the carriage of passengers.

With the recent publication of the Public Aircraft Logging of Flight Time, Training in Certain Aircraft Holding Special Airworthiness Certificates, and Flight Instructor Privileges final rule,⁸⁴ § 61.1(b) now defines “passenger” for purposes of part 61 as any person on board an aircraft other than a crewmember; FAA personnel; manufacturer personnel required for type certification; or a person receiving or providing flight training, checking, or testing as authorized by part 61. The FAA finds it unnecessary to further modify § 61.31(l)(2)(iii)(B) as it pertains to powered-lift because the definition of passenger excludes FAA personnel and manufacturer personnel associated with type certification. The regulation now explicitly allows these persons to be carried onboard without the PIC holding category and class ratings because they are onboard the experimental aircraft for specific purposes, generally to fulfill regulatory obligations, and possess knowledge of the risks associated with those purposes (*e.g.*, flight test engineers).⁸⁵ As written, § 61.31(l)(2)(iii)(B) will continue to enable pilots of experimental aircraft to operate without holding the relevant category or class rating in the circumstances previously described. Importantly, in accordance with § 91.319(i), the Administrator may prescribe additional limitations to experimental aircraft, including limitations on the persons that may be carried in the aircraft. These additional limitations may require pilots to hold category, class, or other ratings or limitations in certain situations. These additional limitations are issued as operating limitations at the time of airworthiness certification of the aircraft

and must be complied with, in accordance with § 91.9.⁸⁶

B. Applicability of the Type Rating Requirement to Military Pilots

Currently, § 61.73(a) permits a military pilot or former military pilot⁸⁷ who meets certain requirements to apply based on their military pilot qualifications for a commercial pilot certificate with the appropriate category and class rating, an instrument rating with the appropriate aircraft rating, and a type rating.⁸⁸ Similarly, a military instructor pilot or pilot examiner (including a former instructor pilot and former pilot examiner) may apply for a flight instructor certificate with appropriate ratings, subject to certain requirements under § 61.73(g).

The NPRM did not propose any changes to these processes as it relates to powered-lift; in other words, military pilots with the appropriate experience and documentation may apply for a commercial pilot certificate with a powered-lift category rating, an instrument-powered-lift rating, a powered-lift type rating, and a flight instructor certificate with powered-lift category and/or instrument-powered-lift ratings under § 61.73. In fact, currently, the only FAA-certificated powered-lift pilots are those who have received their certificates through military competency. However, due to the absence of any type-certificated powered-lift,⁸⁹ military pilots who have received an FAA powered-lift category rating are currently limited in their ability to exercise those privileges in civil operations.

ALPA supported the FAA’s position that military experience in powered-lift should not by itself waive the requirement to obtain a type rating. ALPA also agreed that military pilots should be able to receive a military equivalent of a commercial powered-lift instrument certificate, but that experience should not exempt those pilots from completing the requisite training and certification required for

⁸⁶ See § 91.9 Civil aircraft flight manual, marking, and placard requirements.

⁸⁷ For purposes of this preamble, references to “military pilots” are inclusive of former U.S. military pilots.

⁸⁸ Military pilots who receive an FAA certificate through § 61.73 must continue to follow FAA regulations to exercise the resulting FAA certificate(s) (*e.g.*, recency of experience requirements in § 61.57).

⁸⁹ At the time of publication of this final rule, the only powered-lift that have entered civil operations are those issued an experimental airworthiness certificate. For those manufacturers currently developing powered-lift, operating limitations pertaining to pilot qualifications may be applied to experimental powered-lift. FAA Order 8900.1 Vol. 5, Chap. 9, Sec. 2.

⁸⁴ Public Aircraft Logging of Flight Time, Training in Certain Aircraft Holding Special Airworthiness Certificates, and Flight Instructor Privileges final rule, 89 FR 80310 (Oct. 2, 2024).

⁸⁵ For purposes of the SFAR, these individuals will be conducting these official duties in addition to complying with the SFAR for the purposes of receiving powered-lift ratings as FAA personnel or manufacturer personnel that are required for type certification. Definitions of these personnel for the purposes of this SFAR are further discussed in section V.F.2.i. of this preamble.

civilian pilots for a powered-lift type rating. HAI stated that, if type ratings are required as proposed, military pilots should be allowed to obtain that rating for the aircraft the military pilot operated, or any civilian version of that aircraft, with requisite civilian pilot training provided by the employer. HAI stated this would make development of the initial cadre less dependent on manufacturers.

As previously discussed in section V.A. of this preamble, the FAA will require pilots to hold a type rating for each powered-lift they fly, which would equally apply to military pilots. Currently, a military pilot could apply for a type rating for certain aircraft on the basis of the pilot's military experience, and this final rule does not change that allowance extended to military pilots seeking to operate civilian powered-lift. Specifically, an aircraft type rating may be issued to a military pilot through § 61.73(e) only for a type of aircraft that has a comparable civil type designation by the Administrator. Because there are currently no military powered-lift for which comparable civil type ratings have been designated, military pilots with powered-lift experience are unable to obtain a powered-lift type rating pursuant to § 61.73 and, therefore, are limited to the issuance of a powered-lift category rating and an instrument-powered-lift rating. However, should a civil type-certificated version of a military powered-lift become available, pilots with the appropriate military experience, as identified in § 61.73, would be eligible to receive the type rating in the same manner that airplane and rotorcraft military pilots currently receive them. Those military instructors who have obtained or will obtain a flight instructor certificate with a powered-lift category and instrument rating through military competency would be permitted to conduct flight training in a powered-lift only after obtaining a type rating on their pilot certificate for the powered-lift in which they conduct flight training.⁹⁰

ALPA accurately noted that, as previously explained, the FAA's current regulatory framework does not restrict a military pilot from obtaining a powered-lift category rating on a pilot certificate provided the military pilot meets the requirements set forth in § 61.73. There are no civilian powered-lift to date that have completed FAA type certification, however, the U.S. Armed Forces

maintains and utilizes powered-lift in military operations (e.g., the Bell-Boeing V-22 Osprey, McDonnell Douglas AV-8 Harrier, F-35B Lightning II STOVL), where pilots establish experience operating these powered-lift. Should these military powered-lift transition into civilian operations and receive a comparable civilian type designation, the military pilot could apply to receive that aircraft type rating in accordance with § 61.73, as supported by HAI. While the FAA does not anticipate surplus military powered-lift to enter civilian operations during the period of this SFAR, if such a scenario occurred, the FAA would follow existing regulations, policies, and procedures to address military surplus powered-lift as the FAA currently evaluates surplus military airplanes and rotorcraft.⁹¹ Specifically, type ratings are designated for military surplus aircraft with civilian certificate type ratings through the FSB process, which would evaluate each respective powered-lift.

Because the allowances in § 61.73 apply equally to powered-lift as rotorcraft and airplanes and for the reasons previously discussed, the FAA determined there is no need for changes to military competency regulations in this final rule.

C. Applicability of the SIC Qualification Requirements of § 61.55 to Powered-Lift

Section 61.55 prescribes the qualifications for a person seeking to serve as second-in-command (SIC) of certain aircraft,⁹² requiring a person to hold (1) at least a private pilot certificate with the appropriate category and class rating, (2) an instrument rating or privilege that applies to the aircraft being flown if the flight is under IFR.⁹³ Additionally, unless the flight will be conducted as a domestic flight operation within the U.S. airspace, the person must hold at least a pilot type rating (SIC Privileges Only) for the aircraft being flown. Given the diverse characteristics of powered-lift, the FAA considered whether a person serving as SIC of a powered-lift should also be required to hold a powered-lift type rating on their pilot certificate and

found the SIC qualification requirements of § 61.55 to be largely sufficient to serve as SIC of a powered-lift in part 91 operations (excluding operations conducted under subpart K of part 91).⁹⁴ Specifically, a person seeking to serve as SIC would be required to hold the appropriate powered-lift category rating on their pilot certificate and complete familiarization training and certain pilot time⁹⁵ in the specific type of powered-lift for which SIC privileges are sought. Additionally, while the experience an SIC obtains in the powered-lift category may differ from type to type, for a pilot who has passed the practical test in a powered-lift capable of performing all the tasks required by the ACS, the existing SIC familiarization training would ensure persons seeking to act as SIC would gain sufficient experience operating the specific type of powered-lift before acting as SIC of that powered-lift. Therefore, despite adopting the requirement that a powered-lift PIC must hold a type rating, the FAA maintains in this final rule that there is no need to impose requirements beyond those contained in § 61.55 for persons seeking to serve as SIC of a powered-lift, except where a pilot does not receive training in a specific task as subsequently discussed.

The FAA recognizes that some powered-lift may not be able to perform all tasks required on the applicable ACS. When this occurs, proposed § 194.207 of this SFAR would enable an examiner to waive the task on the practical test. Therefore, a person may obtain a powered-lift category rating on their pilot certificate, thereby meeting the requirement in § 61.55(a) to hold at least a private pilot certificate with the applicable category rating, but not have performed all the tasks specified in the ACS. This person may then seek to serve as SIC of a powered-lift type that is capable of performing the task for which the pilot was never trained or tested. To ensure an SIC is trained and found proficient on any tasks that were omitted on the practical test prior to serving as SIC of a different powered-lift that is capable of performing that task, the FAA proposed new § 61.55(a)(4), which is adopted in this final rule. Specifically, § 61.55(a)(4) will require a person serving as an SIC of a powered-lift to satisfy the requirements as specified in new § 194.209(a). Section 194.209(a) will require additional

⁹¹ See FAA Order 8900.1, Volume 5, Chapter 2, Section 19, Table 5–88.

⁹² The SIC qualification requirements apply to persons seeking to serve as SIC of an aircraft type-certificated for more than one required pilot flight crewmember or in operations requiring an SIC pilot flight crewmember in part 91 (excluding subpart K of part 91).

⁹³ See section V.H.2.i. of this preamble for additional discussion regarding a powered-lift category and type rating without an instrument rating. If a pilot held a "VFR only" limitation on their pilot certificate, the pilot could serve as SIC in VFR operations only.

⁹⁴ The FAA notes that the provisions of § 61.55 would be applicable to operations conducted in accordance with part 91, while part 91, subpart K, and part 135 have additional requirements before a person may serve as a SIC in those operations.

⁹⁵ Section 61.55(b).

⁹⁰ Under § 61.195(e), a flight instructor may not give flight training, including instrument training, in an aircraft that requires the PIC to hold a type rating unless the flight instructor holds a type rating for that aircraft on their pilot certificate.

training and an endorsement to ensure the person seeking to serve as SIC of a powered-lift capable of performing tasks that were waived on the person's practical test (by utilizing a powered-lift precluded from certain tasks) is trained and found proficient. This amendment is intended simply to inform all persons seeking to act as SIC of a powered-lift pursuant to § 61.55 and ensure awareness of the new temporary requirements and the situation under which they would apply and is adopted as proposed.

Additionally, § 61.55 provides for the issuance of an SIC pilot type rating, which is required unless the flight will be conducted as a domestic flight operation within U.S. airspace. This requirement to hold the SIC pilot type rating outside U.S. airspace conforms to the FAA pilot type rating requirements to the ICAO pilot type rating standards.⁹⁶ To obtain the SIC pilot type rating, a person may either complete the SIC familiarization training § 61.55(b) subject to certain conditions set forth in § 61.55(d) or may complete certain SIC training programs or checks as set forth in § 61.55(e). The FAA did not propose any revisions to this requirement or options to obtain the pilot type rating, as this rating is required to operate powered-lift in international airspace as it applies to any other aircraft. Therefore, this final rule continues to apply the current SIC pilot type rating requirements of § 61.55 to persons seeking SIC privileges in a powered-lift.

The FAA received several comments regarding the proposed §§ 194.207 and 194.209. HAI noted that SIC pilots would likely not be needed in operations conducted in many of the AAMs currently under development. HAI stated that aircraft under 12,500⁹⁷ with four to six seats do not require an SIC and additionally referenced that these aircraft will most likely be flown by part 135 operators required to provide pilots with training appropriate to the operations.

The FAA agrees that many anticipated powered-lift operations will not require an SIC and notes a second pilot is required to operate an aircraft if (1) the type certificate (TC) for the aircraft requires two pilots, or (2) an operating rule requires two pilots for the operation.⁹⁸ The FAA did not propose

any new operating requirements that would create additional scenarios under which a second pilot would be required to operate a powered-lift other than those already applicable to all aircraft.

ALPA disagreed that the current SIC requirements of § 61.55 sufficiently ensure safety for powered-lift. ALPA noted that powered-lift will not be designed to have similar controls or flight characteristics from type to type and recommended that SICs be type-rated to ensure required crew members are appropriately trained. ALPA also stated that only having basic familiarity with the type of powered-lift for which SIC privileges are sought is an insufficient safety assurance. Similarly, an individual commenter recommended that the FAA reserve the right to require SICs to be type-rated on specific powered-lift based on factors such as complexity, operating environment, adverse low airspeed handling qualities, and level of automation.

The FAA maintains that a person seeking to serve as SIC is sufficiently qualified by way of holding the powered-lift category on at least a private pilot certificate and completing familiarization in the specific type of powered-lift for which privileges are sought (and holding an instrument rating when the flight operates under IFR). First, because this SFAR enables a person to obtain a commercial pilot certificate with a powered-lift category rating, the initial pool of pilots serving as an SIC will hold a higher level of certificate than that minimum required by § 61.55(a).⁹⁹ Second, the regulations already account for the possible gap in proficiency with certain characteristics unique to a type of powered-lift: for example, operational procedures, performance specifications, and emergency procedures. Section 61.55(b)(1) requires the person seeking to serve as SIC of a powered-lift to become familiar with information for the specific type of powered-lift for which SIC privileges are sought. This familiarization must include the operational procedures applicable to the powerplant, equipment, and systems; performance specifications and limitations; normal, abnormal, and emergency operating procedures; flight manual; and placards and markings.

§ 91.531 specifies certain criteria that would be applicable when a second pilot is required to operate an airplane.

⁹⁹ Additionally, § 194.215(a) requires a person utilizing the SFAR and relief herein to hold certain non-powered-lift certificates prior to seeking a powered-lift category and type rating, which, by virtue of holding the certificates and ratings, includes the demonstration of certain skills in the NAS such as communication with ATC services, navigation, weather, communication.

Additionally, under § 61.55(b)(2), the person would be required to log pilot time in the type of powered-lift that includes the performance of three takeoffs and landings to a full stop as the sole manipulator of the flight controls, engine-out procedures and maneuvering with an engine out while executing the duties of PIC, and crew resource management training. Given these experience considerations, the FAA does not find a safety gap to warrant different treatment of powered-lift SICs than SICs for other categories of aircraft that may differ from type to type, as well. Therefore, the FAA maintains that the minimum qualifications of § 61.55(a), which will be exceeded in practice, in tandem with familiarization training on the particular type of powered-lift will adequately inform and prepare a pilot to serve as SIC without holding the specific type rating for the powered-lift.

The FAA recognizes the scenario where a person could hold a commercial pilot certificate with a powered-lift category and type rating for an aircraft that cannot perform certain maneuvers and seeks to serve as SIC of a powered-lift that is capable of performing the tasks that were waived on that person's practical test. In this case, the FAA does agree a safety gap exists. However, as previously referenced, the FAA finds that § 194.209(a) as proposed and adopted herein sufficiently addresses this safety gap. To the extent a pilot completes a practical test in a powered-lift that was precluded from performing each task required by § 61.43(a)(1) and, therefore, has not demonstrated proficiency on such task(s) before an examiner, § 194.209(a) will prohibit that pilot from serving as SIC of a powered-lift that is capable of performing the tasks that were waived on the person's practical test until certain requirements are met. Rather, to serve as SIC, the person must receive and log ground and flight training from an authorized instructor on the specific tasks that were waived, culminating in a logbook or training record endorsement from the authorized instructor certifying that the person has satisfactorily demonstrated proficiency in those tasks.¹⁰⁰ The FAA finds that these additional requirements combined with the SIC qualification requirements prescribed in § 61.55 (e.g., familiarization training) address a

¹⁰⁰ The FAA recommends the authorized instructor utilize the applicable ACS in determining whether a pilot has demonstrated proficiency of a task as the ACS specify the approved standard for tasks under an area of operation.

⁹⁶ See ICAO Annex 1, paragraphs 2.1.3.2, 2.1.4.1(b), and 2.1.4.1.1.

⁹⁷ The FAA notes that HAI's comment specifically referred to "1200" pounds, however, the FAA believes this was a typo and HAI intended "12,500."

⁹⁸ The following are operating rules that require a second pilot: §§ 91.5, 91.109(c), 91.189, 91.1049, 135.99, 135.101, and 135.111. The FAA notes that

possible safety gap in differing, new, or absent flight characteristics.¹⁰¹

However, in the NPRM, the FAA identified two instances where a person seeking to act as SIC should be excepted from the aforementioned training and endorsement requirements set forth by § 194.209(a).

First, some pilots may seek to obtain multiple type ratings on their pilot certificate. Under § 194.209(b)(1), a person seeking an additional type rating could forgo the training and endorsement requirements described previously if that person subsequently passes a practical test for a type rating in a powered-lift that is capable of performing all the tasks specified in the ATP and Type Rating for Powered-Lift Category ACS in accordance with § 61.43(a). For example, if a pilot is type-rated in powered-lift A that is not capable of performing stalls and, therefore, the task was waived during the pilot's practical test. That pilot then seeks a type rating in powered-lift B, which is capable of performing stalls and, therefore, the pilot demonstrates proficiency in that task during the practical test. If the pilot then seeks to serve as SIC on powered-lift C, which is also capable of performing stalls, the person would not be required to receive ground and flight training in accordance with § 194.209(a), because they will have already demonstrated proficiency on the task that was initially waived through powered-lift B's type rating practical test.

The second scenario applies to pilots operating under subpart K of part 91 and part 135. A person employed by a fractional ownership program as set forth in subpart K of part 91 or a person employed by a certificate holder authorized to conduct operations under part 135 may receive training and a competency check in a powered-lift that includes the tasks that were waived on the person's practical test for a commercial pilot certificate with a powered-lift category rating. In accordance with § 135.323, a part 135 air carrier or operator is required to establish and implement an approved training program that ensures each pilot is adequately trained to perform their assigned duties. Under § 135.323, the pilot must receive ground and flight training in the accompanying type of powered-lift and complete a competency check under § 135.293 every 12 calendar months. Similarly, under § 91.1073, each program manager

must establish and implement an approved training program that ensures each crewmember is adequately trained to perform their assigned duties, and § 91.1065 requires each pilot to pass a competency check every 12 calendar months.

In light of the previously discussed waiver authority, without relief, a situation may arise where a person receives training on the task that was previously waived on the person's practical test and subsequently completes a competency check that includes the task. Therefore, in § 194.209(b)(2), the FAA proposed an exception to the training and endorsement requirements for those pilots seeking to serve as an SIC who have received ground and flight training under an approved training program and have satisfactorily completed a competency check under § 135.293 or § 91.1065 in a powered-lift, provided the approved training program and competency check include each task that was previously waived on the person's practical test.

AWPC identified a situation where application of § 61.55 as written would not fully enable a pilot to receive training in a powered-lift type certificated with a minimum crew of two pilots. AWPC expressed concern that the FAA's position would mean that flight instruction could not be provided on an aircraft with a minimum crew of two pilots unless the pilot receiving training already meets the requirements of § 61.55 by holding a certificate with powered-lift category and instrument ratings. AWPC stated that the proposed SFAR should address entry into service for powered-lift that will be type-certificated with a minimum crew of two pilots and recommended providing relief to § 61.55 to avoid a scenario where only pilots qualified through military competency may serve as flightcrew members.¹⁰²

The FAA acknowledges the barriers that would be encountered for flight training in powered-lift type certificated for two pilots because, while the instructor will hold ratings to serve as PIC, the person receiving flight training will not have the powered-lift ratings required by § 61.55(a) to serve as SIC. Under the traditional airman certification framework, an applicant for a commercial pilot certificate will already hold the private pilot certificate

and ratings required by § 61.55(a) by having received flight training in (1) an aircraft that does not require more than one required pilot flight crewmember, or (2) an aircraft type-certificated for two pilots because they would hold the private pilot certificate and ratings necessary to receive the familiarization training that would qualify them as an SIC under § 61.55.

However, the lack of pilots with a powered-lift category rating at any certificate level (here, specifically, a private pilot certificate with a powered-lift category rating) creates a barrier in qualification as an SIC for any operation involving a powered-lift type certificated for two pilots, including training flights. The two affected populations of pilots under the SFAR would be (1) the initial cadre of pilots receiving flight training at the OEM, and (2) the pilots receiving training at the approved training program under part 135, 141, or 142. This would not be an issue to test pilots and instructor pilots because these pilots will be operating an experimental powered-lift (*i.e.*, not yet type-certificated for two pilots) and will be authorized to act as required crewmembers in accordance with a letter of authorization issued by the FAA for the conduct of flights during the powered-lift type certification process.¹⁰³

The FAA agrees that, without relief, powered-lift type-certificated for two pilots would only be able to utilize pilots already holding a commercial pilot certificate with a powered-lift category (and instrument rating when the flight is under IFR) from the military competency provisions of § 61.73, largely inapplicable to new powered-lift pilots engaging in flight training (*i.e.*, those pilots would already hold powered-lift ratings and, therefore, would not be engaging in the alternate framework of the SFAR). A lack of relief would essentially create a barrier to all flight training in powered-lift type certificated for two pilots for the initial cadre of pilots receiving training at the OEM and the pilots receiving training at an approved training program.

Therefore, the FAA finds it necessary to provide relief for the initial cadre of instructors and pilots receiving training under an approved training program who are seeking a commercial pilot certificate with a powered-lift category rating and an instrument-powered-lift rating in a powered-lift type certificated for more than one required pilot flight

¹⁰¹ Additionally, the PIC, who would hold a type rating, remains directly responsible for and is the final authority as to the operation of that powered-lift. 14 CFR 1.1 and § 91.3(a).

¹⁰² AWPC also emphasized that aligning with ICAO Annex 1 2.1.1.4 recommendation would alleviate the § 61.55 flight training dilemma. Section V.A. of this preamble addresses AWPC's ICAO comments, and the FAA trusts the relief adopted by this final rule, as subsequently discussed, adequately alleviates AWPC's concerns.

¹⁰³ This would also not be an issue for FAA test pilots or aviation safety inspectors, who are added to the alternate SFAR framework as discussed in section V.F.2.i.d. of this preamble, for the same reasons.

crewmember. The SIC requirements were initially codified to ensure sufficient experience prior to operating sophisticated aircraft,¹⁰⁴ taking into account the aircraft's specific operating characteristics. In that codification, the FAA found that the certificate prerequisites currently set forth in § 61.55(a) sufficiently addressed the operation of sophisticated aircraft, while the familiarization requirements of § 61.55(b) sufficiently addressed the aircraft's specific operating characteristics.¹⁰⁵ Likewise, the FAA finds that temporary relief in new § 194.209(c), in tandem with the mitigations set forth in the training program itself, will sufficiently address the unfamiliar operating characteristics an applicant would encounter during flight training in a powered-lift type certificated for two required flight crewmembers such that the flight maintains a high degree of safety.

Specifically, new § 194.209(c) will permit applicants receiving training in a powered-lift in accordance with §§ 194.221, 194.223, 194.229, and 194.231 to serve as SIC during those training flights without meeting the requirements in § 61.55(a)(1), (a)(2), and (b)(2). In sum, a person receiving flight training under certain provisions of the SFAR would be excepted from (1) holding a powered-lift category rating on the person's private pilot certificate, (2) holding an instrument-powered-lift rating (if the flight is flown under IFR), and (3) performing and logging flight pilot time in the type of aircraft or in a flight simulator for which SIC privileges are requested. However, the applicant would still be expected to meet § 61.55(b)(1) prior to flight time designated as the SIC (*i.e.*, the training flights), as subsequently discussed.

First, applicants receiving training in accordance with §§ 194.221, 194.223, 194.229, and 194.231 must possess the prerequisites set forth by § 194.215(a) (*i.e.*, at least a commercial pilot certificate with a category and class rating and the applicable instrument rating). By virtue of holding a

commercial pilot certificate and an instrument rating, the applicant would possess greater aeronautical experience than the current requirements set forth in § 61.55(a), which requires at least a private pilot certificate. The FAA recognizes that this aeronautical experience will not be in the applicable category in which the applicant seeks to serve as PIC (*i.e.*, the pilot will hold an airplane or helicopter rating on their commercial pilot certificate but seek to serve as SIC in a powered-lift). The FAA finds the possibility of a safety gap is mitigated both by the significantly higher amount of aeronautical experience that a commercial pilot must attain and standard of proficiency and competency a commercial pilot must demonstrate on the practical test as opposed to a private pilot. This includes valuable experience operating in the NAS, communicating with ATC, interacting with other air traffic, and acting as PIC of an airplane or helicopter, all of which generally translate to a degree to the basic duties and responsibilities of a SIC where other mitigations, subsequently discussed, exist for the purpose of flight training.

Additionally, under the SFAR, a person must also hold the corresponding instrument rating as part of the prerequisites in § 194.215(a). Again, the FAA recognizes this will not be the appropriate instrument rating as set traditionally required to act as SIC if the flight is flown under IFR as forth in § 61.55(a)(2). However, the same concept applies insofar as the person will possess experience and have demonstrated skill operating an airplane or helicopter under IFR. Further, many of the skill elements a person must demonstrate on the practical test for the instrument-airplane or instrument-helicopter exist on the instrument-powered-lift practical test as well. For example, a person with an existing instrument-airplane or instrument-helicopter rating is not required to demonstrate any of the tasks under AOO I, III, or V¹⁰⁶ on the instrument-powered-lift practical test, and only demonstrate a limited number of tasks under AOO II and VII.¹⁰⁷ Therefore, the FAA finds this foundational level of instrument experience, in tandem with the other mitigations described herein, provides a person with sufficient experience to serve as SIC in a flight training operation for which the person does not hold the "appropriate" instrument rating in the powered-lift.

As discussed, § 61.55(b) was implemented to ensure a designated SIC is sufficiently knowledgeable in the specific operational characteristics of an aircraft type certificated for more than one pilot flightcrew member. Specifically, under § 61.55(b), the applicant would be required to meet the familiarization requirements set forth under paragraph (b)(1). Additionally, the applicant would be required to complete the pilot time in the type of powered-lift, or in a flight simulator representing the type of powered-lift, set forth under paragraph (b)(2). The pilot time under § 61.55(b)(2) must include three takeoffs and landings to a full stop as the sole manipulator of the flight controls, engine out procedures and maneuvering with an engine out while executing the duties of PIC, and crew resource management training. The FAA finds this paragraph (b)(2) to present a barrier to the flights for the purpose of flight training, as the applicant cannot be expected to sufficiently demonstrate these maneuvers before receiving flight training on such maneuvers. Moreover, the applicant would be actively becoming proficient in these maneuvers by nature of accomplishing flight training for certification. Therefore, the person would not be required to meet § 61.55(b)(2).

However, while there are foundational skills and proficiency elements that translate between the prerequisite ratings and the duties of an SIC in a powered-lift for the purposes of the narrowly tailored flight training operations, the FAA finds it crucial for a person to be adequately familiar with the specific type of powered-lift on which the person will be serving as SIC. Therefore, to ensure an appropriate level of safety while simultaneously enabling operators of powered-lift certificated with more than one required pilot flight crewmember to train in the aircraft, the FAA will continue to require the person to meet § 61.55(b)(1). Specifically, before the person may serve as SIC for flight training in the powered-lift, the person must become familiar with the information set forth by § 61.55(b)(1)(i) through (v). The FAA notes that, like the application of § 61.55(b)(1) to any person seeking to serve as SIC regardless of aircraft, there is no minimum time or standardized delivery requirement for such familiarization. For example, because a person would be required to complete ground training for the powered-lift category rating,¹⁰⁸ the person could complete the requisite SIC familiarization as part of the ground

¹⁰⁴ At this time of this rulemaking, the SIC requirements applied only to large airplanes and turbojet powered multiengine airplanes type certificated for more than one required pilot flight crewmember. In 1986, the FAA extended the SIC pilot qualifications to include helicopters type-certificated for more than one required pilot flight crewmember (51 FR 40692, Nov. 7, 1986), citing the similar operating complexities of helicopters type certificated for more than one pilot and higher level of safety provided through specific training and flight testing of pilots (50 FR 10144, Mar. 13, 1985).

¹⁰⁵ NPRM, *Second-in-command qualifications and pilot-in-command proficiency checks*, 36 FR 5247 (Mar. 18, 1971), adopted in 1972 as a final rule (37 FR 14758). Renumbered from § 61.46 to § 61.55 in 1973 (38 FR 3161).

¹⁰⁶ Preflight Preparation, ATC Clearances and Procedures, and Navigation Systems.

¹⁰⁷ Preflight Procedures, Emergency Operations.

¹⁰⁸ §§ 61.63(b)(1) and 61.125(a).

training, as long as the subjects in § 61.55(b)(1)(i) through (v) specific to the powered-lift type to be operated were present.

D. Dual Controls Considerations Related to Flight Training and Supervised Operating Experience

1. Introduction

In the NPRM, the FAA did not propose any relief in the SFAR to the long-standing requirement that an aircraft must have dual controls for certain operations.

Section 91.109(a) stipulates that no person may operate a civil aircraft that is being used for flight instruction unless that aircraft has fully functioning dual controls.¹⁰⁹ This requirement is subject to limited exceptions including (1) manned free balloons¹¹⁰ and (2) instrument flight instruction in an airplane equipped with a single, functioning throwover control wheel, provided the instructor has determined that the flight can be conducted safely and the person manipulating the controls has at least a private pilot certificate with appropriate category and class ratings.¹¹¹ The prerequisite certificate and rating requirement ensures the person receiving instrument flight instruction in the airplane has previously demonstrated foundational knowledge and proficiency appropriate to the category and class in the airplane in which training occurs. The throwover control wheel also provides a means for the authorized instructor to directly intervene, when necessary, in the interest of safety.

Similarly, an aircraft must have dual controls if it is used to conduct supervised operating experience under § 61.64(g). Section 61.64 details requirements for certain situations when training or any portion of a practical test is conducted in an FSTD. Under § 61.64(f), if an applicant for a certificate or rating in a powered-lift uses an FSTD for any portion of the practical test and does not meet the experience requirements set forth in § 61.64(e) and does not complete the specific tasks on the practical test listed in § 61.64(f)(1) in an aircraft, then the applicant's pilot certificate is issued with a PIC

limitation.¹¹² Per § 61.64(g), the applicant may remove the limitation by, in part, completing 25 hours of flight time in an aircraft of the appropriate category, class (if a class rating is required), and type for which the limitation applies under the direct observation of a PIC, termed "supervised operating experience" (SOE). That PIC must hold a category, class (if a class rating is required), and type rating, without limitations, for the aircraft in which SOE is being conducted.¹¹³ While the FAA concedes there is no explicit regulation requiring an aircraft to be equipped with dual controls when a pilot is completing the 25 hours of required flight time in accordance with § 61.64, the PIC observing the flight is also acting as PIC of the operation and ensuring the safety of the flight. Therefore, the person observing the flight and acting as PIC must have access to a set of controls while the applicant is performing the duties of PIC while under the direct observation of the acting PIC.

However, as noted in the NPRM, some manufacturers have or intend to only design powered-lift with a single set of controls. Therefore, the FAA invited public comment on three specific points: (1) how a flight instructor would provide flight training in a powered-lift with only a single set of flight controls without adversely affecting safety; (2) how an applicant would meet the SOE requirements with a single set of flight controls in a powered-lift; and (3) how an operator would fully qualify pilots for air carrier operations in an aircraft without dual flight controls while meeting the enhanced standard expected of air carrier operations. Additionally, the FAA requested commenters provide any relevant data or technical analyses that could assist the FAA in evaluating the viability of pathways to single set of flight controls.

This section acknowledges comments received and describes the three alternate pathways that the FAA adopts in this final rule to facilitate airman certification in a powered-lift with a single functioning control and single

pilot station while upholding safety in the NAS.

2. Summary of Comments Pertaining to Flight Training and Dual Controls

The FAA received many comments pertaining to the situations under which dual controls are required, as outlined above. The comments generally opposed the current requirements that have existed for many decades, and the FAA grouped the comments into the subsequent general categories. The FAA addresses some comments in the same sections but finds that the alternates adopted in this final rule sufficiently address the remainder of comments (e.g., by adopting a commenter's suggestion in one of the alternate frameworks).

Support for Maintaining Only Dual Controls

ALPA supported the FAA's position in the NPRM pertaining to dual controls. Specifically, ALPA stated that allowing a pilot to operate an aircraft in the NAS with a single set of flight controls while receiving flight instruction in that specific powered-lift would result in a degradation of safety because the instructor would not have the ability to take control of the aircraft. While ALPA recognized that the military trains pilots in single-control configured aircraft, ALPA emphasized that flight instruction with a single set of controls has not occurred in any civil capacity. Further, ALPA stated that it is far too early to consider autonomous systems (e.g., simplified vehicle operations) as they have not been properly studied or analyzed through data collection. ALPA stated that existing studies with newly automated systems show that training must increase to ensure the pilot masters the use of automation and retains mastery of flying with the different combinations of automation due to various degrees of automation failure.

Neutral Over Dual Controls

EASA expressed neither direct support nor direct opposition to the NPRM's position pertaining to dual controls but provided situational awareness of their own regulations. Specifically, EASA stated that, according to the European requirements and standards for trainers, trainers require primary flight controls that are easily accessible by the student pilot and the instructor. EASA stated this may either be via dual controls or through a center control stick.

¹⁰⁹ Additionally, § 61.195(g)(1) references the requirements in § 91.109, stating that a flight instructor must perform all training from in an aircraft that complies with the requirements of § 91.109. Further, § 61.195(g)(2) requires the aircraft that a flight instructor provides flight training for a pilot certificate or rating issued under part 61 to have at least two pilot stations and be of the same category, class, and type, if appropriate, that applies to the pilot certificate or rating sought.

¹¹⁰ § 91.109(a)(1).

¹¹¹ § 91.109(a)(2).

¹¹² The applicant's pilot certificate will be issued with a limitation that states: "The [name of the additional type rating] is subject to pilot in command limitations," and the applicant is restricted from serving as pilot in command in an aircraft of that type. § 61.64(f)(2).

¹¹³ Additionally, the applicant must log each flight and the pilot in command who observed the flight must attest to each flight, the applicant must obtain the flight time while performing the duties of pilot in command; and finally, the applicant must present evidence of the supervised operating experience to a flight standards office to have the limitation removed. See § 61.64(g)(2), (3), and (4).

Align With ICAO Annex 1, 2.1.1.4

Many commenters urged the FAA to align with ICAO Annex 1, recommendation 2.1.1.4. Commenters, including GAMA, Eve, and L3Harris, stated this alignment with ICAO would eliminate the requirement for dual controls because the dual controls requirement is directly related to flight training requirements to achieve a powered-lift category rating and an instrument-powered-lift rating. Specifically, commenters stated that all flight training for the addition of a type rating to a commercial pilot certificate with an airplane category rating or rotorcraft category rating with helicopter class rating could be conducted in a high fidelity FSTD. These commenters further urged the FAA to acknowledge the aeronautical experience in one category of aircraft as creditably similar to the experience required for powered-lift qualifications, citing §§ 61.3(e)(3) and 61.159(a)(5)(ii).

As discussed in section V.A. of this preamble, the FAA is not implementing recommendation 2.1.1.4, which would permit a pilot to add a powered-lift type rating to an existing commercial pilot certificate with airplane category rating or rotorcraft category, helicopter class rating. This final rule maintains the traditional airman certification framework, even within the SFAR alternate requirements, to hold the powered-lift category rating. However, the FAA notes that, even if the FAA did align with the ICAO recommendation, barriers for single controls powered-lift would persist. Section 91.109 applies to civil aircraft being used for flight instruction generally; in other words, § 91.109 is applicable to flight training in the aircraft for a type rating. The FAA acknowledges that type specific flight training could occur in an FSTD, pursuant to § 61.31(h), which could alleviate the dual controls requirement.¹¹⁴ However, in the event there was not yet a qualified FSTD representative of that type of aircraft, the person would complete their type-specific flight training in the aircraft, which would fall under § 91.109 requirements (*i.e.*, a set of fully functioning dual controls). Additionally, a person who chose to complete the type rating practical test in

an FSTD pursuant to § 61.64 would be required to complete certain aeronautical experience requirements or complete SOE set forth by § 61.64, which, as discussed in the introduction to this section, inherently requires a set of dual controls.

Align With the U.S. Armed Forces' Approach

Commenters urged the FAA to utilize the U.S. Armed Forces' approach to qualifying pilots in powered-lift through high fidelity simulation, augmented flight controls, and endorsed solo experience. These commenters included GAMA, FSI, Archer, AUVSI, and Joby. Many comments specifically referenced the Department of Defense's F-35 Lightning Joint Strike Fighter program.¹¹⁵ Specifically, commenters stated that, in the case of the F-35 program, the DoD found that a two-seat trainer to be unnecessary largely due to the abilities of high-fidelity simulators. GAMA and Joby urged the FAA to utilize the F-35B training and readiness manual, NAVMC 3500.118B, as a reference point for civilian powered-lift training programs.

One individual commenter recognized the military's development of "T" version aircraft: single-seat aircraft that have been modified with two seats and dual flight controls specifically for the purpose of flight training. The commenter stated that a similar scheme could be followed for civil powered-lift rather than instituting training provisions for powered-lift with a single set of controls. Relatedly, HAI recommended that the FAA implement a performance-based structure that allows OEMs to develop appropriate training plans using acceptable methods, including advanced simulation, to meet training and qualification objectives, and specifically suggested the FAA collaborate with defense contractors who have already demonstrated the safety, effectiveness, and cost benefits of single seat aircraft

simulators will yield similar results for OEMs developing powered-lift for the commercial aviation sector.

The FAA does not find the comparison of military aircraft to a wholly new category of aircraft to be an equivalent one. Military aircraft are not designed and built to the same safety standards as an FAA certificated aircraft. Single-seat, military combat aircraft—with or without ejection seat systems—are not designed to comply with the robust statutory or regulatory standards as passenger-carrying aircraft that receive an FAA type certificate. The DoD operations are inherently characterized by different safety continuum considerations and liability thresholds. Additionally, regarding simulator training, the amount of technology and resources available to DoD differs greatly from that which is available to the civilian aviation sector. Specifically, before military pilots begin training on single seat aircraft or simulators, they traditionally have already received training and qualification in at least another category of aircraft. Taking the differences into account, as discussed further in section V.D.3.ii. of this preamble, the FAA is adopting a similar, though not identical, approach to that of DoD in this final rule to facilitate airman certification for powered-lift used in the civil operations.

Full Training and Testing in an FSTD

Commenters including FSI, NBAA, CAE, Archer, Lilium, Supernal, and Eve overwhelmingly advocated for the concept that pilots could be fully trained and tested in an approved FSTD; likewise, the Advanced Air Mobility Institute encouraged the FAA to engage in collaboration with industry to explore utilization.^{116 117} For example, Archer specifically outlined a program under which the applicant would complete ground training and all aeronautical experience training in the FSTD, receive a solo endorsement, and then complete solo time in the powered-lift. Additionally, ADS recommended that advanced aircraft technology be considered when developing training requirements for powered-lift and also

¹¹⁴ In this final action the FAA has determined utilizing § 61.31(h) in which a specific powered-lift would be subject to type specific training as determined by the FAA (as opposed to training for a type rating) would not adequately address the training necessary because of the unique differences inherently present in powered-lift being developed. Instead, the FAA has determined in the interest of safety that all powered-lift require a type rating as outline in adopted § 61.31(a)(3).

¹¹⁵ One commenter specifically referenced an opinion editorial article, (www.forbes.com/sites/mikehirschberg/2023/08/10/faa-should-heed-1990s-powered-lift-training-decision/), which discussed two DoD commissioned studies conducted by the Johns Hopkins University Applied Physics Laboratory and the Georgia Tech Research Institute. Both independent studies concluded a single-engine fighter aircraft could be just as safe as a twin-engine fighter aircraft. The article further stated that the decisions for the F-35 to have only one seat and for the program to forgo the development of a dual-seated trainer for new pilots was due to "[t]he expense of developing another variant—a two-seat trainer—was seen as completely unnecessary due to the high fidelity of flight simulators of the day and the capabilities of digital fly-by-wire flight controls." The author asserted the FAA could allow the same practice for civilian powered-lift without compromising safety.

¹¹⁶ Generally, commenters advocated for an alternate pathway for pilots with the prerequisites as proposed under the SFAR (*i.e.*, a commercial pilot certificate with an airplane category rating or rotorcraft category, helicopter class rating and the corresponding instrument rating) rather than an ab initio applicant.

¹¹⁷ The FAA understands the commenter's phrase of "buddy box system" in this context as two radio systems whereby the control of the powered-lift could be released to the student and removed from the student by the instructor with the flick of a switch.

recommended that the FAA expand its credit of aeronautical experience in a simulator and subsequently require solo experience to be gained in the aircraft. Commenters relied on the comparative premise that training for a type rating may be fully completed in the simulator, with no time in the type of aircraft itself, which translates to the FAA's recognition that FSTDs are a commonplace means of delivering training, particularly as it pertains to abnormal and emergency situations.

In-Aircraft Monitored Training and Related Technology

Commenters including FSI, NBAA, CAE, Lilium, and AUSVI, urged the FAA to consider innovative technologies outside of a traditional FSTD that could facilitate in-aircraft training for those powered-lift with a single set of controls. Specifically, commenters cited artificial intelligence, virtual reality, mixed reality, augmented reality, headsets with camera systems, eye tracking technology, aircraft control movements, and keystroke and touchscreen inputs as options for instructors to train (for purposes of § 91.109) and supervise (for purposes of § 61.64) from the ground. Additionally, commenters stated the instructor could observe from the forward most passenger-seat, in tandem with the aforementioned remote technologies, for real-time monitoring. An individual commentor also urged the FAA to consider capitalizing on remote safety pilot technology or built-in autonomous systems that are able to swiftly take over full control of the powered-lift during in-aircraft training sessions. Lilium stated that automated fly-by-wire systems and advanced flight control laws provide safety measures and envelope protection enhance situational awareness and reduces complexity of aircraft. Lilium described these features as contributing to a safe flight training regime by preventing over-corrections and stalls, while hands-free hover positioning and altitude hold capabilities further enhance safety during flight training, negating the need for dual controls requirements.

Opposition to Dual Control Trainers

Commenters disagreed with the FAA's expectations as stated in the NPRM that powered-lift manufacturer's develop dual control trainers for their single control aircraft. Commenters opposed such development, first, on the grounds that the dual control trainer would not be an accurate representation of the single control aircraft, which would present an operational discrepancy when the applicant would

move from the dual control trainer to the actual powered-lift in the NAS. Additionally, many commenters emphasized that the development of a dual control trainer would be costly and create significant delays for manufacturers at this stage of powered-lift progress and certification, especially after relying on the FAA's original position that powered-lift would be certificated as airplanes, which held until changed in 2022.¹¹⁸ These commenters included FSI, NBAA, CAE, Archer, Eve, HAI, and the Honorable Jeff Van Drew.

3. Alternate Pathways

In light of the overwhelming support for innovative pathways to facilitate training in powered-lift with a single set of controls, the FAA analyzed the safety intent of the requirement for dual controls in flight training and SOE to determine whether nontraditional alternate pathways could achieve an equivalent level of safety to in-aircraft training. In this final rule, the FAA adopts three pathways to accomplishing flight training and SOE for powered-lift with a single set of controls. This section first explains the FAA's three adopted alternate pathways. The FAA trusts that these pathways will address the majority of commenters discrete issues; however, the second part of this section responds to certain comments that may not be enveloped in the three alternate pathways.

i. Alternate One: Powered-Lift Equipped With a Single Instantly Accessible Functioning Flight Control

As previously discussed, § 91.109(a) restricts a person from operating a civil aircraft that is being used for flight instruction unless that aircraft has fully functioning dual controls. However, there are some narrowly tailored exceptions to this restriction: (1) if the aircraft is a manned free balloon, (2) for the purpose of instrument flight instruction in an airplane equipped with a single, functioning throwover control wheel that controls the elevator and ailerons,¹¹⁹ and (3) for the purposes of a flight review under § 61.56 or to obtain recent flight experience or an instrument proficiency check under

§ 61.57 in an airplane equipped with a single, functioning throwover control wheel that controls the elevator and ailerons.¹²⁰ Dual controls requirements can be traced back to the inception of the Civil Aviation Regulations in 1938¹²¹ and the FAA instituted the first two exceptions in 1978 to then § 91.21¹²² in response to a public solicitation for proposals in relation to an Operations Review Program. The FAA explained that the exceptions were appropriate in light of numerous exemptions allowing AOPA and the AOPA Air Safety Foundation to conduct simulated instrument instruction at flight training clinics using single-engine airplanes equipped with a single, functioning throwover control. The FAA instituted the third exception in 2011, again, in response to numerous exemptions that allow instructors to provide recurrent flight training and simulated flight training for the purpose of meeting recency of experience requirements and flight review requirements in airplanes equipped with a single, functioning throwover control wheel.¹²³

Notwithstanding the exception for manned free balloons, these exceptions share two characteristics. First, the flight instructors have access to a control such that if there exists a condition warranting immediate action (e.g., immediately taking the controls to maneuver the aircraft so as to see and avoid traffic or take controls to ensure a maneuver does not result in a mishap or exceed an aircraft limitation), the flight instructor can intervene. Second, in each of the two exceptions, the applicant pilot possesses a pilot certificate. In other words, the single, throwover control is considered sufficient in instances where the person manipulating the controls has prerequisite certificates and ratings (i.e., foundational aeronautical experience). Specifically, in the exception under

¹²⁰ Pursuant to § 91.109(b), the airplane must also be equipped with operable rudder pedals at both pilot stations; the pilot manipulating the controls must be qualified to serve and serves as PIC during the entire flight; the instructor must be current and qualified to serve as PIC of the airplane, meet the requirements of § 61.195(b), and have logged at least 25 hours of PIC flight time in the make and model of airplane; and the PIC and instructor have determined the flight can be conducted safely.

¹²¹ See 14 CFR 20.655 (1938), which stated, in pertinent part, that "no flying instruction shall be given in any aircraft, for or without hire, unless such aircraft is equipped with fully functioning dual controls and a certificate instructor is in full charge of one set of said controls."

¹²² General Operating and Flight Rules and Related Airworthiness Standards and Crewmember Training, 43 FR 46233 (Oct. 5, 1978).

¹²³ Pilot in Command Proficiency Check and Other Changes to the Pilot and Pilot School Certification Rules, 76 FR 54095 (Oct. 31, 2011).

¹¹⁸ The FAA acknowledges that certain manufacturers were of the understanding that they would be classified as an airplane. Commenters expressed that reliance on this position led manufacturers to believe they would not need dual controls in powered-lift even for training.

¹¹⁹ Pursuant to § 91.109(a)(1) and (2), to utilize this exception, the instructor must determine that the flight can be conducted safely and the person manipulating the controls must have at least a private pilot certificate with appropriate category and class ratings.

§ 91.109(a)(1) and (2), the person receiving instrument flight instruction must have at least a private pilot certificate with appropriate category and class ratings. Similarly, in the second exception under § 91.109(b), the person manipulating the controls is a certificated and rated pilot who is receiving instruction for a flight review, recent flight experience, or an instrument proficiency check. These activities are conducted to maintain privileges, not to obtain them for the first time.

Therefore, the FAA finds extending mirrored relief to that as provided in § 91.109(a) and (b), and similar to that of EASA,¹²⁴ would not adversely affect safety for pilots seeking certification under the SFAR (*i.e.*, an instantly accessible, single, functioning flight control in an aircraft with single controls where two pilots are seated in the flightdeck of the aircraft). Both prongs of safety criteria will be met: (1) the powered-lift will have a control such that the flight instructor can immediately intervene in an emergency event, as well as maintain the ability to demonstrate a maneuver if necessary, and (2) the pilots under the SFAR will have at least a commercial pilot certificate with an airplane category rating or rotorcraft category rating with helicopter class rating and the corresponding instrument rating.

Under § 194.253(a)(1), this alternate requirement would be extended only to those pilots seeking a powered-lift category rating, powered-lift type rating, and instrument-powered-lift rating under the SFAR (*i.e.*, those qualified in accordance with § 194.215(a) who are instructor pilots, test pilots, FAA test pilots, aviation safety inspectors, the initial cadre of instructors, and pilots receiving training under an approved training program). Additionally, under new § 194.253(a)(1)(i) and (ii), the instructor must be an instructor pilot for the manufacturer of the powered-lift under the manufacturer's proposed training curriculum or a flight instructor under an approved training curriculum under part 135, 141, or 142, as applicable.

Under new § 194.253(a)(2), a person may operate a powered-lift for flight training without fully functioning dual controls provided it is equipped with a

single, functioning control¹²⁵ that is instantly accessible by both the applicant and the instructor.¹²⁶ As discussed in the NPRM, some powered-lift are equipped with inceptors, which encompasses a wide variety of non-traditional pilot controls through which pilot inputs are managed for the purpose of operating the powered-lift. The FAA notes that although this alternate pathway enables powered-lift with one flight control to be used in flight instruction, the two seats or pilot stations with access to this single flight control would be evaluated during the aircraft certification process using the certification standards for pilot stations. Additionally, instant accessibility means that the person providing the instruction would be able to take immediate corrective action and full control of the aircraft from their occupied seat. Finally, the instructor pilot must determine that the flight can be conducted safely.

ii. Alternate Two: Full Flight Simulator (FFS) Training for Powered-Lift With Single Functioning Controls and a Single Pilot Station

Overview

While an instantly accessible, single, functioning flight control, including a throwover control, presents a viable option for training in an aircraft with single controls where two pilots are seated in the flight deck of the aircraft (*i.e.*, where the control is accessible through virtue of side-by-side seats), the FAA acknowledges that some powered-lift will have a single pilot station. This would render the option of an instantly accessible, single, functioning flight control as inherently unfeasible. In light of commenters' recommendations for full qualification through FSTD training and testing, the FAA evaluated how to facilitate a path for full training and testing in an FFS for a powered-lift category rating, powered-lift type rating, and instrument-powered-lift rating, while maintaining an equivalent level of

safety to that of flight training in an aircraft equipped with fully functioning dual controls (or a single, functioning flight control that is instantly accessible to both the applicant and the person providing the flight instruction in their respective pilot station). To ensure an equivalent level of safety to that of in-aircraft training through this unconventional training and testing framework, the FAA evaluated six main factors and mitigations: prior piloting experience, FAA oversight of training programs, simulator fidelity, demonstration and familiarity flights, solo flight, and SOE. To this end, the FAA adopts in this final rule an alternate framework to facilitate training and testing for a powered-lift category rating, powered-lift type rating, and instrument-powered-lift rating. This final rule facilitates the framework through § 194.253(b) and the alternate framework process in new appendix A to part 194, mirroring a part 141 minimum curriculum appendix.¹²⁷ The following sections describe the linear framework, safety considerations, and mitigations to enable training in an FFS that represents a powered-lift with single controls and a single pilot station.

Applicability and Eligibility

The relief provided in the alternate framework will apply to only those pilots simultaneously seeking a powered-lift category rating, a powered-lift type rating, and an instrument-powered-lift rating in a powered-lift with single fully functioning controls and a single pilot station. Therefore, while the traditional airman certification approach under part 61 permits a piecemeal approach for a pilot to obtain a rating,¹²⁸ this alternate pathway for powered-lift ratings would require an applicant to train for all three ratings simultaneously.¹²⁹ Because an

¹²⁷ Specifically, § 141.55 requires training courses to meet the minimum curriculum requirements in accordance with the appropriate appendix of part 141. The appendices set forth the minimum curriculum requirements for that certification course under part 141 (*e.g.*, eligibility for enrollment, aeronautical knowledge training, flight training, etc.).

¹²⁸ For example, a person seeking an airplane or helicopter type rating has flexibility to take the type rating practical test independent of other practical tests and may obtain an instrument rating in an airplane or helicopter for which a type rating is not required prior to applying for a type rating in an airplane or helicopter. Additionally, because there exist airplanes and helicopters where a type rating is not required, a person could obtain the category and class ratings independent of a type or instrument rating.

¹²⁹ See section V.F.3. of this preamble for further discussion of the FAA's determination that a powered-lift-instrument rating is necessary to utilize this pathway.

¹²⁴ Pursuant to AMC4 to appendix 6 of EASA regulations, the airplane used for instrument flight training provided outside an ATO by an IRI(A) or FI(A) should be fitted with primary flight controls that are instantly accessible by both the student and the instructor, for example, dual flight controls or a center control stick. Additionally, the regulation states that swing-over flight controls should not be used.

¹²⁵ The FAA notes this relief is similar to that suggested by BETA Technologies, who recommended the FAA add additional requirements to § 91.109 to allow for shared controls for pitch and roll that may include devices other than control wheels. (A pilot uses a "control wheel" or "yoke" to control the attitude of an aircraft usually in both pitch and roll. Rotating the control wheel controls the ailerons and the roll axis.) The final rule as described herein will allow a shared control but does not require the shared control to be a control wheel device.

¹²⁶ The FAA notes that since both pilots have immediate access to the control and, therefore, the ability to manipulate the controls of the powered-lift, if supervised operating experience was required after a person's practical test via § 61.64 requirements, the aircraft could be used for supervised operating experience.

applicant utilizing this relief would be required to seek the three ratings simultaneously, § 194.211 inherently would not be applicable to this population of applicants training and testing via this alternative in a powered-lift with single controls and equivalent FSTD.¹³⁰

This training alternate pertains to the training requirements for powered-lift originally type certificated with single fully functioning controls and a single pilot station or a powered-lift undergoing the type certification process with these features. When opting for this alternate for initial and add-on ratings in a single flight control powered-lift, pilots are required to complete additional flight hours as stipulated in §§ 194.253 and 194.255 (e.g., the familiarization flight, demonstration flight, and supervised operating experience). As a result, this alternate is not applicable to those powered-lift originally certificated with dual controls and dual pilot stations or those with single functioning flight controls and dual pilot stations. Similarly, this alternate is not applicable to dual control powered-lift designs that are later altered to a single set of fully functioning controls and a single pilot station through a Supplemental Type Certificate (STC) or other means, such as disconnecting a removable set of controls.

When developing the FFS Training alternative, the FAA considered the level of experience that a pilot utilizing this alternative should possess. The FAA has long maintained the position of the importance of actual aircraft experience when an applicant uses flight simulation for training and testing, especially as it pertains to ab initio pilots.¹³¹ Where an ab initio pilot has little to no experience in an aircraft in the NAS, the FAA maintains that in-aircraft training and testing (or required SOE when an applicant accomplishes the entire practical test in an FFS) is paramount in ensuring pilot proficiency. Simulation offers many benefits to training, particularly as it relates to training abnormal and

emergency procedures, such as brown or white out conditions, engine inoperative procedures during critical phases of flight, and system malfunctions that cannot be safely replicated in actual flight. However, the actual flight environment requires certain knowledge and skills and provides experiences that may not be able to be comprehensively accomplished in a simulator (e.g., the experience of actually landing on a pinnacle, or conduct a steep approach into a confined area at night). Additionally, simulator training does not fully replicate the inflight environment in the flightdeck of an aircraft, taking into considerations such as realistic ATC communications, flightdeck distractions, temperature extremes and noise, unexpected interactions with traffic not communicating with ATC, or adapting to unexpected weather conditions to the degree expected in the actual flight environment.

A pilot utilizing the SFAR will be required to have the prerequisite certificate and ratings prescribed in § 194.215(a), which is a commercial pilot certificate with either an airplane category rating with a single-engine and/or multiengine land or sea class rating or a rotorcraft category rating with helicopter class rating, and the corresponding instrument rating.¹³² This requirement ensures the pilot seeking the powered-lift ratings via this appendix has extensive exposure to in-aircraft flight training and aircraft operations within the NAS,¹³³ including a variety of operational and environmental issues that cannot be fully replicated in an FFS. Additionally, to hold these ratings, the pilot would have demonstrated, at a minimum, a level of aircraft mastery required to achieve the commercial pilot certificate and instrument ratings and, therefore, be certificated at a level that enables them to serve as a pilot for compensation or hire. Therefore, the FAA has determined that holding such certificates and ratings will ensure that pilots utilizing the FFS Training

alternative will possess key knowledge, skills, as well as exposure and experience of operating an aircraft in the NAS, all of which cannot be fully replicated in a simulator for a pilot that lacks the required prerequisites for entry in this training alternative.¹³⁴

In addition to the prerequisites, an important aspect of this training alternative is the requirement for the training to be conducted by an FAA-approved program under part 135, 141, or 142. This ensures the training is conducted via an approved curriculum fostering quality, standardized training, which results in consistent, highly effective training. Additionally, these FAA-approved programs have a higher level of FAA oversight than training that is conducted outside of an FAA-approved training program. Requiring this training to be conducted under an approved program enables the FAA to evaluate the quality of the training and ensure the training course syllabuses are followed, and it affords the FAA the ability to work with the training provider to correct deficiencies. Another advantage of an approved program is that the provider and the FAA can gather data and monitor trends so that positive adjustments can be made to the program to ensure a high level of effective training continues to be provided. The FAA notes that the training curriculum submitted must encompass all the necessary training for a pilot to obtain a commercial pilot certificate with powered-lift category rating, an instrument-powered-lift rating, and type rating for the powered-lift that is being trained on that is equipped with only a single set of flight controls.

However, under this appendix approach, if a manufacturer is not one of the certificate holders mentioned, they will not be able to utilize this provision.¹³⁵ Although this necessitates

¹³⁰ Section 194.211 sets forth certain provisions permitting a person to obtain an initial powered-lift type rating without concurrently obtaining the instrument-powered-lift rating or an additional powered-lift type rating with a "VFR Only" limitation. The FAA is not extending the relief contained in § 194.211 to ensure that applicants utilizing this framework will be able to act as PIC while completing the cross-country requirements set forth in appendix A, section 8.(a)(iii).

¹³¹ E.g., Aircraft Flight Simulator Use in Pilot Training, Testing, and Checking and at Training Centers, final rule, 61 FR 34508 (Jul. 2, 1996); Pilot, Flight Instructor, and Pilot School Certification final rule, 74 FR 42500 (Aug. 21, 2009).

¹³² The FAA considered whether a lower certificate level (i.e., private pilot certificate) would be a viable alternative minimum level of qualification but finds that a private pilot's experience through their limited privileges may not adequately ensure the foundational knowledge, skills, and proficiency such that the person should bypass in-flight training elements and situational exposure.

¹³³ A pilot seeking an airplane category rating must have at least 250 hours (190 hours if training at a part 141 pilot school) and a pilot seeking a rotorcraft category helicopter class rating must have at least 150 hours to be eligible for a commercial pilot certificate.

¹³⁴ The FAA notes that there currently exist scenarios where fully rated pilots in other categories of aircraft with a similar level of experience as described herein seek to train on an aircraft with a single set of controls and a single pilot station. The relief adopted herein is a temporary measure meant to springboard the entry of a new category of aircraft and sufficient numbers of flight instructors and pilots to support this industry sector. Moreover, unlike airplanes and helicopters, the type rating requirement for each powered-lift creates a unique scenario where a pilot cannot first obtain category and class ratings before separately seeking a type rating. One benefit of this SFAR is to collect information and data to later educate the FAA when contemplating future permanent amendments for both powered-lift and aircraft in general, including dual controls requirements.

¹³⁵ The FAA has established a Flight Standards Certification Team (FSCT) to allow for the expedited processing of certifications. The process to complete certification of a new Air Agency

that an OEM become a certificate holder under one of these parts, this requirement will help ensure the FAA has the necessary tools and authority to conduct surveillance and gather data on this new and novel approach to certificating pilots in a single flight control powered-lift. In this respect, the appendix approach differs from the provisions set forth in the SFAR for aircraft equipped with dual controls under the current regulatory framework, which do not necessarily require a manufacturer to become one of the certificate holders mentioned. For example, the alternate aeronautical experience requirements in §§ 194.217 and 194.219 may be completed at a powered-lift manufacturer without the manufacturer having to become a part 135 operator, part 141 pilot school, or part 142 training center.

The first two sections of new appendix A to part 194 prescribe applicability and eligibility provisions in section 1. and 2., respectively. Specifically, appendix A, section 1.(a) sets forth the specific ratings for which a person may utilize the minimum requirements of the appendix to apply for a pilot training program in a powered-lift with a single control and a single pilot station and specifies that the powered-lift must be type certificated, or seeking type certification, with one set of controls and a single pilot station. Section 1.(b) requires that a person utilizing the pathway set forth in the appendix apply for all three ratings simultaneously. Section 2.(a) sets forth the prerequisite qualification requirements an applicant must possess as stipulated in § 194.215(a). Finally, Section 2.(b) requires the training and testing under the appendix to be provided under a part 135, 141, or 142 approved training program.

Ground Training

Ground training is an integral part of a training program that ensures an applicant has received the required instruction on the required aeronautical knowledge areas and has been found competent. Section 61.63 prescribes the requirements to apply for additional

aircraft category, class, and type ratings other than ratings at the ATP certification level, and § 61.65 prescribes the requirements to apply for an instrument rating. A person who applies to add a powered-lift category and a type rating to a pilot certificate is required to complete the requisite ground training from an authorized instructor on the aeronautical knowledge areas specified in § 61.125(b).¹³⁶ Similarly, § 61.65 requires a person to receive and log ground training from an authorized instructor or accomplish a home-study course of training on the aeronautical knowledge areas set forth in § 61.65(b) that apply to the instrument rating sought.¹³⁷ The appendix will not alter the requirement to receive and log ground training on the applicable aeronautical knowledge areas, but section 3.(a) of the appendix will require the applicant to complete all the required ground training, which must be outlined in the certificate holder's approved training program, prior to starting the simulator training phase. To ensure a person's competency on the required aeronautical knowledge areas, including those for the specific powered-lift type, a person will be required to pass a knowledge check prior to starting the simulator training phase pursuant to new section 3.(b) of the appendix. However, because the person would already hold a commercial pilot certificate and an instrument rating, by virtue of the prerequisites in § 194.215(a), the person would not be required to take an FAA knowledge test.¹³⁸ Rather, the knowledge check will be within the purview of the training program to determine the processes and procedures (e.g., number of questions, scenario based questions, etc.) of the knowledge check, but it must comprehensively cover the required aeronautical knowledge areas. The required knowledge check may be administered using written or oral questions or a combination of both written and oral questions, and the outcome of the knowledge check will be documented in the applicant's training record. The method and content of a knowledge check must be submitted as part of the required documentation when a person submits the training program to the FAA for review and approval. A knowledge check should be similar to a progress or stage check commonly found in an operator's approved training program under parts 135, 141, and 142, the intent

of which is to ensure the applicant possesses the foundational aeronautical knowledge of a specific powered-lift type before commencing the next phase of simulator training.

Full Flight Simulator Training

In lieu of flight training in an aircraft, section 4. of the appendix will permit the flight training requirements referenced in § 194.217 through § 194.235 as well as any other applicable flight training requirements under part 61 to be accomplished in a qualified Level C or higher FFS. An operator will be required to submit their training program to the FAA for approval. The program must incorporate all the flight training necessary for an eligible applicant¹³⁹ to receive a powered-lift category, instrument-powered-lift rating, and type ratings under parts 61 and 194. At a minimum, the training program must include at least 20 hours¹⁴⁰ of flight training in an FFS for the commercial pilot powered-lift category and 15 hours¹⁴¹ of flight training in an FFS for the instrument rating.¹⁴²

This FFS training may only commence after the applicant completes the ground training portion of the training program as set forth by section 3.(a) of the appendix. As discussed in section V.F.2 of this preamble, to ensure the applicant receives training in an FFS that replicates flight in the actual aircraft as closely as possible, the FFS must be a Level C or higher qualification level. The fidelity, and therefore qualification level, of the FFS is a vital element of this alternative method of training since the applicant will receive no flight training in the aircraft, may not possess a powered-lift category rating and instrument-powered-lift rating, and will have little or no prior experience flying this powered-lift type. Additionally, after the completion of the FFS training phase, the applicant who is seeking a powered-lift category, powered-lift instrument rating, and powered-lift type rating concurrently for

¹³⁹ As noted, only certain pilots will be eligible for this training under section 2 of the appendix.

¹⁴⁰ §§ 194.217 (b)(1), 194.219(b)(1), 194.221(b)(1) and 61.129(e)(3).

¹⁴¹ §§ 194.225(b)(1), 194.227(b)(1), and 61.65(e)(2).

¹⁴² Of the 35 hours of flight training in the FFS, 15 hours is creditable toward the 35 hours of PIC flight time required by § 194.216(a). Additionally, the FAA notes that when instrument training is being logged toward a commercial pilot certificate with powered-lift category rating, the same training could be concurrently utilized and log toward the instrument training requirements required for a powered-lift-instrument rating. See Legal Interpretation to Ms. Kristine Hartzell- Airline Owners and Pilots Association (December 17, 2010).

certificate consists of five phases; Preapplication, Formal Application, Design Assessment, Performance Assessment, and Administrative functions in which the FAA combines into three gates. Gate I consists of the Final Preapplication Statement of Intent and completion of the Preapplication Meeting. Gate II consists of the Formal Application and Design Assessment and is allotted 90 days for completion. Gate III consists of Performance Assessment and Administration Functions in which the FSCT allots 30 days for completion. Therefore, if an applicant is prepared, the timeline for certification would take approximately 120 days to complete.

¹³⁶ § 61.63(b)(2).

¹³⁷ § 61.65(a)(3), 61.65(b).

¹³⁸ §§ 61.63(b)(4), 61.63(d)(4), 61.65(a)(7).

the represented powered-lift, will transition to flight in the actual aircraft with only single controls and a single pilot station. Therefore, the applicant must have some experience with a closer degree of realism of the FFS, which is only characterized at these highest qualification levels. For those pilots who already possess a powered-lift category and instrument rating and are seeking only a type rating for the powered-lift, the required qualification level of the simulator aligns with established requirements to add a type rating for other categories of aircraft.

Therefore, as set forth in new section 4.(a) of the appendix, an applicant seeking all three ratings must complete all the applicable flight training requirements of § 194.217 through § 194.235, including the two instrument cross-country flights required by § 194.235, which will be conducted in the FFS, and the applicable flight training requirements under part 61. However, the cross-country requirements of § 194.233 will be accomplished during the solo segment of the training program. At the successful completion of the FFS training phase, as detailed in the approved training program, and prior to advancing to the in-aircraft phase, the applicant must satisfactorily accomplish a check administered by a person authorized to conduct this check. As set forth in 4.(b) of the appendix, a person authorized to administer the check can be a check pilot, a training center evaluator (TCE), an authorized instructor, an instructor pilot, an FAA aviation safety inspector (ASI), or another person authorized by the FAA to administer this check. Specifically, the check must consist of oral questioning and the satisfactory performance of all the maneuvers and procedures required for the issuance of a commercial pilot certificate with a powered-lift category rating, for the issuance of an instrument-powered-lift rating, and for the issuance of a powered-lift type rating.¹⁴³ Requiring the applicant to demonstrate the maneuvers and procedures required for the issuance of the rating(s) ensures the

applicant has the knowledge and mastery of controlling the aircraft prior to advancing to the training segment where flight in the aircraft without a set of dual controls will occur (*i.e.*, when the applicant will have full control of the aircraft and the flight instructor may not have a method by which to intervene). This check requirement is also important since the applicant will not yet possess a powered-lift category or instrument rating, thereby possessing no prior experience flying this powered-lift type in addition to holding little to no category experience. The successful completion of the FFS check establishes a 90-day window in which the applicant must accomplish both the familiarity flight and demonstration flight as discussed in the following sections.¹⁴⁴ Failure to complete both the familiarity flight and demonstration flight within this 90-day timeframe will require the applicant to return to the FFS and successfully complete a demonstration of proficiency, of which the content should include, at a minimum, the maneuvers and tasks contained in section 10. of appendix A.

The FAA notes that because the FFS training would be provided under a part 135, 141, or 142 approved training program, the applicable requirements of those parts must also be met. This includes documenting the training and testing in accordance with the part under which the training program is offered, pursuant to the regulations within those parts.

Aircraft Familiarity Flight

The aircraft familiarity flight is the first of two in-flight training program segments required to transition the applicant from the FFS training phase to the aircraft training phase of the training program. Section 5. of the appendix will dictate the requirements of the aircraft familiarity flight. The purpose of this segment is to expose the applicant to the operation of the aircraft in actual flight in the NAS where the authorized instructor must demonstrate all of the maneuvers and procedures required for the issuance of a commercial pilot certificate with a powered-lift category rating, for the issuance of an instrument-powered-lift rating and for the issuance of a powered-lift type rating, pursuant to new section 5.(b)(1). Additionally, it will provide the authorized instructor an opportunity to familiarize the applicant with the local flight area to include practice areas and departure airport familiarization. The aircraft familiarity flight must be accomplished

in the aircraft with an instructor piloting the aircraft with the applicant having unobstructed visual sight of the controls and the instrumentation, and able to engage in active communication with the instructor during the entire flight under new section 5.(b)(2). During the aircraft familiarity flight, if the same task or maneuver is required for the issuance of a commercial pilot certificate with a powered-lift category rating, for the issuance of an instrument-powered-lift rating, and for the issuance of a powered-lift type rating that same task or maneuver does not have to be demonstrated more than once. Additionally, tasks or maneuvers that have been waived in accordance with § 194.207(c) are not required to be demonstrated (*i.e.*, tasks that the powered-lift physically cannot perform). Pursuant to new section 5.(c), the aircraft familiarity flight may involve one or more flights to accomplish a demonstration of all the required tasks.

After a person completes the aircraft familiarity flight, the authorized instructor may endorse the applicant in accordance with new section 5.(d) to act as PIC to accomplish the demonstration flight with an authorized instructor on board. However, this endorsement will be valid only for 90 days from the date of the check in the FFS was completed (*i.e.*, the check in accordance with new section 4.(b) of the appendix).¹⁴⁵ This timeframe is because the demonstration flight will be the first flight that the applicant pilots the actual aircraft in the NAS for which they do not have a category rating; therefore, the linear process of flights (proficiency check in FFS, aircraft familiarity flight, and demonstration flight) must be accomplished in a timely manner so the proficiency from the FFS training and the information obtained from the aircraft familiarity flight does not degrade.

Demonstration Flight

The next phase in the training program set forth in the appendix includes a demonstration flight. The purpose of a demonstration flight is to enable an authorized instructor to ascertain that an applicant possesses satisfactory proficiency in the operation of the aircraft to then act as PIC safely in solo flight. In other words, the FAA finds a safety gap would exist if the applicant went directly from the FFS to solo in the aircraft, even with an aircraft familiarity flight because the applicant

¹⁴³ As is currently applicable, when an applicant is concurrently seeking a pilot certificate with instrument and type ratings, and there are overlapping tasks between the practical tests the applicant may conduct a task required for the multiple ratings sought a single time provided the task is performed to the higher standard. For example, if an applicant seeking a commercial pilot certificate with instrument-powered-lift rating, and type rating for the aircraft sought must conduct a precision approach for both the type rating and instrument rating, the applicant would only need to demonstrate the task once provided they perform it to the higher standard.

¹⁴⁴ Appendix A to part 194, 4.(b), 5.(a) and 6.(a)(4).

¹⁴⁵ The FAA has previously found this time-period to be an appropriate amount of time between proficiency retention between training and solo flights and aligns with limitations on student pilots operating an aircraft in solo flight. See § 61.87(n).

would have no supervised experience manipulating the controls before solo flight in the NAS. The demonstration flight under new section 6.(a)(2)(i) will require the applicant to pilot the aircraft and demonstrate all the maneuvers and procedures required for the issuance of a commercial pilot certificate with a powered-lift category rating, for the issuance of an instrument-powered-lift rating, and for the issuance of a powered-lift type rating while an authorized instructor observes the applicant. During the entire flight, the instructor must have (1) an unobstructed visual sight of the controls, (2) an unobstructed visual sight of the instrumentation, and (3) the ability to engage in active communication with the applicant, pursuant to new section 6.(a)(2)(ii). Like the aircraft familiarity flight, the demonstration flight may occur over one flight or multiple flights under new section 6.(a)(3). Upon successful completion of the demonstration flight, the instructor may endorse the applicant to act as PIC of the powered-lift in solo flight, subject to any conditions and limitations the instructor believes to be warranted.¹⁴⁶ This endorsement will be valid for no more than 90 days¹⁴⁷ from the day the demonstration flight is successfully completed. These endorsement requirements will be set forth in new section 6.(a)(4).

If the authorized instructor or instructor pilot finds they cannot endorse the applicant for solo flight, the applicant must acquire additional training to obtain the necessary solo flight endorsement within the 90-day window that begins from the successful completion of the check conducted in the FFS, as detailed in the FFS Training section above. The training program should have a procedure for determining how that additional training will occur (e.g., additional FFS simulator training, repeated familiarity flight, repeated demonstration flight, etc.) and what items must be retrained.¹⁴⁸

Lapse in Endorsement To Act as PIC To Accomplish the Demonstration Flight

If the applicant has not successfully completed the demonstration flight within 90 days from the day the FFS

check was completed, then the applicant must return to the FFS and successfully complete a demonstration of proficiency, pursuant to new section 6.(b)(1). This demonstration of proficiency will not require all the maneuvers and procedures required for the issuance of a commercial pilot certificate with a powered-lift category rating, for the issuance of an instrument-powered-lift rating, and for the issuance of a powered-lift type rating to be demonstrated. Instead, under new section 6.(b)(1)(i), the approved training program should detail the minimum content of the demonstration of proficiency and should include, at a minimum, the maneuvers and tasks contained in section 10 of the appendix. The FAA already has minimum maneuvers and procedures contained in the regulations that must be completed successfully in order for a person to be endorsed for solo flight in a powered-lift. The minimum maneuvers and procedures contained in paragraph 10 of appendix A are those that the FAA has previously found to be necessary in order for the person to successfully operate a powered-lift in solo flight. For the training conducted under appendix A, this baseline of maneuvers and procedures is adequate to ensure applicants are found to be proficient to operate a powered-lift in solo flight. An additional mitigation is that the applicants utilizing this appendix would be already rated at the commercial pilot certificate level in accordance with § 194.217. Additionally, the check pilot, TCE, authorized instructor, instructor pilot, an FAA ASI, or other person authorized by the FAA to administer this check may add any additional maneuvers or tasks they believe should be demonstrated by the applicant to ensure the applicant has retained the proficiency in the powered-lift to continue to the in-aircraft segments of the training program. The FAA considers these individuals qualified to administer the demonstration of proficiency because they have been deemed qualified to conduct the full check required by 4.(b) of the appendix. A demonstration of proficiency in the FFS is more appropriate than a repeated in-flight demonstration flight, to ensure that the trainee is adequately knowledgeable and proficient in the operation of the aircraft before continuing to conduct solo operations in the aircraft in the NAS. This is especially important as the flight instructor does not have the ability to intervene should an unsafe condition arise. Additionally, using an FFS for the

demonstration of proficiency allows an instructor to provide additional guidance and training, if necessary, on items the trainee may require a refresher on due to the length of time since the original check was completed in the FFS (i.e., more than 90 days).

After the additional demonstration of proficiency, pursuant to new section 6.(b)(1)(ii), the applicant will be required to engage in another aircraft familiarity flight in accordance with the requirements of section 5.(b) of the appendix. Upon successful completion of the subsequent aircraft familiarity flight, the applicant may receive another endorsement for the applicant to act as PIC to accomplish the demonstration flight with an authorized instructor on board under section 6.(b)(2). This endorsement will be valid for 90 days from the day the demonstration of proficiency conducted in the FFS was successfully completed.

Solo Flights

Upon successful completion of the demonstration flight and after obtaining the endorsement to act as PIC of the powered-lift in solo flight, the applicant will begin the solo flight segment of the training program, as set forth in new section 6.(c) of the appendix. Specifically, the FAA finds that requiring the applicant to complete 20 hours of solo flight in the aircraft will sufficiently ensure the applicant gains an equivalent level of proficiency as that under traditional flight training, as subsequently discussed. First, the FAA notes that under the traditional flight training framework for a commercial pilot certificate, an applicant is required to obtain only 10 hours of solo flight time under § 61.129(e)(4). The FAA finds that the solo flight time parameters are equally as vital in this alternate framework for experience in solo operations integrating the areas of operation listed in § 61.127(b)(5), night VFR conditions, and certain takeoffs and landings. However, the FAA recognizes that the SFAR provides relief to the cross-country solo requirement of § 61.129(e)(4)(i). Therefore, under the appendix, the applicant may utilize the corresponding alternate provision for the cross-country time as set forth in §§ 194.217 through 194.231, as applicable.

The FAA finds that because the applicant will have completed all flight training in the FFS rather than receiving exposure to the actual flight environment, the applicant will be required to obtain another 10 hours of solo flight time. The FAA finds that 10 additional hours of solo flight time, which must include the maneuvers and

¹⁴⁶ For example, the endorsement could be limited to operation in cross-winds no greater than 8 knots. See Advisory Circular 61–65H.

¹⁴⁷ See footnote 139.

¹⁴⁸ This approach is no different from what occurs when a flight instructor determines they cannot provide the necessary two-month endorsement for a practical test. A person may not proceed until they obtain the necessary endorsement.

procedures required for the issuance of the three ratings, is an appropriate amount of time to expose the pilot to the realistic operating environment (*e.g.*, weather conditions, air traffic, etc.). Additionally, because the SFAR reduces the amount of pilot in command in a powered-lift time from 50 hours to 35 hours¹⁴⁹ and permits 15 hours of those 35 hours to be attained in an FFS,¹⁵⁰ by the time the applicant completes the 20 hours of pilot in command time¹⁵¹ in a powered-lift, they will meet the eligibility requirements to take the practical test.

Finally, § 194.233, adopted herein, sets forth alternate means to satisfy the cross-country aeronautical experience requirement for a commercial pilot certificate with a powered-lift category rating, specifically prescribed by § 61.129(e)(3)(ii) and (iii) and (e)(4)(i). Section 194.233 replaces the requirements described in § 61.129(e)(ii) and (iii) and also requires an applicant to conduct an additional cross-country because of the reduction of the total straight-line distance from 100 nautical miles to 50 nautical miles. Although § 194.233(a) requires three cross-countries to be conducted as flight training, under appendix A, the FAA is requiring the applicant to conduct all cross-country experience listed in § 194.233 as solo flight in the aircraft. Although these cross-country flights will be conducted as solo flights, the applicant will already have conducted cross-country flights in the FFS representing the powered-lift as required by § 194.235. Therefore, the applicant will have demonstrated the ability to conduct a cross-country flight in the FFS and will be adequately prepared to conduct a solo cross-country in the NAS because of their extensive training in the FFS, and the prerequisites set forth by § 194.215. Requiring in-aircraft cross-country flights in the NAS would ensure the applicant is exposed to items that may not be adequately replicated in an FFS environment, such as pilotage, dead reckoning, realistic ATC communications, and unforecast weather events, thereby ensuring the applicant correlates all previous training in a powered-lift.

Lapse in Endorsement for Solo Flights

The FAA anticipates that applicants will accomplish all the required solo tasks and flight hours within the initial

90-day endorsement for the applicant to act as PIC of the powered-lift in solo flight. However, the FAA recognizes that there may be instances where an applicant is unable to complete those tasks and flight hours within the initial 90-day endorsement (*e.g.*, prolonged weather activity). The FAA identified two distinct scenarios that will require endorsement: re-endorsement within the 90-day endorsement window and re-endorsement outside the 90-day endorsement window.

If an applicant identifies that they will be unable to complete their solo flights within the 90-day time period, but that period has not fully lapsed yet, the applicant will be required, at a minimum, to complete a demonstration flight with a check pilot, a TCE, an authorized instructor, an instructor pilot, an FAA ASI, or another person authorized by the FAA, as set forth in new section 6.(d)(1). However, because the 90-day period has not yet lapsed, the applicant will not be required to demonstrate all maneuvers and procedures required for issuance of a commercial pilot certificate with the applicable ratings, as is required of the typical demonstration flight. Rather, the abbreviated demonstration flight must include at least the maneuvers and tasks set forth in section 10 of the appendix.¹⁵² Additionally, the person administering the demonstration flight may require any other maneuvers or procedures necessary to satisfactorily ensure the applicant maintains proficiency such that they are qualified to act as PIC. When the applicant successfully completes of the abbreviated demonstration flight, the person who administered the demonstration flight may endorse the applicant again to act as PIC of the powered-lift in solo flight for a period not to exceed 90 days.

If the 90-day endorsement period has expired, an applicant will require a re-endorsement to act as PIC of the powered-lift in solo flight. Because more than 90 days will have lapsed since the applicant demonstrated proficiency, the FAA finds it is necessary for the applicant to demonstrate proficiency again before operating the aircraft in solo flight. Therefore, the applicant will be required to successfully complete, first, another demonstration of proficiency in the FFS and, second, another demonstration flight with a person authorized to administer the demonstration flight on board, as set

forth in new section 6.(d)(2). However, each of these modules may be abbreviated since the applicant has already completed a full check in the simulator and a full demonstration flight encompassing the maneuvers and procedures required for the issuance of the applicable rating(s). Using an FFS permits the person authorized to administer the demonstration of proficiency to provide training and allows for the applicant to regain proficiency, especially if any items are noted for which the applicant may lack proficiency. Conducting this demonstration of proficiency in the FFS gives the applicant an opportunity to practice maneuvers and procedures in an environment where no risk is posed to the applicant and the person administering the demonstration of proficiency, should the applicant's proficiency lapse and result in an unsafe condition without the ability for the instructor to intervene. As previously stated, demonstration of proficiency in the FFS must include, at a minimum, the maneuvers and tasks contained in section 10 of the appendix. Upon successful completion of the demonstration of proficiency conducted in the FFS, the person administering the demonstration of proficiency may endorse the applicant to act as PIC to accomplish the demonstration flight with an authorized instructor on board. This endorsement will only be valid for 90 days from the day the demonstration of proficiency conducted in the FFS was successfully completed.¹⁵³ The demonstration flight conducted in the aircraft must consist of at least the maneuvers and procedures as outlined in section 10 of the appendix because the applicant will have already demonstrated base proficiency in the original cycle of proficiency demonstration and have experienced a refresher through the demonstration of proficiency in an FFS. If the applicant does not successfully complete the demonstration flight within 90 days from the day the demonstration of proficiency in the FFS was completed, then the cycle would start over again with the applicant completing another demonstration of proficiency in the FFS. In this specific scenario (*i.e.*, an expired solo endorsement) the FAA finds that another aircraft familiarity flight should not be a requirement after a demonstration of proficiency in the FFS because the applicant would already

¹⁴⁹ § 194.216(a).

¹⁵⁰ § 194.216(b).

¹⁵¹ By virtue of being the sole occupant in the powered-lift, the applicant would be the pilot in command of the powered-lift in flight. § 61.51(e)(1)(ii).

¹⁵² The FAA expects that a certificate holder will detail these maneuvers and procedures in the appropriate module or lesson for their submission when seeking approval of their approved training program incorporating this new method of training.

¹⁵³ This is similar to the original linear process of demonstration of proficiency in the FFS, aircraft familiarity flight, and demonstration flight, except the applicant will not be required to complete another aircraft familiarity flight and both demonstrations may be abbreviated in their content.

have some operational experience in the aircraft through, first, the original aircraft familiarity flight and, second, the original demonstration flight where the applicant demonstrated the applicable maneuvers and tasks to a person authorized to administer the demonstration flight. However, this does not preclude an instructor or a training program from requiring another aircraft familiarity flight if the training program or instructor determines it necessary in the interest of safety. Upon successful completion of the demonstration flight, the person who administered the demonstration flight may endorse the applicant to act as PIC of the powered-lift in solo flight, subject to any conditions and limitations the instructor believes are warranted. This endorsement will be valid for no more than 90 days from the day the demonstration flight is successfully completed.

For example, an applicant successfully completes the FFS check on January 1, 2025, and the applicant then completes the aircraft familiarity flight on January 15, 2025. Immediately following the aircraft familiarity flight, the applicant receives the endorsement for 90 days to complete the demonstration flight, which will expire no more than 90 days from the date of the FFS check. To reiterate, the reason the 90 days begins on the date of the FFS check is because it is the date upon which the applicant has last demonstrated proficiency in the aircraft, as the applicant is just observing another pilot during the aircraft familiarity flight. Therefore, the person has 90 days from January 1, 2025, to complete their demonstration flight (*i.e.*, the applicant acts as PIC while an authorized instructor observes). After the person satisfactorily completes their demonstration flight, the applicant will receive another endorsement by the authorized instructor to act as PIC on a solo flight even though the pilot is not appropriately rated.

This endorsement starts a new 90-day clock to complete the solo flight time requirements. Thus, suppose the applicant successfully completes the demonstration flight on February 1, 2025, and receives the endorsement to facilitate the solo flights. On April 25, 2025, the applicant realizes that completing the solo flights before May 2, 2025, (90 days from February 1, 2025) is unattainable. The applicant may complete an abbreviated demonstration flight with an authorized instructor, to include the maneuvers and tasks set forth by section 10. of the appendix because the original 90 days has not expired. The applicant will then receive

another 90-day endorsement to complete the solo flights. Conversely, suppose the applicant does not complete the solo flights before May 2, 2025, and realizes such on May 10, 2025. The applicant will be required to successfully complete both an abbreviated demonstration of proficiency in an FFS, successful completion of which will result in a 90-day endorsement for the demonstration flight, and after successful completion of an abbreviated demonstration flight, the applicant will receive a 90-day endorsement for solo flight.

Practical Test

After the applicant completes all required training, experience, and solo flight under the training program, the applicant will then complete the appropriate practical test(s). First, under § 61.129(e)(3)(iv),¹⁵⁴ to apply for a commercial pilot certificate with a powered-lift category rating, a person must complete three hours of training on the areas of operation listed in § 61.127(b) in a powered-lift with an authorized instructor in preparation for the practical test within the preceding two calendar months from the month of the practical test. Under new section 7.(a) of the appendix, a person may complete this training in a Level C or higher FFS. The FAA notes that it is possible a person could complete the full training program in a timeline that would allow the crediting of the FFS training in this new section to meet the requirements of both § 61.129(e)(3)(iv) and section 7.(a). In other words, if the training program in section 4 of the appendix is completed within the preceding two calendar months, the activity could be counted for purposes of both the 20 hours of flight training and the three hours of practical test preparation. If the applicant does not have the three hours of training in preparation for the practical test within the preceding two calendar months from the month of the test, the applicant

would be required to receive the required number of hours of instruction in an FFS to meet that three-hour requirement.

Section 61.45(e) permits the use of an aircraft with single controls to be used for a practical test if certain provisions are met. Specifically, the examiner must agree to conduct the test in the aircraft with a single set of controls and the examiner must be in a position to observe the proficiency of the applicant. Additionally, § 61.45(e)(2) bars a test involving a demonstration of instrument skills from being conducted in an aircraft with single controls. Although using the single control aircraft to conduct the practical test is a theoretically viable option, the demonstration of instrument skills (as required by the instrument-powered-lift rating practical test and other discrete tasks that will be on the powered-lift category and type tests, such as a precision and missed approach) could not be accomplished in that aircraft, thus requiring the use of the FFS to demonstrate instrument skills, resulting in an SOE limitation, as subsequently discussed. When developing the practical test, as is typical practice, the examiner must ensure that the practical test meets the requirements of § 61.43, thereby encompassing all the tasks and maneuvers in the applicable Airman Certification Standards.¹⁵⁵ However, since the practical test consists of tasks required for the issuance of the three ratings, if there is a duplication of a task, only a single demonstration of that task on the practical test is acceptable if the task is performed at the highest standard.

As previously discussed in this section, when an applicant for a certificate or rating uses an FSTD for any portion of the practical test and does not meet certain experience requirements set forth in § 61.64, the applicant's certificate will be issued with a PIC limitation.¹⁵⁶ Under § 61.64(g), the person may remove the limitation when the person performs 25 hours of flight time in the aircraft category, class, and type under the direct observation of the fully qualified PIC.¹⁵⁷ However, the FAA finds this

¹⁵⁴ The FAA notes specific stipulations to part 194 were necessary to ensure the requirements in § 61.129(e)(3)(iv) were attainable by the groups of pilots under the adoption of this SFAR (*e.g.*, instructor pilots, test pilots, FAA test pilots, FAA ASIs, and initial cadres of flight instructors). Therefore, the provisions in §§ 194.217(b)(2), 194.219(b)(2), and 194.221(b)(2) as adopted in this final rule provide parameters under which these pilot groups receive the necessary flight training toward the practical test. As described in section V.D.3.ii. of this preamble, the FAA notes all relative flight training requirements in parts 61 and 194 are still applicable to pilots receiving training under this appendix. Therefore, the FAA did not deem it necessary to add provisions in paragraph 7 concerning the training in preparation for the practical test, because these provisions would already be applicable under the sections listed or § 61.129(e)(3)(iv).

¹⁵⁵ See section XVI.

¹⁵⁶ Section 61.64(f). Section V.E.1. of this preamble discusses the amendments adopted in this final rule to § 61.64(e), where a person would not be required to have a limitation on their certificate if the person has 500 hours of flight time in the type of powered-lift for which the rating is sought.

¹⁵⁷ Section 61.64(g). The pilot must also log each flight and the PIC who observed the flight must testify in writing to each flight. Additionally, the pilot must obtain the flight time while performing the duties of PIC.

limitation would not permit a pilot to conduct supervised operating experience for a powered-lift with single controls and a single pilot station because the PIC limitation would restrict the pilot from operating the only set of controls (*i.e.*, acting as PIC). Therefore, to mirror the typical part 61 training and testing regime, new section 7.(b), will require that a person who uses an FSTD for any portion of the practical test in accordance with § 61.64(a) after training in accordance with the appendix will receive a limitation stating the certificate is subject to certain PIC limitations and will be restricted from the carriage of persons or property other than necessary for the conduct of the flight.¹⁵⁸ Additionally, the carriage of property for compensation or hire is not permitted, but the carriage of property under part 91 would be permitted, such as company materials. The FAA notes that if a pilot met the experience requirements of § 61.64(e), as adopted herein and subsequently discussed, the person would not receive the limitation on their certificate.¹⁵⁹

Under new section 7.(c), the limitation may be removed from the pilot certificate by meeting the requirements set forth in section 8. of the appendix, which prescribes the requirements for supervised operating experience for a powered-lift with single controls and a single pilot station mirroring that of § 61.64(g).

Supervised Operating Experience for a Powered-Lift With Single Controls and Single Pilot Station

The PIC limitation that the pilot receives under the alternate framework of the appendix functions to restrict the carriage of persons or property on board the aircraft, other than necessary for the conduct of the flight while under the observation of a pilot who holds a category and type rating without limitations for that powered-lift. In practical terms, this would occur while a pilot who holds a PIC limitation is carrying another pilot while conducting supervised operating experience. In such scenarios, the pilot with the PIC limitation can carry persons or property

because it would be necessary for the flight's operation (*i.e.*, for obtaining SOE). As previously discussed, under § 61.64, a person receives a similar limitation under § 61.64(f), and § 61.64(g) provides an avenue to remove the PIC limitation by completing certain SOE. This final rule applies the same concept in section 8.(a) of the appendix. As discussed, an FFS cannot fully replicate the operational experience that the actual flight environment provides to a pilot, which requires the pilot to operate the powered-lift while simultaneously making decisions, communicating with ATC, and interacting with other aircraft. Because the pilot will have attained all flight training in the FFS, the FAA finds that a certain degree of in-flight experience is necessary before the pilot may conduct commercial operations involving the carriage of persons or property (*e.g.*, part 135 operations).

To remove the limitation, under new section 8(a), an applicant seeking a powered-lift category rating, instrument-powered-lift rating, and powered-lift type rating will be required to perform 10 hours of flight time in an aircraft of category and type for which the limitation applies under the observation of a pilot who holds a category and type rating without limitations for that powered-lift. The FAA notes this is a reduction from the requirements of § 61.64(g)(1), which requires 25 hours of SOE under the direct observation of the pilot in command who holds a category, class, and type rating, without limitations, for the aircraft. When setting the flight time requirement for SOE under this alternative, the FAA considered that the applicant will have been previously exposed to operating the powered-lift in the NAS while completing the training segment requirements through multiple flights atypical to the traditional training regime (*e.g.*, aircraft familiarity flight, the demonstration flight). Additionally, during the applicant's solo flight segments, they will have attained a minimum of 20 hours of PIC while conducting maneuvers, procedures, and cross-country flights as the sole occupant of the aircraft, rather than the option in § 61.129(e)(4), which permits the 10 hours of flight time to occur with an authorized instructor on board while performing the duties of PIC.

To ensure the pilot is proficient in specific key flight regimes that were fully trained and tested in the simulator rather than the actual flight environment, the FAA finds it necessary to require certain elements within the SOE. Specifically, the FAA will require a cross-country flight to be conducted

during SOE as stipulated in new section 8.(b). Although the applicant will have gained an ability to conduct IFR procedures in the specific powered-lift type while conducting the cross-country requirements of § 194.235 in an FFS, the applicant will benefit from the additional experience of interacting with ATC that cannot be fully duplicated due to the sterile nature of the simulator environment, such as interactions with ATC, other aircraft, and the full flight environment, which all can be unpredictable. The presence of a fully qualified pilot supervising this cross-country flight will facilitate the fully qualified pilot to provide feedback or guidance on the PIC's proficiency in cross-country elements in the actual flight environment. Therefore, this cross-country flight will mirror the requirements of § 194.235. This cross-country flight must be on an IFR flight plan, consist of a flight of 100 nautical miles along airways or by directed routing from an air traffic control facility,¹⁶⁰ consist of an instrument approach at each airport, and involve three different kinds of approaches with the use of navigation systems.¹⁶¹ Since there is only a single set of controls and a single pilot station, the applicant cannot conduct any portion of this flight with a view limiting device.

Deviation for Level C or Higher Full Flight Simulator

Many commenters discussed the use of novel technology (*e.g.*, virtual reality (VR), extended reality (XR), and mixed reality (MR) systems) in simulation that could be used as a replacement for in-aircraft flight training. However, those technological advancements have not yet been demonstrated to the FAA to ensure those novel technologies provide a level of fidelity equivalent to that which is currently applicable for a Level C FFS or higher qualification for any aircraft. However, the FAA recognizes that during the ten-year period of the SFAR, technological advancements might be developed and perfected, thus enabling the use of new technology to replicate the level of fidelity required for simulation to effectively replace all

¹⁵⁸ Because flight time must be under the observation of another fully rated pilot, but the fully rated pilot would not be at the controls (and, therefore, unable to act as PIC), the FAA cannot restrict all persons from being on board the aircraft. The observing pilot would be considered as necessary for conduct of the flight.

¹⁵⁹ The FAA expects the majority of test pilots and instructor pilots to meet § 61.64(e) with the comprehensive flight time they will accrue by virtue of the professional duties, which would springboard the first cadre of fully rated pilots to observe the flight activities in the appendix.

¹⁶⁰ As discussed in the NPRM, the FAA considers cross-country experience as a foundational set of skills that is necessary for a pilot in a powered-lift. At the time of this final rule, the FAA evaluated certification project and the ranges that were reported to the FAA. The FAA is retaining this experience requirement and notes that a powered-lift capable of performing this cross-country flight must be used for issuance of an initial category rating.

¹⁶¹ The FAA notes that this cross-country flight may be credited to the overall 10 hours of flight time set forth in section 8.(a) of the appendix and is not a mutually exclusive requirement in addition to the 10 hours.

in-aircraft flight training. Currently, this level of fidelity is only attainable in a Level C or higher FFS.¹⁶² If such technological advancements occur, and in order to be proactive and agile, section 9. of the appendix will facilitate deviation authority to enable training to be conducted in the new technology simulation device. Therefore, to authorize a deviation from the simulator qualification requirements in section 4. of the appendix, the Administrator must determine that the alternative training device is of adequate fidelity to be used as a substitution for in-aircraft flight training, and the effectiveness and objectives of the training program can be met utilizing the alternative training device.

The FAA notes the deviation authority is only applicable to the level of fidelity necessary to replace flight training in the aircraft and, therefore, is only applicable to the FFS training for powered-lift with single functioning controls and a single pilot station alternative permitted under appendix A. For a deviation, the FAA currently provides direction on how to submit a deviation to the Administrator through policy in FAA Order 8900.1.¹⁶³ The applicant must submit an application in writing and detail the specific regulatory section from which a deviation is requested, include the specific reasons for why the deviation is requested, demonstrate how an equivalent level of safety will be maintained, and any other information requested by the FAA based on the rule in which deviation is sought and the complexity of the operation to which the deviation would apply. The FAA sees that an evaluation of fidelity is critical to ensure the flight training environment is adequately replicated because this training device is replacing actual experience gained in flight.

iii. Alternate Three: Deviation Authority

While the FAA finds the two preceding options will facilitate opportunities for pilots to obtain powered-lift ratings in powered-lift that are not equipped with a full set of dual controls, the FAA acknowledges the potential development of technological advancements that could further enable flight training in a powered-lift equipped with single flight controls and a single pilot station. Specifically, these technological advancements may sufficiently facilitate flight training for

powered-lift ratings but may not fit squarely into the frameworks set forth by new § 194.253(a) or (b). Such technological alternatives have not yet been demonstrated or validated at a level or with sufficient reliability that would be required to replace dual controls and two pilot stations in a powered-lift used for flight training. As such, permanent changes to the regulations are not appropriate at this time. However, given feedback from commenters, the FAA recognizes that during the ten-year period of the SFAR, current technological advancements could be perfected and integrated into the training footprint, including technologies not yet envisioned. To encourage innovation and provide a pathway for technological advancements that could achieve an equivalent level of safety as the purpose of §§ 91.109(a) and 61.195(g), the FAA will adopt deviation authority as a third alternative to allow for flight training in a powered-lift equipped with a single set of fully functioning controls to be used for flight training.

First, this deviation authority will be limited to powered-lift equipped with a single set of fully functioning controls in an approved training program under part 135, 141, or 142. As previously discussed, programs under these parts have a higher level of FAA oversight than training that is conducted outside of an FAA-approved training program (*i.e.*, through part 61). Additionally, this oversight provides the FAA the opportunity to ensure the quality of the training is maintained. It also allows the training provider and the FAA to gather data and monitor trends after approval of a novel system to be used in lieu of dual controls. In turn, this enables quicker detection and more responsive actions to correct deficiencies when those novel systems are used.

When the training provider applies for a deviation to utilize a new technology or flight training plan to replace dual controls in a powered-lift used for flight training, the plan of action must incorporate characteristics that provide an equivalent level of safety that meets or exceeds the safety margin currently provided by a second set of controls in the same or similar powered-lift used for flight training. Flight training carries a higher risk compared to many other forms of flight operations because the maneuvers being taught may require the aircraft to be flown, for example, close to the ground, in a high-traffic environment, or at the limits of aircraft performance. Compounding these factors, powered-lift is new to flight operations outside of the military, and training in powered-

lift is currently non-existent outside of the military. Flight training requires an instructor to be actively engaged in how the applicant is operating the powered-lift, to see and be aware of the flying environment, including other nearby aircraft, weather, terrain, class of airspace, etc., and all while providing high-quality instruction. Since, during flight instruction, the applicant is not rated or is inexperienced in an aircraft the responsibility for making the immediate corrective action falls on the person providing the flight instruction.

Other than the flying skills necessary to make those corrective actions, recognition, and ability to make corrective actions are required. One important recognition factor to take into consideration for a system in lieu of a dual control aircraft, is that the instructor has the same visual cues available to them as the person flying the aircraft from their pilot station. This includes the field of view outside of the aircraft as well as inside the aircraft, to include the instrumentation and controls. This provides the instructor with the visual cues so they can determine if intervention is required. When intervention is required, the instructor must be able to take immediate corrective action and full control of the powered-lift to prevent a mishap. In addition, to provide effective instruction and timely and correct intervention, the FAA and the people using the technology needs to consider and understand how the advanced technology works and what its limitations are. Therefore, in the preceding example, the Administrator would consider the level of field of view the flight instructor will have outside the aircraft, as well as the one inside aircraft, including instruments and flight controls while conducting flight training.

Another key element the Administrator will consider in granting deviation authority includes that the flight training and supervised operating experience requirements that can be effectively conducted using the system in place of dual controls installed on the aircraft. Although the system may provide the instructor or the pilot observing SOE with the required visual cues and the ability to take control of the powered-lift, effective flight instruction or SOE might not be possible, especially when considering all the maneuvers that can be required for flight training or any limitations of the system replacing the requirement for dual flight controls. Additionally, the instructor or pilot observing SOE would need the ability to see outside the aircraft what is normally visible from

¹⁶² Level C FFS technical standards are defined in part 60 under Appendix A (airplanes) and Appendix C (helicopters), See 14 CFR part 60 Appendices A and C.

¹⁶³ FAA Order 8900.1 Volume 3, Chapter 2, Section 1, paragraph 3–41.

the pilot station, thereby enabling them to intervene or provide guidance when appropriate. It would logically follow, that if the instructor had no way to observe the student's performance or what should be visible from a pilot station in the aircraft, they could not provide effective training or supervision. Continued effectiveness of the training provided under this deviation, and monitoring of such, also justifies why this deviation may only be granted to FAA approved training programs under part 135, 141, or 142. The additional FAA oversight will recognize deficiencies with a training program's system and require corrective actions to continue to use the system permitted by the deviation.

Therefore, the FAA adopts in this final rule a third option to facilitate the use of technological advancements that would replace the requirement for fully functioning dual controls when conducting flight training. Under § 194.253(c), the training provider under part 135, 141, or 142 must demonstrate certain elements, as subsequently discussed, in a form and manner acceptable to the Administrator. As discussed in section V.D.3.ii. of this preamble, the FAA currently provides direction on how an applicant must submit an application for a deviation.¹⁶⁴ During review of the deviation request, the FAA may request more information from the applicant to assist the FAA in determining if granting the deviation is warranted. Additionally, the applicant can provide revised information as necessary to address any deficiencies noted by the applicant or the FAA. Upon approval, the FAA will issue the certificate holder under part 135, 141, or 142 paragraph A005 detailing the deviations approval as is currently done today. Additionally, as this technology evolves or the need for deviation further emerges, the FAA will update guidance as necessary.

The first provision of § 194.253(c) allows for a deviation to be made to §§ 91.109 and 61.195 that considers the ratings held by the pilot and the certificate holder's approval of a course of training that incorporates factors that would provide for an equivalent level of safety and afford for an instructor to immediately take control of the aircraft

and recover from an unsafe condition. Therefore, § 194.253(c)(1) will require the certificate holder to demonstrate in a form and manner acceptable to the Administrator that the person providing flight training and the PIC observing any applicable SOE can take immediate corrective action and full control of the powered-lift and that the flight training and any applicable SOE can be effectively conducted in the powered-lift. Additionally, under § 194.253(c)(2), the alternate flight training and applicable SOE may not adversely affect safety. This demonstration could be done through a flight training versus solo complement, or even the development of a certificated system that would provide for an instructor to take control of the aircraft remotely. The FAA will not set strict parameters around this operational capability to allow for innovation that meets the safety intent of the existing sections requiring dual pilot stations with dual controls for flight training or SOE. The FAA notes that this provision is only applicable to operators of a powered-lift and only for the purposes of an initial cadre of pilots. The strict approvals provided by parts 135, 141, and 142 would act as a safety mechanism by providing oversight to supplement the equivalent level of safety determination. Specifically, the deviation will be approved through the use of the operator's operations specifications issued by the FAA.

Under § 194.253(c)(3), the Administrator may cancel or amend a letter of deviation authority at any time the Administrator determines that the requirements of section 9 of appendix A are not met, or if such action is necessary in the interest of safety. Given the novel approach underpinning a deviation, it is especially important for the FAA to be able to require changes or rescind deviations upon a determination that the new approach results in safety concerns. In the case of a rescission, training in a powered-lift with single controls will need to proceed under another available regulatory avenue.

E. Supervised Operating Experience of § 61.64

1. Amendment to § 61.64(e)

Section 61.64 addresses the use and limitations of FFSs and FTDs for training or any portion of a practical test for certificates and ratings, including aircraft type ratings. Specifically, under § 61.64, an applicant for an aircraft type rating may accomplish the entire practical test (except for the preflight inspection) in a Level C or higher FFS.

To ensure the applicant has sufficient experience operating the aircraft prior to serving as PIC, an applicant must satisfy certain aeronautical experience requirements set forth in § 61.64(b) through (e), as appropriate to the type rating sought. If the applicant meets one of the aeronautical experience requirements, then the applicant receives a type rating without limitation. If an applicant does not meet one of these requirements, the applicant receives a PIC limitation on their certificate in accordance with § 61.64(f)(2).¹⁶⁵ The limitation may be removed from the certificate upon completion of the SOE requirement set forth in § 61.64(g): 25 hours of flight time while performing the duties of PIC in an aircraft of the category, class, and type for which the limitation applies under the direct observation of a qualified PIC who holds the appropriate ratings, without limitations, for the aircraft.

As discussed in the NPRM,¹⁶⁶ the FAA evaluated whether the requirements in § 61.64 would adequately implement the operation of powered-lift into the NAS. As it pertains to powered-lift, an applicant may accomplish the entire practical test for a powered-lift type rating in a Level C or higher FFS and obtain the powered-lift type rating without a PIC limitation on their pilot certificate if the applicant satisfies one of the experience requirements set forth in § 61.64(e). These options include: (1) hold a type rating in a powered-lift without an SOE limitation; (2) have been appointed by the U.S. Armed Forces as PIC of a powered-lift; (3) have 500 hours of flight time in the type of powered-lift for which the rating is sought; or (4) have 1,000 hours of flight time in two different types of powered-lift. Upon comparing the experience requirements for powered-lift type rating applicants in § 61.64(e) to those experience requirements for airplane and helicopter type rating applicants in § 61.64(b), (c), and (d), the FAA determined during the development of the NPRM that the category-specific experience requirements for powered-lift type ratings in § 61.64(e)(1), (2), and (4) do not achieve the same objective as the class-specific experience requirements for airplane and helicopter type ratings in § 61.64(b)(1) through (3); (c)(1)

¹⁶⁴ See FAA Order 8900.1 Volume 3, Chapter 2, Section 1, paragraph 3–41, which details that the request must be in writing, with the specific regulatory section from which a deviation is requested detailed, and include: the specific reasons for why the deviation is requested, how an equivalent level of safety will be maintained, and any other information requested by the FAA based on the rule in which deviation is sought and the complexity of the operation to which the deviation would apply.

¹⁶⁵ An applicant would not receive the limitation if the completed tasks of preflight inspection, normal takeoff, normal instrument landing system approach, missed approach, and normal landing on the practical test in an aircraft appropriate to the category, class, and type for the rating sought, pursuant to § 61.64(f)(1).

¹⁶⁶ 88 FR 38946 at 38962 (June 14, 2023).

through (3); and (d)(1), (2), and (4). Therefore, the FAA proposed the removal of § 61.63(e)(1), (2), and (4).

However, the FAA proposed to retain § 61.64(e)(3), 500 hours of flight time in the type of powered-lift for which the rating is sought,¹⁶⁷ consolidated into § 61.64(e) and adopts the provision as proposed.¹⁶⁸ Powered-lift type rating applicants who do not use a powered-lift during the practical test and do not satisfy proposed § 61.64(e) (current § 61.64(e)(3)) will be required to accomplish SOE in the type of powered-lift for which they obtain a type rating, pursuant to § 61.64(g). Pursuant to § 61.64(g)(2), the SOE must be under the direct observation of the PIC who holds the category, class,¹⁶⁹ and type ratings, without limitations, for that aircraft (as it applies to a powered-lift, a powered-lift category rating and a type rating). The alternate pathways adopted by this final rule will enable persons to obtain powered-lift ratings without a limitation on their commercial pilot certificates by training and testing in a powered-lift, therefore creating the initial cadre of qualified PICs to directly observe SOE.

As previously stated, because the applicant would have a limitation on their pilot certificate that prohibits the applicant from serving as PIC in an aircraft of that type, the applicant is not acting as PIC of the aircraft during the SOE. Rather, the qualified PIC is observing the applicant performing the duties of PIC and is the only person who is directly responsible for and final authority as to the operation of the aircraft.¹⁷⁰ Therefore, while SOE is not considered flight training so as to require dual controls by § 91.109(a), the supervising PIC must have access to controls in the aircraft to fulfill their responsibility to maintain direct responsibility for the operation and safety of the flight. The FAA explained in the NPRM that each powered-lift

would be required to have a version of the aircraft that contains fully functioning dual controls, consistent with those expectations for flight training in airplanes and helicopters that require a type rating. Additionally, the FAA acknowledged a movement toward Simplified Vehicle Operations (SVO) whereby automation coupled with human factors best practices may reduce the quantity of skill and knowledge training that a pilot must acquire¹⁷¹ as an alternate way to perform SOE in a powered-lift with single controls and a single pilot station.

2. Alternate Requirement for Powered-Lift Without Fully Functioning Dual Controls Used in Supervised Operating Experience When Adding a Type Rating

The FAA continues to lack sufficient operational data to analyze and implement the use of the SVO technology that was noted in the NPRM. Without this information, it is not possible to codify permanent relief enabling SOE on an aircraft without dual functioning controls. However, as previously discussed, the FAA invited public comment specifically pertaining to how an applicant would meet the SOE requirements with a single set of flight controls in a powered-lift. ALPA generally agreed with the provisions of the proposal that rely on the use of an FFS¹⁷² and that the pilot would receive a limitation on the grounds that SOE would ensure the pilot has adequate experience and competence operating the powered-lift in the actual flight environment.

GAMA, NBAA, CAE, Eve, Joby, and L3Harris provided comments specifically pertaining to this question. Generally, commenters reasoned that SOE should only apply to newly rated PICs to ensure they are acclimated with performing PIC duties, not necessarily PICs who've already obtained PIC experience through the SFAR prerequisite ratings. GAMA, Joby,¹⁷³ and Eve asserted that SOE is not

mandatory for obtaining a type rating, even when the aircraft is equipped with a single set of controls. Specifically, commenters stated that SOE is not required when the five checking points of § 61.64(f)(1) can be assessed in aircraft with single controls at the examiner's discretion under § 61.45(e). Archer expressed the lack of need for SOE, stating that the FAA's purpose of SOE to ensure applicants have sufficient experience operating the powered-lift for which the type rating is sought in the actual flight environment prior to acting as PIC of the aircraft for the first time in the NAS is met through the "other requirements"¹⁷⁴ the FAA is levying on pilots seeking a category and type rating.

The FAA notes that the five checking points of § 61.64(f)(1) that commenters refer to are: (1) preflight inspection, (2) normal takeoff, (3) normal instrument landing system approach, (4) missed approach, and (5) normal landing. The FAA agrees with the commenters that SOE is not required if the applicant completes these five checking points in the aircraft because the person's certificate would not be issued with a limitation. However, if the entirety of the practical test is completed in the FSTD or if the applicant completes one of the checking points in the FSTD, it follows that the certificate would receive a PIC limitation pursuant to § 61.64(f)(2), unless the person meets one of the experience requirements set forth by § 61.64(b) through (e), as applicable. In that scenario, the PIC limitation may be removed by completing SOE pursuant to § 61.64(g).

Additionally, the FAA agrees with Archer that the purpose of SOE is to ensure applicants have sufficient experience in the aircraft in the NAS and actual operating environment that the PIC would operate within. However, the FAA does not agree that SOE is entirely unnecessary on the basis of "other requirements" that the FAA proposed in the NPRM or that SOE should only apply to initial PICs in the NAS. When SOE is required, the FAA does not give latitude based on the pilot's experience in other categories of aircraft. Therefore, the FAA is not requiring anything more than is already required for a pilot when adding a different category or type to their existing certificate. If Archer refers to the prerequisites proposed in

¹⁶⁷ While the FAA acknowledges that there are currently no type-certificated powered-lift, developmental and certification flight tests, which are conducted in accordance with an experimental certificate to the aircraft and authorization to the manufacturer's test pilots, could be credited toward the pilot's 500 hours of flight time in the type of powered-lift for which a rating is sought.

¹⁶⁸ The FAA also proposed to make a conforming amendment to § 61.64(f) technical in nature that would replace the cross reference to § 61.64(e)(1) through (4) to only referencing paragraph (e).

¹⁶⁹ As discussed in section V.D.3.ii. of this preamble, this final rule adopts certain miscellaneous amendments to make clear that regulatory references to class throughout part 61 are only appropriate if the regulations require classes for that category of aircraft. These miscellaneous amendments include § 61.64(g)(1).

¹⁷⁰ Section 91.3(a). See also 14 CFR 1.1, which provides the PIC has final authority and responsibility for the operation and safety of the flight.

¹⁷¹ GAMA, *A Rationale Construct for Simplified Vehicle Operations (SVO)*, (May 20, 2019).

¹⁷² ALPA also supported the use of the highest fidelity devices (e.g., an FFS with six degrees of motion) to ensure the appropriate level of aerodynamic modeling. This preamble discusses the FAA's FTSD position(s) in section IV.C of this preamble.

¹⁷³ Joby additionally recommended to remove the instrument requirements in the five checking points to be conducted in the aircraft. The FAA does not agree with Joby recommendation as this fundamental testing element minimally ensures a pilot can operate an aircraft in IFR conditions if necessary. As further discussed in section V.A. of this preamble, a pilot operating a powered-lift could be subject to inadvertent IMC, where a pilot must hold the requisite skills to operate an aircraft in IMC conditions.

¹⁷⁴ The FAA quotes Archer's phrasing here as the FAA is unsure what other requirements the FAA proposed to impose outside of the traditional airman certification framework that Archer intends to refer to. While the FAA proposed alternate requirements, the FAA finds these requirements are relieving rather than additional.

§ 194.215(a) (*i.e.*, a commercial pilot certificate with at least an airplane category and single- or multiengine class rating or a rotorcraft category and helicopter class rating, and the corresponding instrument rating), the FAA finds that this would not ensure that a pilot possesses sufficient operating experience in the actual flight environment specific to the powered-lift. As discussed in section V.G.1 of this preamble, pilot proficiency does not exactly translate from category to category. While the pilot may have a plethora of PIC experience in the NAS in an airplane or helicopter, training and testing in a simulated environment necessitates operating experience specific to the powered-lift itself.

Several commenters suggested alternatives to SOE. GAMA stated that the FAA does not need to grant a blanket authorization for SOE in single control aircraft. Rather, GAMA suggested two alternatives to ensure an equivalent level of safety and oversight. First, GAMA suggested amending the SOE regulations to include an alternate operation “as authorized by the Administrator” through a letter of authorization (LOA). Second, GAMA suggested the FAA make a determination during the FSB process as to whether the manufacturer demonstrates operational suitability and reduced pilot skill and knowledge required for safe operation such that pilots may be exempt from SOE or be authorized to conduct SOE virtually. Similarly, other commenters, such as L3Harris and Eve, suggested leveraging the FSB process to determine if a combination of SOE in an FSTD and scenario-based training (SBT), exposing the pilot to in-flight situations (*i.e.*, situational awareness, workload management, communication, decision making) in lieu of SOE would meet an equivalent level of safety. Further, NBAA recommended utilizing the FSB process for a determination as to whether supervised line flying (SLF), as defined in AC 120–53,¹⁷⁵ could be used as a post-qualification in lieu of SOE. Eve suggested utilizing line operational simulations, line-oriented flight training (LOFT), special purpose operational training (SPOT), and line operational evaluations (LOE) to comply with

operating experience requirements in single pilot operations.

The FAA finds the use of limitations and a broad overarching “determination” would be arbitrary thereby not providing uniform expectations of manufacturers regarding the required pilot skill and knowledge for safe operation of an aircraft. The FAA would also not be able to broadly apply this relief to the manufacturer since the relief itself would be applicable to an individual pilot who has trained and tested entirely in the simulator. Further, the FAA does not agree with the feasibility of utilizing the FSB process to determine if SOE would not be required or reduced for a pilot operating a specific powered-lift. The FAA does not currently permit the FSB process to determine under what conditions SOE is required or could be reduced; a change of this nature would be a global change affecting all aircraft, which is out of the scope of this rulemaking, especially without any data or rationale to support safety considerations.

The FAA does not agree with L3Harris and EVE’s suggestions to combine SOE with aircraft and FSTD experience. As discussed previously in this section, the FAA maintains its position that SOE is only valid when conducted in an aircraft due to the unique characteristics in the actual operating environment that the FFS inherently cannot replicate.

The FAA also disagrees with NBAA and other commenters that suggest SLF is an adequate replacement to SOE. Powered-lift are coming to the civilian market for the first time and the only pilots with powered-lift experience in the NAS are military pilots and test pilots. Therefore, while applicants for a powered-lift type rating may accomplish their training and testing in FFS under an approved training program, the FAA has determined that applicants must have sufficient experience operating the powered-lift for which a type rating is sought as is the case for other categories of aircraft. As discussed further in section V.E.2 of this preamble, the FAA sees that the contents of AC 120–53 in regard to supervised line flying would not be applicable in this scenario especially in a standalone context with reference to § 61.64. Section 61.64 is applicable to every pilot receiving a rating, while supervised line flying is only a consideration when talking in terms of an air carrier’s approval of a training program. Powered-lift could benefit from supervised line flying if such is deemed necessary through an FSB but utilizing those standalone part 61 requirements would not be

appropriate. Initially, the SFAR enables certificate holders certain flexibility when considering receiving a pilot certificate under part 61 through training conducted under parts 135, 141, and 142.

However, in consideration of commenters’ general positions and this final rule’s facilitation of flight training in powered-lift with a single set of controls and single pilot seat, the FAA finds that it is appropriate to extend certain relief in the context of SOE as well. Pilots who already possess a powered-lift category and instrument rating and are only adding a powered-lift type rating to their certificate would be able to utilize regulatory pathways already provided in part 61 for training and testing in an FSTD. Specifically, as is currently applicable to airplanes and helicopters requiring the applicant to hold a type rating, even if those aircraft were equipped with a single functioning flight control and single pilot station, the type rating could be wholly accomplishable in a Level C FFS or higher per § 61.63(d) and § 61.64. However, after accomplishing the practical test for a type rating entirely in the simulator, the person would receive a limitation on their certificate with PIC restrictions, but the pilot observing the SOE would need to be onboard the aircraft from an observing position. Therefore, the FAA adopts new § 194.255, which will contain the alternate requirements for powered-lift without fully functioning dual controls used in supervised operating experience when adding a type rating.

New § 194.255 largely mirrors current § 61.64(f) and (g), with minor revisions to account for the inherent limitations of a single controls and single pilot station aircraft. Notwithstanding the limitation prescribed in § 61.64(f), a person who does not meet the requirements of § 61.64(e)¹⁷⁶ will receive a limitation on the certificate restricting the person from operating the powered-lift type from carrying any person or property on the aircraft, other than necessary for the purpose of the narrowly tailored parameters of SOE (see § 194.255(a)). New § 194.255(b) sets forth the removal requirements, which mirror § 61.64(g). Finally, under new § 194.255(c), the observing pilot will be required to have unobstructed visual sight of the controls and instrumentation.

¹⁷⁵ Supervised line flying is defined under AC120–53 as amended, is associated with the introduction of equipment or procedures requiring post-qualification skill enhancement during which a pilot occupies a specific pilot position and performs particular assigned duties for that pilot position under the supervision of a qualified company check airman.

¹⁷⁶ In other words, a person who has 500 hours of flight time in the specific type of powered-lift would not receive a limitation on their certificate warranting SOE.

F. Establishment of an Alternate Pathway for Pilot Certification

The introduction of powered-lift as a new category of civil aircraft creates unique challenges for the training and certification of airmen. The traditional framework for a pilot follows an incremental path to build piloting skills through an iterative series of training activities with a flight instructor, accumulation of other flight experience, and successful completion of a practical test with an evaluator (*i.e.*, student pilot to private pilot to commercial pilot to ATP for part 121 and certain part 135 operations). Under this building block approach, a pilot must meet minimum aeronautical experience requirements at each certificate level which include total time and subsets of flight time like pilot-in-command time, night time, and cross-country time. In many instances, a portion of this time must be accomplished in the aircraft for the category rating sought.

However, as discussed in the NPRM, two predominant barriers exist in the introduction of powered-lift into civil operations.¹⁷⁷ First, the FAA does not anticipate that the initial powered-lift that obtain type certification will be broadly available for basic airman training and certification at the private pilot level. Rather, manufacturers intend to produce powered-lift for commercial purposes, meaning the initial pilots will be required to hold at least a commercial pilot certificate to act as required flightcrew members (*i.e.*, PIC or SIC) for compensation or hire. This situation disrupts the building block approach to flight training and certification which is customary for other categories of aircraft. Second, because there are no civil powered-lift, a person would have difficulty obtaining flight training due to the low numbers of qualified flight instructors who constitute a key foundation of the civil airman certification framework¹⁷⁸ and would not have the necessary flight time in a powered-lift to be eligible for a rating at the commercial pilot level.

To address these barriers without adversely affecting safety, the FAA proposed subpart B of part 194 to establish alternate pathways for pilots to obtain powered-lift ratings through alternate aeronautical experience

requirements and expanded logging provisions, while maintaining the general building block framework prescribed by part 61. Many commenters supported the FAA's general intention to create an alternate framework for powered-lift pilots in light of the aforementioned barriers to certification (*i.e.*, current lack of powered-lift in civilian operations and lack of powered-lift flight instructors). Specifically, several powered-lift manufacturers agreed that the part 61 framework is inadequate as applied to the integration of powered-lift in the NAS and expressed support for the concept of an alternate framework. Airlines for America agreed with the FAA's framework in encompassing the current building-block approach while also redefining the aeronautical experience requirements for powered-lift.

Alternate Approaches: Cycle-Based and Competency-Based

Commenters recommended different approaches to certificating powered-lift pilots and flight instructors than that proposed by the NPRM, which leveraged the building block approach with alternate requirements where necessary. One commenter expressed that the FAA's proposed alternate approach may be feasible as the industry matures, but that it is infeasible for initial powered-lift operations. Suggested alternatives included a competency-based approach and a cycle-based approach.

Archer proposed a cycle-based approach in lieu of part 61 certification, specifically in context of the alternate experience framework in general and cross-country alternate requirements, stating that the traditional hours-based training and experience does not account for the unique characteristics of powered-lift. Archer stated that the length of training requirements is impossible to achieve in some powered-lift, specifically providing the example of powered-lift exceeding helicopter minimum training times. Archer urged the FAA to contemplate a cycle-based approach to pilot training utilizing §§ 121.434 and 61.159(b) as a guide and recommended amending § 61.129(e)(2)(iii) to permit powered-lift pilots to substitute 10 operating cycles¹⁷⁹ for 10 hours of cross-country time.¹⁸⁰

¹⁷⁹ 14 CFR 121.431(b) defines an operating cycle as a complete flight segment consisting of a takeoff, climb, enroute portion, descent, and a landing.

¹⁸⁰ This preamble addresses Archer's comments pertaining to FSTD credit and cross-country time in sections V.D.2. and V.F.ii. of this preamble, respectively.

SAE International suggested developing pilot training criteria in accordance with ICAO Annex 1 focusing on a competence-based, performance-based approach to pilot training and certification, much like EASA member states do. The commenter believed a more competence-based approach will mitigate risk and provide well trained and qualified pilots and instructors without being prescriptive (hours based).

Similarly, Lilium proposed a competency-based approach to powered-lift certification rather than an hour requirement under the premise that some powered-lift will have limited endurance and range. Lilium stated that requiring in-flight hours will lead to an excessive number of "sorties,"¹⁸¹ ultimately escalating training costs without improving safety. Instead, Lilium recommended a framework where a pilot demonstrates specific skills relevant to the operation of a particular powered-lift established by the FSB because applicants will already be trained and qualified as commercial pilots (with an instrument rating). Lilium emphasized flying experience already held by a pilot against the powered-lift type rating specifics and the operational characteristics of powered-lift (*e.g.*, short duration flights with an emphasis on landings and takeoffs) whereby certification should be tailored to the representative conditions and maneuvers. GAMA echoed Archer and Lilium's recommendation, stating that because the SFAR applies to already-qualified commercial pilots with significant experience, the elevated prerequisites justify a competency and training-oriented curriculum rather than an hours-based approach. AWPC urged the FAA to consider flight hours required in a powered-lift that focus only on achieving the minimums required by §§ 61.65(f), 61.129(e)(3), and 61.129(e)(4), which are training oriented requirements instead of a prescriptive time building metric. AWPC also urged the FAA to leverage a training and through a competency-based approach in combination with passing a practical test to ATP certificate standards. Finally, SAE International supported a competency approach to training and certification.

The FAA declines to adopt a cycle-based approach or competency-

¹⁸¹ A sortie is a military aviation term typically used to describe the combat mission of a singular military aircraft. The FAA notes that there is no equivalent term in FAA regulations but understands the term in this situational context to refer to "training flights."

¹⁷⁷ 88 FR 38946 at 38965 (June 14, 2023).

¹⁷⁸ The FAA recognizes that the only pilots and flight instructors with powered-lift ratings are those obtained through the military competency provisions of § 61.73. While there are approximately 905 powered-lift pilots and 447 powered-lift flight instructors (as of January 2024) through this process to form an initial cadre, these numbers are likely insufficient to meet forthcoming demands.

approach in this final rule for the following reasons.

By referring to a cycle-based framework, the FAA understands commenters as meaning that operational cycles, as used in part 121, should be the model in which the FAA dictates experience requirements for applicants seeking a pilot certificate with powered-lift ratings. Section 121.431 provides the only FAA definition of “operating cycle,” which is specifically earmarked for the purpose of subpart O of part 121 (Crewmember Qualifications). Specifically, § 121.431(b) defines an operating cycle as a complete flight segment consisting of a takeoff, climb, enroute portion, descent, and a landing. Within part 121, the cycle-based approach is not used in the context of flight training, but rather it refers to activity after a part 121 pilot completes an air carrier training program and is designed to consolidate what the pilot has learned in training. Part 121 flightcrew members utilizing these provisions are certificated pilots in accordance with part 61, which means they have obtained significant operating experience in the category, class, and type, where appropriate, of aircraft to achieve initial certification. At such time, the pilot already holds the category and type rating necessary to operate the aircraft and the pilot has already met the cross-country requirements in category and demonstrated proficiency in operating the aircraft to receive a type rating. Additionally, this substitution of hours with operating cycles occurs while under supervision of a check pilot, for the purpose of this experience of an air carrier’s overall compliance with part 121, not for initial category and type certification.

In sum, the purposes of § 121.434 and the use of operating cycles (*i.e.*, preparing a pilot specifically for part 121 operations) are vastly different from the traditional certification framework and corresponding alternate experience requirements for powered-lift. Because the FAA only has experience and operational data of operating cycles in an unparalleled training scenario (*i.e.*, in the context of additional training after the foundational certificates and ratings are obtained), and commenters did not provide any supporting data to justify a pivotal airman certification transition, the FAA does not find that the use of operating cycles to obtain a powered-lift category rating provides an equivalent level of experience to ensure foundational proficiency when obtaining an initial powered-lift category rating.

Archer also urged the FAA to adopt a model like that set forth by § 61.159(b) that would permit a pilot to substitute cycles of a takeoff and landing to a full stop for one hour of flight time to satisfy certain aeronautical experience requirements.¹⁸² The FAA finds that the substitution in § 61.159(b) is not feasible to implement into a model for powered-lift certification at this time. The FAA proposed the substitution of 20 night takeoffs and landings as currently set forth by § 61.159(b) in 1968, which was later adopted in 1969.¹⁸³ The proposed rule¹⁸⁴ explained that the aeronautical experience for an ATP certificate required at least 100 hours of night flight time with no minimum number of landings. Additionally, when flight times were first developed in the regulations, airplanes had to stop more frequently for fuel and, therefore, logged more takeoffs and landings in the 100-hour time frame.

However, the FAA noted that because of technological advancements, airplanes made fewer fuel stops and, therefore, accomplished many fewer landings within the ATP night flight time experience of 100 required hours. Therefore, to account for this discrepancy, as well as to ensure proficiency in operations involving a reduction in a pilot’s vision, associated darkness, and available lighting, the FAA adopted the substitution in § 61.159(b) to incentivize an applicant for an ATP certificate to complete these critical flight operations to proficiency without instituting a required minimum in the regulations. However, this time is limited to 25 hours of the 100 hours of required night flight time experience; therefore, requiring pilots to still attain at least 75 hours of night flight time.

Comparably, the FAA notes that the cross-country flight time required for a powered-lift pilot certificate is ten hours, and vastly less than the 100 hours of night flight time the commenter’s comparison is based upon. As discussed in section V.A. of this preamble, one critical point of pilot

proficiency in the powered-lift category is the transition period from vertical take-off to horizontal flight and back to vertical landing. Should the FAA contemplate a takeoff and landing cycle mirroring § 61.159(b), the transition period into vertical flight would be a critical element to include in the scope of that cycle, which would be the equivalent of a cross-country flight. The situations a pilot encounters during the terminal and enroute portions of a cross-country flight constitute valid experiences to increase a pilot’s opportunity to use dead reckoning and pilotage over the entire route, not only the takeoff or landing portion of the flight. The FAA further discusses endurance challenges in cross-country requirements in section V.F.4.ii. of this preamble.

Additionally, the FAA notes this substitution’s applicability to those applicants seeking an ATP certificate is different from the minimum certificate level held by the target cadre of pilots this SFAR is directed toward. An applicant for an ATP certificate with an airplane category rating must hold a commercial pilot certificate with an instrument rating issued under part 61,¹⁸⁵ inherently including a prerequisite level of experience in the airplane category. In the absence of data presented to support a cycle-based substitution, the FAA finds that implementation of a cycle-based framework at the foundational entry-level of pilot certification for powered-lift may introduce a reduction in pilot proficiency in comparison to the traditional pathways of airman certification.

Similarly, at this time, the FAA does not find it appropriate to implement a novel approach to initial category ratings through competency-based training. As defined by ICAO, competency-based training is training and assessment characterized by a performance orientation, emphasis on standards of performance, and their measurement and the development of training to the specified performance standard.¹⁸⁶ Traditionally, a competency-based training framework is free of defined schedules and hour requirements. While operators under parts 121 and 135 regularly utilize

¹⁸² Specifically, § 61.159(b) permits a person who has performed at least 20 night takeoffs and landings to a full stop to substitute each additional night takeoff and landing to a full stop for 1 hour of night flight time to satisfy the 100 hours requirements of night flight time in § 61.159(a)(2). However, not more than 25 hours of night flight time may be credited in such manner.

¹⁸³ Airplane Transport Pilot Certificate with Airplane Rating final rule, 34 FR 17162 (Oct. 22, 1969). This provision was originally adopted in § 61.145(b), later redesignated as § 61.155(b) in 1973 (38 FR 3156). The 1997 final rule relocated § 61.155(b) to present-day § 61.159(b) (62 FR 16220, Apr. 4, 1997).

¹⁸⁴ Airplane Transport Pilot Certificate with Airplane Rating NPRM, 33 FR 12782 (Sept. 10, 1968).

¹⁸⁵ Section 61.153(d)(1). In lieu of a commercial pilot certificate with an instrument rating issued under part 61, an ATP applicant may meet the military experience requirements under § 61.73 to qualify for a commercial pilot certificate and an instrument rating (§ 61.153(d)(2)) or may hold certain foreign ATP licenses with instrument privileges or a foreign commercial pilot license (§ 61.153(d)(3)).

¹⁸⁶ ICAO Doc. 9868, Procedures for Air Navigation Services, Training, 3d Edition (2020).

competency-based training (and cycle-based framework) to facilitate additional and specific experience for more complex operations, the FAA does not utilize competency-based training as a pathway to airman certification in part 61 (neither foundational initial certification nor added ratings).

Under the traditional airman certification process under part 61 (and part 141), a pilot must meet minimum aeronautical experience requirements at each certificate level that include total time requirements (*e.g.*, 250 total hours to be eligible for a commercial pilot certificate) and subsets of flight time like pilot-in-command time, nighttime, and cross-country time. While these requirements are characterized by time components, this framework ensures that flight training envelops smaller blocks of flight training (*e.g.*, instrument training in a powered-lift under § 61.129(e)(3)(i)) or flight time (*e.g.*, 10 hours of cross-country flight time in a powered-lift under § 61.129(e)(2)(ii)) that, together, constitute the total objective of minimum aeronautical experience for a category rating on a certificate (*e.g.*, 250 hours of flight time for a commercial pilot certificate with a powered-lift category rating). Additionally, these subsets are tethered to flight proficiency regulations respective to the certificate sought (*e.g.*, § 61.127(b)) to ensure a person receives training on critical areas of operation. The applicable Airman Certification Standard or Practical Test Standard mirrors these areas of operation as the practical test standard. An hours-based approach ensures a set amount of flight time, exposing the pilot to a cross-section of, for example, flight environments, scenarios, and potential emergencies. Conversely, a wholly competency-based framework may not ensure a pilot receives such comprehensive exposure to foundational aeronautical experience, particularly where a practical test cannot encompass every flight scenario to confirm an independent determination of competency. For example, an applicant for a commercial pilot certificate is required to conduct aeronautical experience at night but is not required to demonstrate competency during a practical test at night.

In regard to commenters' reference to experience already held as a helicopter or airplane pilot, as the FAA outlined in section V.E of this preamble, this would not be wholly appropriate. Because a powered-lift is essentially a hybrid aircraft, pilots who have completed airplane training or helicopter training are not going to have 1:1 proficiency in a powered-lift. In other words, a pilot

fully trained to only airplane proficiency will not have experience in a vertical land and takeoff regime and, conversely, a pilot fully trained to only helicopter proficiency will not have experience in horizontal flight regime. Furthermore, pilots who first received a pilot certificate in an airplane or helicopter could have deeply ingrained tendencies due to the law of primacy¹⁸⁷ that can be very difficult to overcome. The FAA notes that this could have a significant impact on a pilot transitioning from airplane or helicopter to powered-lift. For example, a pilot performing a circling approach is conducting a maneuver requiring physical skills, while also cognitively evaluating surroundings to manage the flight path and perform a safe landing in the aircraft in which the circling approach is being conducted. During this maneuver, the pilot must incorporate motor skills as well as cognitive abilities to correlate the surrounding environment while being able plan and execute an appropriate flight path to safely land (*i.e.*, considering possible interaction with other traffic, maintaining clear of clouds while on the approach). If the applicant first learned this in an airplane, and then was transitioning to conducting the task in a powered-lift, what was first learned in the airplane would be in the forefront of a pilot's actions. Checklists, procedures, and maintaining positive control of the aircraft while executing this maneuver in a different category of aircraft warrants training in the aircraft on specific maneuvers to ensure the pilot has the skills necessary to operate in the NAS.

Furthermore, the FAA disagrees that training wholly in a simulator would effectively mitigate any negative transfer of learning present due to the pilot's previous experience. Effective training under realistic operating conditions and variability (*i.e.*, in an aircraft versus in a simulator) provides the operational experience necessary for a pilot to overcome primacy. Simulator experience can present an environment that helps develop a pilot's motor skills as well as their cognitive skills to

¹⁸⁷ Pioneer of educational psychology, E.L. Thorndike formulated three laws of learning in the early 20th century. These laws are universally accepted and apply to all kinds of learning: the law of readiness, the law of exercise, and the law of effect. Since Thorndike set down his laws, three more have been added: the law of primacy, the law of intensity, and the law of recency. Primacy in teaching and learning, stipulates that what is learned first, often creates a strong, almost unshakable impression and underlies the reason an instructor needs to teach correctly the first time. Aviation Instructor's Handbook, FAA-H-8083-9B (2020) pages 3-11 through 3-12.

respond to a scenario. However, when obtaining a category rating, the integration of motor skills with cognitive skills is only fully attained to a level that mitigates any negative tendencies due to the law of primacy when the pilot is provided the opportunity to perform functions in the actual flight environment.¹⁸⁸ Therefore, these possible proficiency gaps necessitate experience specific to a powered-lift rather than fully crediting a pilot with an airplane category or helicopter class rating with a powered-lift category rating.

Additionally, the FAA does recognize the time that a helicopter or airplane pilot has through prerequisites in the alternate framework and generalized requirements in § 61.129. For example, § 61.129(e)(1) requires 100 hours in a powered aircraft, only 50 of which must be in a powered-lift. Other than the requirement that the aircraft used be a powered aircraft, the regulation does not specify which powered aircraft the other 50 hours must be accomplished in. Therefore, the other 50 hours could be accomplished in an airplane or helicopter.

Finally, an SFAR intended to facilitate operations of a new and novel category of aircraft is not the appropriate place to implement a new airman certification framework due to the lack of operational data to illustrate that a novel framework would provide an equivalent level of safety in initial pilot category training. For these reasons, this final rule does not introduce a cycle-based or competency-based pathway to initial powered-lift ratings at this time.

Safety Management System Processes

A4A stated that any effort to provide alternative flight time and experience requirements should be vigorously vetted through the Safety Risk Management (SRM) process.

The FAA uses a Safety Management System (SMS) to integrate the

¹⁸⁸ The FAA recognizes this in a balance of crediting certain experience, while also requiring specific experience relative to the ratings and certificates a pilot is accomplishing. For example, §§ 61.129 (a)(4), 61.129 (b)(4), and 61.129 (c)(4) require solo experience to be conducted in single-engine airplane, multiengine airplane, or helicopter. Likewise, 10 hours of flight training and specific cross country flights are required to be accomplished in the specific category of aircraft required for single-engine airplane, multiengine airplane, or helicopters by §§ 61.129 (a)(3), 61.129(b)(3), or 61.129 (c)(3) respectively. The FAA has found it appropriate to codify these existing requirements, as applicable to the ratings sought, and finds these contributing human factors considerations are integral to overcoming any negative learning effects from previous experience a pilot may have in a different aircraft.

management of safety risk into operations, acquisition, rulemaking, and decision making. SMS consists of four components: Safety Policy, safety risk management (SRM), Safety Assurance, and Safety Promotion.¹⁸⁹ The FAA has its own established SRM policy, which supports the FAA's SMS by providing the ability to consistently conduct SRM and provide safety risk information to decision makers. The NPRM proposed both limited permanent changes and an SFAR to facilitate powered-lift operations and permit the FAA to gather data and better understand what a comprehensive permanent regulatory framework should look like. The FAA has not identified any hazards with the narrowly tailored alternate experience that would trigger the SRM process. Additionally, with each alternate requirement proposed (and adopted in this final rule), the FAA likewise proposed (and adopts) certain risk mitigations (*e.g.*, extra cross-country flights, requirements that the alternate requirements may only be utilized through approved training programs with FAA oversight). Since the FAA can initiate SRM at any time through its established policy, the FAA would initiate an SRM as necessary to ensure risk is mitigated. For example, if it becomes apparent that a specific hazard may exist because of the alternate experience, the FAA would initiate an SRM to identify and assess hazards related to the alternate flight time and experience requirements adopted in this final rule.

The following sections briefly describe the proposed alternate requirements and address any comments on that proposal. To note, where the FAA did not propose and adopt an alternate aeronautical experience or logging provision, the person must meet the applicable part 61 requirement, as appropriate.¹⁹⁰

1. Applicability of Alternate Requirements

Because the alternate eligibility requirements facilitate a degree of relief from certain provisions in § 61.129, the FAA proposed certain prerequisites to ensure the applicant possesses extensive flight experience and a solid foundational skill set in § 194.215(a). Therefore, except for the alternate requirements for cross-country discussed later in this section, to utilize the alternate aeronautical experience and logging requirements for obtaining a powered-lift category rating and

instrument-powered-lift rating, the FAA proposed a person already hold at least a commercial pilot certificate with at least an airplane category and single-engine or multiengine class rating or a rotorcraft category and helicopter class rating. The FAA also proposed the person hold an instrument-airplane or instrument-helicopter rating that corresponds to a category rating held at the commercial pilot certificate level. Commenters generally supported the parameters proposed in § 194.215(a).

A4A, Archer, and Bristow supported the proposal that alternate requirements be allowed only for pilots who already hold a commercial pilot certificate and corresponding instrument rating for another category of aircraft. Archer stated that the prerequisites offer a meaningful skills and experience advantage that substantially mitigates the challenge of training in aircraft that have different flight control characteristics, and may have a single set of controls, but share an operating environment and fundamental aerodynamics. Archer further noted that possessing one category rating to enable eligibility for another category rating is unprecedented but would constitute a near-term enabler for innovation. The FAA agrees with the benefits pointed out by commenters and emphasizes that, by virtue of holding these certificates/ratings, the powered-lift applicant will have, first, satisfied the respective aeronautical experience and training requirements and, second, demonstrated flight proficiency and competency through successful completion of the requisite knowledge and practical tests. Additionally, the applicant will have valuable practical experience, such as operating in the NAS, communicating with ATC, interacting with other air traffic, and the duties and responsibilities of acting as PIC of an airplane or helicopter.

One commenter questioned whether pilots of aircraft that operate primarily in wing-borne flight should be eligible for powered-lift designations in general given that they are unlikely to experience the unique aerodynamic and handling qualities-related effects of aircraft that generate thrust via propellers. The commenter also provided examples such as lateral darting, settling with power, untoward low airspeed aerodynamic effects, and one thrust-producing device operating within ground effect while the other is operating out of ground effect.¹⁹¹

¹⁹¹ While the commenter did not specifically opine on the alternate eligibility prerequisite itself, the FAA determined this point is best adjudicated in relation to the prerequisites for the alternate framework.

Another individual suggested prerequisites consisting of an airplane category rating; rotorcraft category, helicopter class ratings; and part 107 UAS certificate. The commenter acknowledged that this would narrow the pool of eligible pilots but stated that initial pilots with dual qualifications in addition to a part 107 UAS rating would be the most adequately situated to inform industry in training adaptation and procedures.

The unique aerodynamic and handling qualities of a powered-lift necessitate specific powered-lift training and flight time, which is why a pilot who operates primarily in wing-borne flight (*i.e.*, an airplane-rated pilot) must complete specific powered-lift aeronautical experience requirements rather than being automatically eligible for a powered-lift category rating solely on the basis of a prerequisite certificate. The prerequisites for the alternate framework simply function to ensure that an applicant has an advanced level of aeronautical knowledge as a foundation before capitalizing on certain relieving provisions. However, the FAA disagrees with the premise that holding a remote pilot certificate issued under part 107 translates into experience that should be credited or required in the applicability of the proposed alternate requirements for manned aircraft under this rulemaking. Part 107 applies to the registration, airman certification, and operation of civil small UAS within the U.S.¹⁹² To obtain a part 107 certificate, a person need only meet the eligibility requirements of § 107.61, which includes either (1) passing an initial aeronautical knowledge test covering the areas of knowledge in § 107.73 or (2) completes training covering the areas of knowledge in § 107.74, if the person holds a part 61 certificate (other than a student pilot certificate) and meets the flight review requirements of § 61.56. Several of these knowledge areas are specifically tailored to small UAS that would not translate to recognizable experience applicable to a powered-lift. For example, effects of weather on small UAS performance and operations will be handled differently by a remote pilot than the effects of weather¹⁹³ on a large powered-lift with a pilot physically onboard the aircraft. For these reasons, the FAA finds there would be little net benefit by also requiring a part 107 small UAS rating on a person's pilot certificate to the prerequisites of the alternate eligibility framework.

¹⁹² § 107.1.

¹⁹³ §§ 107.73(c) and 107.74(b).

¹⁸⁹ FAA Order 8040.4C *Safety Risk Management Policy*.

¹⁹⁰ See § 194.215(b).

Therefore, the FAA adopts the requirement that a person must hold at least a commercial pilot certificate with at least an airplane category and single- or multi-engine class rating or a rotorcraft category and helicopter class rating, and the corresponding instrument rating (*i.e.*, instrument-airplane or instrument-helicopter), to utilize the alternate experience requirements (except for cross-country) in § 194.215(a).

2. Obtaining a Powered-Lift Category Rating on the Commercial Pilot Certificate (§ 61.129(e))

Section 61.129(e) sets forth the aeronautical experience requirements¹⁹⁴ to obtain a commercial pilot certificate with a powered-lift category rating. Section 61.129(e)(1) through (4) require specific flight time, such as flight time in powered aircraft, flight time in powered-lift, PIC flight time (including a certain amount of PIC time in a powered-lift), cross-country time, flight training time, and solo flight time (or flight time performing the duties of PIC in a powered-lift with an authorized instructor onboard), resulting in at least 250 hours of total flight time. These flight time requirements specific to powered-lift, resulting from the 1997 final rule, largely mirror the aeronautical experience requirements for airplanes.¹⁹⁵

By virtue of this rulemaking, and as extensively discussed in the NPRM,¹⁹⁶ the FAA acknowledges the lack of certificated powered-lift in civil operations available in which pilots can build the necessary flight time required in § 61.129(e). Even with the introduction of powered-lift into civil aviation, pilots will encounter an inability to satisfy several of these requirements for a commercial pilot certificate (and an instrument rating¹⁹⁷), such as the required PIC flight time in powered-lift in § 61.129(e)(2)(i) and cross-country experience in powered-lift in § 61.129(e)(3) and (4). Additionally, the logging requirements of § 61.51(e) present obstacles for a pilot who is not

rated in a powered-lift to log PIC flight time in a powered-lift.

Therefore, the FAA proposed to enable certain applicants for a powered-lift category rating on their commercial pilot certificate to satisfy alternate aeronautical experience and logging requirements for (1) test pilots and instructor pilots, (2) the initial cadre of instructors, (3) pilots receiving training under an approved training program, including provisions that would enable certain applicants to credit time obtained in an FFS toward certain flight time requirements. The FAA also proposed alternate requirements for cross-country flights, which are generally applicable to all applicants for a commercial pilot certificate with a powered-lift category rating.¹⁹⁸ This section discusses the adopted alternate framework in part 194¹⁹⁹ (*i.e.*, alternate experience, logging, cross-country requirements, and provisions facilitating FFS credit) and responds to comments.

While the alternate framework is largely adopted as proposed in subpart B to new part 194, the FAA determined the challenges presented in obtaining PIC flight hours in a powered-lift necessitate further relief in the context of hours required and available credit in an FFS, as subsequently discussed. Section V.F.6. of this preamble provides tables summarizing the adopted alternate requirements for persons seeking a powered-lift category rating on a commercial pilot certificate.

The FAA received many comments pertaining to the total amount of hours of flight time in a powered-lift set forth by § 61.129(e)(1) and, second, the hours of PIC flight time in a powered-lift set forth by § 61.129(e)(2). The FAA did not propose an hour reduction to either of these provisions in the NPRM. Because each of these provisions apply to all populations of pilots under the SFAR (*i.e.*, test pilots, instructor pilots, initial cadre instructors, and pilots receiving training under an approved training program), this section discusses the additional relief provided by this final rule to PIC flight time in a powered-lift and available FFS credit. Subsequent sections provide additional discussion applicable to specific pilot populations.

Alternative Structured Options for Flight Time in § 61.129(e)(1)

AWPC, GAMA, and Joby suggested reducing the requirement that a pilot must log 100 hours in a powered aircraft, 50 of which must be in a powered-lift.²⁰⁰ Each suggested structured alternatives in lieu of the hour requirement. AWPC noted the commonality between ACS utilized for training and testing and suggested that, in conjunction with the prerequisites to utilize the SFAR, the FAA should approve a course that is competency and training oriented rather than prescriptive time building. AWPC suggested credit through an Initial Operating Experience (IOE) or other SOE toward flight hours toward § 61.129(e)(1). Similarly, notwithstanding Joby's emphasis on eliminating the powered-lift category rating as discussed in section V.A. of this preamble, Joby suggested that the FAA facilitate other methods for obtaining aeronautical experience prior to conducting commercial operations in lieu of a category-based emphasis on time building. Joby specifically stated that § 61.129(e)(1) is not aligned with type-specific training and experience in the SFAR. Joby contended supervised line flying (SLF) requirements, including virtual observation or a probationary period, would be appropriate in light of the broader training program. Similarly, ADS recommended the FAA leverage the FSB process to require post-qualification SLF. Finally, GAMA questioned the net safety benefit of the requirement of § 61.129(e)(1) flight time in a powered-lift as mere time-building and urged the FAA to transition away from § 61.129(e)(1) time building and, instead, prioritize scenario-based training in an FSTD through SLF and LOFT.

The FAA does not find that activities such as SLF, IOE, or LOFT achieve a level of safety for an initial powered-lift category rating such that a full substitution is warranted. SLF, IOE, and LOFT are tools utilized by an operator to transition a certificated pilot into the operational environment specific to that operator (*i.e.*, structured flight training environments to line operations). For example, SLF is typically conducted upon the introduction of equipment or procedures for a specific pilot position and particular assigned duties within an air carrier (*e.g.*, introduction of a new system like ADS-B, RAAS, or new operations like ETOPS), presuming the pilot is appropriately certificated and

¹⁹⁴ Section 61.123 prescribes the general eligibility requirements for a commercial pilot certificate; paragraph (f) requires an applicant to meet the aeronautical experience requirements of subpart F (Commercial Pilots) that apply to the aircraft category and class rating sought (*i.e.*, § 61.129).

¹⁹⁵ Pilot, Flight Instructor, Ground Instructor, and Pilot School Certification Rules, final rule, 62 FR 16220 (Apr. 4, 1997).

¹⁹⁶ See 88 FR 38946 at 38967 (June 14, 2023).

¹⁹⁷ While this section discusses obtaining a powered-lift category rating on a commercial pilot certificate, section V.F.3. of this preamble discusses obtaining an instrument-powered-lift rating.

¹⁹⁸ Section V.F.4. of this preamble discusses alternate means to satisfy the cross-country aeronautical experience requirements for a private pilot certificate with a powered-lift category rating and an instrument-powered-lift rating.

¹⁹⁹ The FAA adopts these alternate eligibility requirements in a temporary state in the SFAR to obtain operational data to properly inform a permanent rulemaking in the future.

²⁰⁰ § 61.129(e)(1).

rated. To date, these tools are not tailored toward flight training toward an initial category and type rating.

The alternatives suggested by commenters (*i.e.*, SLF, IOE, and LOFT) could all be used by certificate holders as supplementary to their part 135 operations. However, the FAA does not find that these programs provide an equivalent or greater level of safety to the aeronautical experience requirements set forth by part 61 such that a reduction in flight time required for an initial powered-lift rating is justified at this time. The requirement to obtain a certain amount of flight time in the aircraft a pilot seeks a rating for is not a new or novel concept unique to powered-lift. While the FAA anticipates challenges with the traditional part 61 framework, the FAA finds the alternate requirements, as adopted by this final rule, to be sufficient measures in furthering powered-lift civilian operations. Additionally, because there are no certificated powered-lift for civilian operations upon which the FAA may base an overhaul of the traditional training time and hours-based framework on, nor did commenters provide any data or persuasive evidence, the FAA declines at this time to implement the novel concept of category certificate elimination or credit of SLF, IOE, and LOFT toward an initial rating.

Reduction of Powered-Lift Pilot-in-Command Time (§ 61.129(e)(2))

A person who applies for a commercial pilot certificate with a powered-lift category rating must log at least 250 hours of flight time consisting of at least, in pertinent part, 100 hours of PIC flight time, which includes at least 50 hours in a powered-lift.²⁰¹ Under § 61.51(e)(1), as relevant to this section, a pilot may log PIC time only when the pilot is the sole manipulator of the controls of an aircraft for which the pilot is rated (category, class, and type rating, if appropriate) or is the sole occupant of the aircraft. While the FAA explained in the NPRM, and still maintains, that the proposal would permit pilots to log the time that meets the criteria in this final rule retroactively,²⁰² the FAA did not propose to decrease the requirement to log 50 hours of PIC flight time in a powered-lift for any pilot under the SFAR. Many commenters urged the

FAA to implement a provision reducing this requirement.

Many commenters stated that the 50-hour requirement in existing § 61.129(e)(2)(i) is simply a time-building requirement that does not add value to a pilot's experience, especially where pilots under the SFAR will have extensive prior PIC experience through virtue of the prerequisite requirements. These commenters included: HAI, L3Harris, AWPC, GAMA, Lilium, Archer, and Supernal.

Commenters stressed that the simplicity of powered-lift renders time building of little value and questioned the net safety benefit of a 50-hour requirement. For example, Archer proposed a 30-hour minimum considering the unique capabilities of powered-lift, many of which possess control frameworks that provide inherent hands-off stability. Archer noted that many OEMs' reliance on battery electric driven propulsions would make maneuver-centric repetition in aircraft training difficult. Supernal emphasized the importance of the critical skill of transitioning between vertical and on-wing flight as opposed to total flight hours. Similarly, GAMA and L3Harris proposed a substitution like that set forth in § 61.159(b) whereby an applicant could perform a certain number of powered-lift takeoffs and landings in lieu of a certain amount of flight hours. Commenters also referenced commonality between maneuvers required by the powered-lift Airmen Certification Standards (ACS) and the airplane and helicopter ACS for purposes of the prerequisite requirements set forth by § 194.215. GAMA, Lilium, and AWPC emphasized that this gives further credence to reducing the hour requirement (*i.e.*, because those pilots will have already demonstrated proficiency in overlapped tasks by virtue of holding the prerequisite ratings).

Additionally, commenters urged the FAA to consider the environment within which training under the SFAR will occur to warrant a reduction in hours. Specifically, AWPC and GAMA emphasized that training under the SFAR would be conducted under an approved course under parts 135, 141, and 142, which require certain prerequisites to entry and a standardized course of instruction. Commenters, including Archer, likened this to courses under part 141, where the FAA approves certain reduced aeronautical experience time compared to part 61. Specifically, Archer noted that appendix I to part 141, (4)(c)(3) requires a minimum of 30 hours of flight training to add a helicopter class rating

to an existing pilot certificate and urged the FAA to adopt similar parameters.

Further, GAMA and AWPC cited the recent final rule, Recognition of Pilot in Command Experience in the Military and Air Carrier Operations,²⁰³ to support the premise that there is a lack of safety benefit provided by a time-building approach. Specifically, the commenters stated that the FAA explained in that final rule that time spent in certain flight regimes in a military powered-lift was equivalent to time in an airplane for the purposes of meeting specific aeronautical experience requirements for an ATP certificate. Both commenters stated that the minimum times should be linked to those specified in §§ 61.65(f) (aeronautical experience for the instrument-powered-lift rating), 61.129(e)(3) (20 hours of training on the areas of operation in § 61.127(b)(5)), and 61.129(e)(4) (solo flight time or flight time performing the duties of PIC with an authorized instructor on board), which are training oriented rather than time building, in conjunction with passage of a practical test to ATP certificate standards to ensure equivalent level of safety.

Finally, several commenters emphasized that the 50-hour PIC flight time in a powered-lift set forth by § 61.129(e)(2)(i) would present resource and cost challenges contrary to public interest. AWPC noted that time building in a large, multi-engine turbine powered tiltrotor would be contrary to public interest because of the consumption of large quantities of fuel, especially at a time when the AAM industry is making strides toward zero carbon emissions, in addition to other noise impacts. Other commenters, such as Lilium, noted that electric aircraft would have limited range and endurance capabilities that would make accumulating time in an aircraft difficult. HAI stated that requiring 50 hours of PIC in a powered-lift would be overly burdensome and unnecessary, especially considering the minimum qualifications a pilot would have to hold would be at the commercial pilot certificate level. HAI and GAMA expressed concern that the flight endurance and resource limitations would extend each FSB process from six to nine months. They further emphasized the challenges presented for OEM's where FSB members would be required to travel long distances to conduct their duties.

First, the FAA does not agree that aeronautical experience is only a time-building exercise but emphasizes that the aeronautical experience

²⁰¹ Section 61.129(e)(2).

²⁰² To underscore, flight time that a pilot is currently accruing, and has previously accrued, that meets the conditions adopted in the SFAR may be applied toward the 50-hour requirement when the pilot applies to take the practical test.

²⁰³ 87 FR 57578 (Sept. 21, 2022).

requirements are an iterative process to ensure a pilot has adequately trained to proficiency while gaining a minimum level of experience to be a safe pilot in the NAS. The FAA maintains the value in accruing experience in the aircraft through minimum time requirements, as such experience builds a pilot's ability to respond and make decisions in unexpected conditions. For example, with respect to weather, some research indicates, first, a lower level of pilot experience increases accident rates versus incident rates during adverse weather events and, second, increased experience results in better decision-making abilities. The study also found that increased experience results in a lower accident rate than subgroups that had less pilot experience when studying actual occurrences related to adverse weather events.²⁰⁴

However, in light of commenters' contentions, the FAA reevaluated the amount of time required by § 61.129(e)(2)(i) for those pilots using the alternate framework set forth by the SFAR. Specifically, the FAA compared the experience requirements in existing § 61.129 for airplanes (§ 61.129(a) and (b)) and helicopters (§ 61.129(c)) related to those required for a powered-lift rating (§ 61.129(e)). An applicant must have 50 hours of PIC flight time in an airplane when applying for an airplane single-engine rating and multiengine rating;²⁰⁵ for a helicopter class rating, however, an applicant must only log 35 hours of PIC flight time in the helicopter class to be eligible for a commercial pilot certificate. As discussed, to receive a powered-lift rating at the commercial pilot certificate level, a pilot would need 50 hours of PIC time in a powered-lift, which aligns with the time requirement for airplanes.

While the NPRM did not propose to reduce the hours set forth in § 61.129(e)(2)(i), it proposed to allow pilots under the SFAR receiving training from a certificate holder to credit up to 15 hours of PIC time obtained in a Level C or higher FFS toward the 50-hour PIC requirement.²⁰⁶ However, after reconsidering the hybrid nature of a powered-lift in relation to the prerequisites²⁰⁷ and requirements set

forth under the alternate framework and weighing the current requirements in § 61.129 for a commercial certificate for powered-lift, airplanes, and helicopters, the FAA agrees that a reduction in flight hours as PIC in a powered-lift under the SFAR would sufficiently ensure pilots are proficient in the duties of a PIC operating a powered-lift and alleviate some of the burden posed for operators of a powered-lift without jeopardizing safety.

When determining the amount of reduced time, the FAA specifically considered a reduction to align with the PIC time in a helicopter. The FAA maintains that a powered-lift is essentially a hybrid between an airplane and helicopter. While part 61 does not traditionally facilitate any category-to-category reduction in PIC aeronautical experience, the hybrid status of a powered-lift, in conjunction with the mitigations discussed herein and certain operational symmetry between helicopter and powered-lift, substantiate the alignment of powered-lift PIC time to helicopter PIC time for pilots under the SFAR.²⁰⁸ While the FAA's position is that powered-lift are, for practical purposes, operated largely like airplanes, key operational differences necessitate closer alignment with helicopter requirements for the purposes of airman certification than alignment with airplane requirements.

Specifically, as noted by commenters, powered-lift operations will be of shorter range, resulting in condensed critical phases of flight as compared to airplanes, which should be reflected in the training footprint. Given that powered-lift training flights and commercial operations will generally consist of shorter range distances, combined with the advanced technology

airplane or instrument-helicopter rating that corresponds to a category rating held at the commercial pilot certificate level.

²⁰⁸ By virtue of a person holding the prerequisites as set forth in 194.215(a), the person would have accrued experience in horizontal flight or vertical land and take off such that regardless of the category the person holds, the person will have some degree of PIC experience in a powered-lift flight regime. Conversely, a person who holds, for example, an airplane category rating who seeks a rotorcraft category rating will only possess experience in a horizontal flight regime, inapplicable to the flight regime experienced in rotorcraft. The FAA notes that, while this time is valuable and applicable to powered-lift experience and operations, thereby warranting a reduction in PIC flight time as explained herein, actual experience in the category of aircraft (*i.e.*, a powered-lift) is essential to attaining full proficiency in the powered-lift where aeronautical knowledge and operational gaps will exist by virtue of operation in another category of aircraft (*e.g.*, an airplane category pilot will have no experience with vertical land and takeoff). Additionally, see section V.F. of this preamble for additional discussion on primacy effect.

detailed by the commenters (*e.g.*, hands-off capabilities, advanced automation, Simplified Vehicle Operations), the reduction in flight time will not negatively affect safety because applicants will conduct a substantial number of takeoffs, transitions from vertical and on-wing flight, and landings (*i.e.*, the critical phases of powered-lift flight) within 35 hours, similar to helicopters. Conversely, airplanes inherently possess longer range capabilities, resulting in less burden to reach the 50-hour PIC time in an airplane and longer cross-country horizontal flight opportunity.

Finally, applicants seeking a commercial certificate with a powered-lift category rating must conduct their training under an approved training program under part 135, 141, or 142 under the SFAR to qualify for this PIC relief. As noted by commenters, appendix D to part 141, which sets forth the minimum curriculum for a commercial pilot certification course, and appendix I, which sets forth the minimum curriculum for an additional aircraft category rating course, generally facilitate a reduced hour footprint than the corresponding certificates in part 61. This relief is largely due to the greater oversight, structured training program, dedicated training facilities, and FAA-approved curriculum offered at the part 141 pilot school. The FAA finds that the approved part 135, 141, and 142 programs under which an SFAR pilot would receive training offer the same safeguards (*e.g.*, oversight, structure, etc.) for certain reduced footprints such that a similar degree of relief may be offered for these approved programs without a reduction in safety.

Therefore, the FAA is reducing the total hours of PIC in the powered-lift from 50 hours to 35 hours to situate pilots seeking a powered-lift rating under the SFAR more similarly on their commercial pilot certificate to those that are attaining a helicopter rating on their commercial pilot certificate. Notwithstanding the eligibility requirement specified in § 61.123(f), new § 194.216(a) will permit an applicant for a commercial pilot certificate with a powered-lift category rating under §§ 194.217, 194.219, 194.221, or 194.223 to log 35 hours of pilot-in-command flight time in a powered-lift in lieu of the aeronautical experience requirement of § 61.129(e)(2)(i) (*i.e.*, 50 hours). In turn, this requires minor revisions to the reg text as proposed in those alternate experience provisions (§§ 194.217, 194.219, 194.221, and 194.223). Because § 194.216(a) renders § 61.129(e)(2)(i) inapplicable to pilots under the SFAR

²⁰⁴ See Udo-Imeh, N. E., & Landry, S. J. (2021). Dimensions of Pilot Experience and Their Contributing Variables. 63rd International Symposium on Aviation Psychology, 376–384. *corescholar.libraries.wright.edu/isap_2021/63*.

²⁰⁵ §§ 61.129(a)(2)(i) and (b)(2)(i).

²⁰⁶ See proposed § 194.223(c).

²⁰⁷ Specifically, to use the SFAR's alternate framework, a person must already hold at least a commercial pilot certificate with at least an airplane category and single- or multiengine class rating or a rotorcraft category and helicopter class rating. The person will also be required to hold an instrument-

seeking a commercial pilot certificate with a powered-lift category rating, the FAA finds it necessary to replace references proposed in part 194 from § 61.129(e)(2)(i) to § 194.216(a). This cross-reference replacement is adopted in: §§ 194.217(b)(3), 194.217(c), 194.219(b)(3), 194.219(c), 194.221(b)(3), 194.221(c), and 194.223(c).

The FAA notes this relief is only permitted under the limited circumstances set forth by the SFAR with the discussed mitigations and does not make a permanent change to § 61.129(e)(2)(i). As discussed in section I.G. of this preamble, the benefit of the SFAR is to collect information over the lifespan of the temporary regulations. The FAA intends to use the time to determine whether a permanent change to § 61.129(e)(2)(i), congruent to PIC flight time in a helicopter, is justified in part 61. Additionally, as discussed further in the subsequent section of this preamble, this final rule will allow for 15 hours in a Level C or higher FFS to be credited toward the PIC requirement of § 194.216(a) and expands this relief to all pilots under the SFAR.

Relatedly, the FAA agrees with GAMA and AWPC that a similar concept was promulgated in the final rule *Recognition of PIC Experience in the Military and Air Carrier Operations*, although the two are not synonymous scenarios such that the traditional approach of garnering time in the aircraft is not warranted from a safety perspective. The Recognition of PIC Experience final rule allowed military pilots to credit flight time in a powered-lift while operated in horizontal flight only toward the requirements of § 61.159(a)(5) (*i.e.*, an airplane category rating). This change was to assist military pilots of powered-lift in qualifying for an ATP certificate in the airplane category supported by the premises that, first, a military pilot will have two to five times the amount of PIC time required by the regulation; second, military powered-lift pilots receive training and qualifications in airplanes prior to transitioning to a powered-lift; and, third, the comprehensive and demanding nature of military pilot training and military assessment of flight proficiency.²⁰⁹ These premises are not synonymously applicable to the qualifications required for the operations enabled by this SFAR.

While not the basis for the FAA's decision to reduce the PIC flight time, the FAA finds that this reduction will address commenters' concerns about resources and cost to the training provider. To the extent that commenters

suggested noise impacts would be implicated because of the additional time required to operate an aircraft toward pilot certification, the FAA notes that these aircraft will still be required to meet the noise requirements of part 36; noise considerations are further discussion in section IV.B. of this preamble ("Noise Certification").

Expansion of FFS Credit Toward PIC Flight-Time Requirements

Currently, § 61.129(i) permits a certain amount of credit for use of an FSTD to certain aeronautical experience requirements. Specifically, in pertinent part, § 61.129(i)(1) permits an applicant who has not accomplished the training required by § 61.129 in a course conducted by a training center certificated under part 142 to credit a maximum of 50 hours toward the total aeronautical experience requirements of § 61.129 for a powered-lift rating, provided the aeronautical experience was obtained from an authorized instructor in an FFS or FTD that represents the powered-lift category and type. For applicants who have accomplished the training required by § 61.129 in a course conducted by a training center certificated under part 142, § 61.129(i)(2) permits the applicant to credit a maximum of 100 hours toward the total aeronautical experience requirements of § 61.129 for a powered-lift rating, provided the aeronautical experience was obtained from an authorized instructor in an FFS or FTD that represents the powered-lift category and type.

To allow for more flexibility and to foster the development of an initial cadre of powered-lift pilots, the FAA proposed to temporarily permit certain time obtained in a Level C or higher FFS to be credited specifically toward the 50-hour PIC flight time requirement in § 61.129(e)(2)(i) in addition to the permitted use of credit in § 61.129(i). Specifically, to mitigate any risk with increasing creditable FFS time, the relief as proposed would have only applied to the group of pilots receiving training from an approved training program under the SFAR provided (1) the aeronautical experience was obtained performing the duties of PIC in a Level C or higher FFS representing the powered-lift category and (2) the FFS sessions were conducted in accordance with an approved training program under part 135, 141, or 142.²¹⁰

²¹⁰ See proposed § 194.223(d). This relief was also proposed for those pilots receiving training under an approved training program leading to an instrument-powered-lift rating in proposed § 194.231(c). Section V.F.3. of this preamble discusses the instrument-powered-lift alternate

The FAA did not receive any comments directly opposing crediting of time in this manner. In fact, several commenters commended the FAA on the approach in § 194.223(d) to credit aeronautical experience in this manner, citing limited range and endurance in the aircraft itself that could hinder the ability to perform repetitive, maneuver-centric training in the aircraft. However, many commenters who supported reducing the PIC time in a powered-lift also proposed the FAA permit the credit of even more time in an FFS toward the PIC time in a powered-lift. These commenters generally emphasized that FSTDs provide realistic, controlled training environments especially useful for training on abnormal and emergency procedures and specific operational scenarios. Commenters suggested crediting 35 hours of PIC time in the FFS, thereby only requiring 15 hours of PIC flight time in the powered-lift in flight (under the premise of the proposal retaining the 50 hours of PIC time in a powered-lift requirement) or permitting all PIC flight time in the FFS. Commenters included: Archer, Lilium, Bristow, GAMA, Supernal, and Flight Safety International.

Commenters also urged the FAA to consider widening the scope from FFS to FSTD. Supernal recommended the FAA maximize the use of flight training devices and flight simulators used for proficiency and examinations and generally agreed with the need for high fidelity simulators utilized for training and qualification of a person seeking a powered-lift type rating. Archer agreed with the FAA's approach to credit 15 hours of flight training in an FSTD, but suggested the FAA should consider Level 6 FTD devices or higher to be considered in this credit. Archer stated that FTDs qualified under part 60 would encourage a more widespread application of innovative devices, ensuring training remains affordable and accessible for a broader range of operators. Archer described FTDs as offering a balanced approach to training through realistic simulation at a fraction of the cost of Level C or higher FFSs. Additionally, Archer stated that requiring a Level C FFS for PIC aeronautical experience does not align with regulations that offer flexibility and efficiency by use of an FTD such as §§ 61.64, 61.129(i), 141.41, and 142.59.

CAE, FlightSafety International, BETA, UPS Flight Forward,²¹¹ and L3Harris also requested the FAA amend

experience requirements proposed and adopted in the SFAR.

²¹¹ UPS FF specifically drew comparisons to part 121 AQP advances with FTDs of a lower level.

the proposal to include any FSTD acceptable to the Administrator or that meets the equivalency of a Level C FFS rather than specify Level C FFS only. BETA suggested consideration of non-motion or 3-degree-of-freedom platforms for creditable training and evaluation.

As discussed in the preceding section of this preamble, this final rule reduces the amount of PIC flight time in a powered-lift from 50 hours to 35 hours. The FAA does not find a reasonable basis to allow a greater amount of credit than 15 hours, nor has the FAA received any compelling data on why a higher hourly amount of simulator training would provide an equivalent level of safety. The FAA finds that the operation of an aircraft in the NAS when adding a foundational category rating to a pilot certificate is important because FSTDs cannot fully replicate the operational experience a pilot receives in the actual flight environment, including, but not limited to, interaction with other aircraft, decision making experience and familiarity with actual air traffic control environment.

In the proposal, the FAA intended to permit 30% of training in a Level C or higher FFS. While the FAA does not see a reason to reduce this amount in light of the total reduced PIC flight time in a powered-lift, particularly given considerations of abnormal and emergency procedures training opportunities afforded by simulation, the FAA notes that training in a Level C or higher FFS could now account for approximately 43% of the required time. Therefore, because time in an FFS that may be credited toward the PIC flight time in a powered-lift accounts for a larger footprint, the FAA finds that commenters' concerns pertaining to limited ranges, cost, and accessibility are addressed.

Additionally, after consideration of comments, the FAA does not find a reasonable basis to limit the population of pilots that may use this crediting provision. Under the proposal, an applicant for a commercial pilot certificate with a powered-lift category rating could only credit the 15 hours toward the 50-hour PIC flight time requirements in § 61.129(e)(2)(i), in relevant part, in accordance with an approved training program under part 135, 141, or 142. However, the FAA finds it appropriate to generalize the provision to all pilots under the SFAR: a manufacturer's test pilots and instructor pilots,²¹² FAA test pilots and

ASIs,²¹³ initial cadre flight instructors, and pilots receiving training under an approved training program. This final rule moves the framework of the provision from proposed § 194.223(d) to § 194.216(b) to apply to all pilots under the SFAR, in accordance with the manufacturer's proposed training curriculum, manufacturer's approved training curriculum, or approved training program under part 135, 141, or 142, as applicable to the pilot.

However, the FAA maintains that credit is only appropriate for that time in a Level C or higher FFS. As discussed in section IV. C. of this preamble, the FAA described that a Level C FFS provides the minimum level of fidelity and motion cueing to replicate the environment for the time in which a pilot would normally be logging PIC time in the aircraft.²¹⁴ FFSs qualified below a Level C FFS are typically not qualified for takeoff, landing, and taxi tasks for initial pilot training and have less stringent system latency requirements, ultimately resulting in slower responsiveness of the simulation, reduced visual system fields of view, and no minimum requirements for daylight or dusk visual scenes. These differences contribute to a lower level of fidelity of the simulation that would result in an overall lower level of immersion during a simulation event. Therefore, the FAA declines to broaden credit to Level A and B FFSs.

Further, the FAA disagrees that FTDs would be adequate to warrant credit for PIC aeronautical experience at this time because an FTD meets lower thresholds than an FFS when qualified in accordance with part 60, resulting in a device characterized by a lower level of immersion and fidelity than that characterized in a Level C FFS or higher. Most levels of FTDs do not require a visual system and are not qualified to conduct takeoff, landing, and taxi training tasks, limiting their effective use for gaining PIC aeronautical experience. Without a visual display system, the PIC is unable

when instructor pilots and test pilots operate the aircraft. Absent a type-certificate, the simulator would not be fully qualified under part 60 (see § 60.13). This provision expands FFS credit to instructor pilots, test pilots, FAA test pilots, and FAA ASIs at the experimental aircraft stage, even though an FFS may not be fully qualified at that time, because the FFS could receive interim qualification. An instructor pilot or test pilot could, therefore, credit time in the interim qualified FFS.

²¹³ See section V.F.3.i.c. of this preamble for discussion on the addition of FAA test pilots and ASIs to the alternate framework under the SFAR.

²¹⁴ This rule does not preclude an applicant from crediting aeronautical experience as allowed in § 61.129(i) toward a powered-lift rating. The FAA is allowing PIC aeronautical experience to be conducted in a Level C FFS or higher.

to replicate taxiing, takeoffs, landings, and other aspects of a full flight in the aircraft which require a visual representation outside the aircraft. These are necessary tasks that would normally be conducted during a pilot's accumulation of PIC experience.

A Level 7 FTD is the only level of FTD that has a minimum qualification requirement for a visual display system. However, while a Level 7 FTD does have a visual display system and would be able to provide the necessary visual representations, unlike a Level C FFS or higher, a Level 7 FTD does not require a motion system. Therefore, the Level 7 FTD is not capable of replicating the spatial orientation a pilot would experience in the aircraft. Spatial orientation is the natural ability to maintain body orientation or posture in relation to a surrounding environment at rest and during motion. Humans inherently maintain spatial orientation on the ground, so the three-dimensional environment of flight is unfamiliar to the human body and creates sensory conflicts and illusions that make spatial orientation difficult to achieve in certain scenarios. As such spatial orientation is an important part of the environment a pilot experiences during flight and is an important part of the experience gained through training due to the risks of spatial disorientation during flight.²¹⁵ Training devices that do not utilize a motion queuing system are not able to replicate the unique environment in which the human body experiences sensory conflicts due to being aloft in a three-dimensional environment. Training in a Level C FFS or higher provides these important environmental experiences. Therefore, because of these differences and the concerns regarding pilot immersion, the FAA is retaining the requirement for a Level C or higher FFS to be utilized toward the PIC aeronautical experience.²¹⁶

If industry can formulate an equivalent training footprint due to advancements in technology, the FAA would consider it at a future date. However, currently there are not sufficient levels of advancement in technology for the FAA to approve a lower qualified FSTD toward the requirements in this SFAR to be

²¹⁵ See FAA Aeromedical Safety Brochure, Spatial Disorientation: Why You Shouldn't Fly By the Seat of Your Pants; FAA Medical Brochure Visual Illusions. Available at www.faa.gov/pilots/safety/pilotsafetybrochures.

²¹⁶ The FAA notes that use of a flight training device or flight simulator is still available as permitted in § 61.129(i). The ability to credit time spent in a Level C or higher FFS toward PIC time in a powered-lift would apply only to applicants utilizing the alternate experience requirements contained in § 194.216(b).

²¹² A powered-lift at the manufacturer will be actively working through the type-certification process with the experimental powered-lift and, therefore, the aircraft will not be type certificated

incorporated into the FAA's developed training footprint. The FAA notes that should advancements in technology warrant any further relief, a sponsor of such a device could petition the FAA for exemption in accordance with part 11.

i. Test Pilots and Instructor Pilots: Alternate Aeronautical Experience and Logging Requirements for a Powered-lift Category Rating

Several manufacturers are currently pursuing a type certificate for powered-lift, which requires developmental and certification flight tests to establish the aircraft meets the applicable certification standards pursuant to § 21.35.²¹⁷ To facilitate certification activities, manufacturers utilize test pilots who design, develop, and test the aircraft's systems and components. Additionally, manufacturers use instructor pilots to develop and validate the training for the experimental powered-lift.²¹⁸ The duties that these instructor pilots and test pilots perform exceed those of a pilot operating in a normal flight environment, which results in these test pilots and instructor pilots gaining significant experience in a particular powered-lift and intricate knowledge of the aircraft's systems and components. Therefore, the FAA proposed alternate experience requirements for qualifying test pilots and instructor pilots at an OEM to create an initial cadre of powered-lift pilots in proposed §§ 194.217 and 194.219.²¹⁹ The FAA determined these individuals would hold the most experience due to their issuance of an LOA to act as PIC during experimental aircraft operations, development of manufacturer's training program, and intricate knowledge of the aircraft's systems and components.²²⁰

A4A supported this proposed approach to providing an alternate pathway for powered-lift pilot certification. A4A emphasized that using manufacturer pilots to develop necessary crew training would provide the best option for the initial cadre of powered-lift flight instructors and

supported amendments to better meet the challenges of introducing a new category of aircraft. AWPC stated that the proposed SFAR provides a reasonable alternate pathway for OEM test pilots and instructor pilots. This section first adjudicates broader comments pertaining to test pilots and instructor pilots. The subsequent sections discuss each of the proposed alternate requirements and respond to related comments.

Eve generally opposed the SFAR proposal for the certification of test pilots and instructor pilots, partially on the basis of urging the FAA to align with ICAO Annex 1, section 2.1.1.4. Additionally, Eve stated the FAA should recognize the experience and duties of instructor and test pilots and authorize these pilots to (1) deliver training to FSB pilots and the initial cadre of instructors in part 141, 142, and 135 training programs²²¹ and (2) receive the powered-lift type rating automatically. Eve also disagreed with the proposal to permit test pilots to be trained by the instructor pilot as unreasonable on the premise that once a powered-lift category rating is not required (*i.e.*, if the FAA eliminated the category rating and fully aligned with ICAO Annex 2.1.1.4 in this final rule), it would be nonsensical to require the instructor pilot to train the test pilot. Additionally, an individual commenter stated that the FAA's allowance for manufacturers' test pilots to function as an instructor pilot could be problematic if they do not understand broader issues related to the nuances of powered-lift operations and operating multi-engine machines close to the ground in complex aerodynamic environments.

First, this final rule does not implement ICAO Annex 1, section 2.1.1.4 for those reasons stated in section V.A. of this preamble. In this SFAR, the FAA sought to leverage the experience and duties of test pilots and instructor pilots to create an initial cadre of powered-lift pilots because these individuals are the most qualified initially given their significant experience in a particular powered-lift and intricate knowledge of the aircraft's systems and components. However, the FAA does not agree that granting a rating automatically on the basis of a test pilot or instructor pilot's duties, responsibilities, and experience would be appropriate without demonstration of proficiency on a practical test.

Although these instructor pilots and test pilots have significant experience as part of the pilots' duties for the manufacturer, the practical test serves as a necessary assessment to ensure proficiency in the skills required to operate an aircraft in the NAS. In addition to the foundational element of establishing a pilot meets baseline proficiency standards, the practical test, which aligns with the applicable ACS, may subject a pilot to a skill or tasks that the pilot would experience in the NAS, but may not necessarily experience in the pilot's day-to-day operations as an instructor pilot or test pilot at the manufacturer. In other words, the practical test is essential to ensuring every pilot within the NAS has demonstrated the same knowledge, skill, and ability to operate the aircraft in many different scenarios. Most applicants for a certificate or rating are not excepted from a practical test, regardless of the pilot's experience or professional position, and instructor pilots and test pilots for powered-lift should not be treated differently.²²² For these reasons, the FAA has determined that the test pilots and instructor pilots must still demonstrate proficiency on a practical test to receive a rating under part 61. The FAA notes that FAA FSB members are equally subject to the practical test requirements to obtain an LOA and subsequent type rating once the type rating is established.²²³

²²² The FAA notes that there are limited circumstances that an applicant may apply for a pilot certificate without taking a practical test. Pursuant to § 61.73, an applicant may apply on the basis of his or her military pilot qualifications and receive a commercial pilot certificate with appropriate aircraft category, class, instrument rating and type rating so long as the pilot has received this qualification in the Armed Forces and presents evidentiary documentation in accordance with § 61.73(b) and (h). The FAA allows for this to be conducted without a practical test because applicants in accordance with § 61.73 accomplish extensive flight training and checking in the respective aircraft they receive qualification in for the Armed Forces. If a civilian equivalent of a powered-lift utilized by the Armed Forces emerges, an applicant could be granted the type rating without a practical test as well, as long as the powered-lift has been recognized to be comparable in FAA Order 8900.1, Volume 5, Chapter 2, Section 19, Table 5–88. Similarly, pursuant to § 61.75, an applicant may apply for a private pilot certificate if that person meets the requirements of § 61.75, holds a foreign pilot license without an ICAO limitation, holds a medical certificate under part 67, and is able to read, speak, write, and understand the English language. The FAA recognizes that an applicant who holds a pilot certificate granted in accordance with their country's respective CAA have also trained and tested to receive their foreign certificate. Therefore, an applicant may forgo a practical test, but only to receive a U.S. private pilot certificate.

²²³ Additionally, the FAA notes a challenge for these pilots: under § 61.51(e) they are unable to log time in which they act as PIC in accordance with an LOA issued by the FAA because they don't hold

²¹⁷ To facilitate flight tests for a non-certificated aircraft, the FAA issues an experimental certificate to the aircraft for research and development and showing compliance with the FAA's regulations. See § 21.191.

²¹⁸ In this case, an experimental certificate is issued for the purpose of crew training. See § 21.191.

²¹⁹ Specifically, under §§ 194.217(a) and 194.219(a), as adopted, the flights must be conducted in an experimental powered-lift at the manufacturer and the test pilots and instructor pilots must be authorized by the Administrator to act as PIC of the experimental powered-lift.

²²⁰ See section V.G.i.d. of this preamble for the addition of FAA test pilots and ASIs to the alternate framework adopted by this final rule.

²²¹ The FAA notes that test pilots and instructor pilots would be the persons providing training to the FSB pilots and initial cadre of instructors in parts 141, 142, and 135 training programs under proposed §§ 194.221, 194.223, 194.229, and 194.231.

a. Aeronautical Experience Requirements Concerning Training (§ 61.129(e)(3))

Currently, § 61.129(e)(3) requires an applicant for a powered-lift category rating to log at least 20 hours of training from an authorized instructor, as defined in § 61.1, on the areas of operation listed in § 61.127(b)(5). A test pilot and an instructor pilot at the manufacturer will possess extensive experience with the powered-lift; however, their flight time would not be considered to meet paragraph (e)(3) because they would not receive the flight training from an authorized instructor. Therefore, the FAA proposed alternate provisions set forth by §§ 194.217(b)(1) and (2) and 194.219(b)(1) and (2). The provisions are adopted as proposed.

First, a test pilot will be permitted to meet the 20 hours of training on the areas of operation in § 61.127(b)(5) in an experimental powered-lift at the manufacturer with an instructor pilot rather than with an authorized instructor in § 194.217(b).²²⁴ Likewise, the instructor pilot who provides the proposed training curriculum will be permitted to credit the time providing the training toward § 61.129(e)(3) pursuant to § 194.219(b). In both cases, the manufacturer's proposed training curriculum would be required to include 20 hours of training on the areas of operation set forth in § 61.127(b)(5), aligning with the corresponding requirement in § 61.129(e)(3). To verify the training, § 194.217(b)(1)(ii) will require the test pilot to receive a logbook or training record endorsement from the instructor pilot certifying that the test pilot satisfactorily completed the training curriculum. Similarly, § 194.219(b)(1)(ii) will require the instructor pilot to receive an endorsement from a management official within the manufacturer's organization certifying that the instructor pilot has provided the manufacturer's proposed training curriculum to a test pilot on the areas of operation listed in § 61.127(b)(5).

Relatedly, § 61.129(e)(3)(iv) requires an applicant to log at least 3 hours in

a powered-lift with an authorized instructor in preparation for the practical test within the preceding two calendar months from the month of the test; the lack of authorized instructors as defined in part 61 creates the same problem as previously discussed. To enable the test pilot or instructor pilot to take the practical test after completing or providing the manufacturer's proposed training curriculum, §§ 194.217(b)(2) and 194.219(b)(2) will permit the preparation for a practical test to be completed with an instructor pilot rather than an authorized instructor, as required by part 61. While the test pilot would receive the three hours from an instructor pilot, an instructor pilot would be required to receive the three hours from another instructor pilot. To enable the examiner to verify that the applicant received the preparation for the practical test, the applicant would be required to receive a logbook endorsement under § 61.123(e)(2). Section 194.213 will permit the applicant to obtain such endorsement from an instructor pilot rather than from an authorized instructor (see section V.F. of this preamble for additional discussion on § 194.213).

Lilium opposed the proposed requirement for test pilots to be qualified by a manufacturer instructor pilot following the completion of 20 hours of training in accordance with the manufacturer's proposed training curriculum.²²⁵ Lilium contended the additional training would be unnecessary and add undue time and cost to the development process. Lilium stated that, instead, the FAA should consider adoption of the test pilot qualification requirement set forth by EASA FCL.725, paragraph (e), which permits test pilots involved in the development, certification, or production flight tests for an aircraft type to apply for the relevant type rating after completing either 50 hours of total flight time or 10 hours of flight time as PIC on test flights.

The FAA notes that the 20 hours of training time set forth by § 61.129(e)(3) could be concurrently accomplished within the testing program of developing a powered-lift to meet requirements outlined in the type certification process, not necessarily

following the completion of a manufacturer's proposed training curriculum. Additionally, the FAA noted in the NPRM that the SFAR would permit pilots to retroactively log time that meets the criteria adopted by this final rule. Therefore, a pilot could log all time within the life of the pilot's career as a powered-lift instructor or test pilot that meets the requirements in this final rule for a commercial pilot certificate with a powered-lift category rating and the applicable type rating. While powered-lift are currently in various stages of development and testing, the FAA finds that 20 hours of training consisting of the areas of operation required for all applicants for a commercial pilot certificate does not constitute an undue burden in the consideration of (1) the role of a powered-lift manufacturer in developing associated training curriculum in general and (2) a test pilot or instructor pilot's expected career at a manufacturer. Therefore, the FAA finds these considerations negate Lilium's assertion that additional time would result in a substantial time and cost burden.

The FAA does not find EASA's provision FCL.725(e) to be similarly situated to the existing FAA's test pilot framework or the alternate requirements set forth by the SFAR. EASA stipulates in FCL.725 that pilots holding a flight test rating issued in accordance with FCL.820 who were involved in development, certification, or production flight tests for an aircraft type, and have completed either 50 hours of total flight time or 10 hours of flight time as PIC on test flights in that type, shall be entitled to apply for the issue of the relevant type rating, provided that they comply with the experience requirements and the prerequisites for the issue of that type rating, as established in FCL subpart H (Class and Type Ratings) for the relevant aircraft category.

FCL.820 outlines the requirements for a flight test rating. Under EASA regulations, pilots may only act as a PIC in certain category 1 or 2 flight tests if they hold a flight test rating.²²⁶ Applicants for the first issuance of a flight test rating must also (1) hold at least a commercial pilot license (CPL) and an instrument rating (IR) in the appropriate aircraft category, (2) have completed at least 1,000 hours of flight time in the appropriate aircraft category, of which at least 400 hours must have been as PIC, and (3) complete a training course at an EASA-approved training program appropriate to the intended

the powered-lift category on their respective pilot certificates. In this SFAR, the FAA alleviates this challenge by leveraging the experience gained by test pilots, instructor pilots, and ASIs acting as PIC in accordance with an LOA for a powered-lift that is in the experimental phase of its type certification by permitting those pilots to log this time as PIC flight time toward ratings required by part 61.

²²⁴ Consistent with the current prohibition in § 61.195(i), which prohibits a flight instructor from making any self-endorsements for a certificate, rating or practical test, the FAA finds it would be inappropriate to permit the instructor pilot to make a self-endorsement.

²²⁵ Additionally, Lilium recommended that the FAA amend § 61.129(e)(3)(iv) to permit the three hours of preparation for the practical test to be conducted in an FSTD for all pilot populations under the SFAR. Lilium did not provide any rationale for such relief outside of referencing that § 61.129(e)(3)(iv) would inherently require dual controls in the aircraft. The FAA addresses powered-lift with single controls and Lilium's recommendation in section V.D. of this preamble.

²²⁶ FCL.820(a) and (b).

aircraft and category of flights.²²⁷ Therefore, these pilots already have this base level of flight proficiency before FCL.725 provisions for a type rating apply, which far surpass the requirements in part 61 for the issuance of an initial pilot certificate with powered-lift category rating. For example, to gain this experience in airplanes, Alternate Means of Compliance (AMC1) FCL.820 states that competency-based courses should include 350 hours of ground training, 100 hours of flight test training of which 15 flights should be made without an instructor on board. Additionally, the curriculum should include elements on theoretical knowledge, flight test techniques and flight training.²²⁸

The FAA contends that implementing the requirements of FCL.820 would result in extensively more burdensome requirements than the FAA's alternate means of compliance for a test pilot (and instructor pilot) to obtain powered-lift ratings in this SFAR. The FAA's test pilot framework differs from that of EASA's in that while a part 141 school has guidelines for test pilot training in appendix K to part 141, that training does not result in a flight test pilot rating. Therefore, if the FAA were to align its approach with the requirements of FCL.725(e), the FAA would need to require significantly more ground and flight training of the test pilot and instructor pilot than is currently afforded in this SFAR.

b. Aeronautical Experience Requirements Involving Time Performing the Duties of PIC in Experimental Powered-Lift (§ 61.129(e)(4))

Section 61.129(e)(4) currently requires an applicant for a powered-lift category rating to obtain either 10 hours of solo flight time in a powered-lift under an endorsement from an authorized instructor or 10 hours of flight time performing the duties of PIC in a powered-lift with an authorized instructor onboard. Either of these flight times may be credited toward the flight time requirement in § 61.129(e)(2), which requires 100 hours of PIC flight time. As previously discussed, the requirement for an authorized instructor defined under part 61 presents a problem for test pilots and instructor pilots; therefore, the FAA proposed §§ 194.217(b)(3) and 194.219(b)(3), with no comments received. The provisions are adopted as proposed.

Therefore, to preserve the option of obtaining solo flight time, §§ 194.217(b)(3) and 194.219(b)(3) will allow test pilots and instructor pilots to obtain the solo endorsement from an instructor pilot in lieu of an authorized instructor. Additionally, test pilots and instructor pilots will be permitted to complete the 10 hours of flight time performing the duties of PIC in an experimental powered-lift with a person other than an authorized instructor onboard. Specifically, under § 194.217(b)(3) (for test pilots), another test pilot or an instructor pilot who is authorized by the Administrator to act as PIC of the experimental powered-lift may be onboard. Under § 194.219(b)(3) (for instructor pilots), a test pilot, another instructor pilot who is authorized by the Administrator to act as PIC of the experimental powered-lift, or an FAA test pilot or ASI may be onboard.

c. Aeronautical Experience Requirements Involving Logging PIC Flight Time (§ 61.129(e)(2))

Section V.F.2. of this preamble discusses the reduction in PIC flight time under the provisions of this SFAR, which is applicable to test pilots and instructor pilots. Section 61.129(e)(2) prescribes 100 hours of PIC flight time, which includes at least 50 hours in a powered-lift.²²⁹ Under § 61.51(e)(1), in pertinent part, a pilot may only log PIC time when the pilot is the sole manipulator of the controls of an aircraft for which the pilot is rated (category, class, and type rating, if appropriate) or is the sole occupant of the aircraft. As discussed in the NPRM, these provisions present challenges for the key population of test and instructor pilots.²³⁰ As it pertains to test pilots, the test pilot would be precluded from logging time under the first option because the pilot would not be appropriately rated. Further, the test pilot would be precluded from logging PIC time under the second option because the test pilot may not be the sole occupant of the powered-lift when conducting operations for conducting research and development or showing compliance with the regulations²³¹ or

the powered-lift may require two pilot flightcrew members. As it pertains to instructor pilots, under § 61.51(e)(3), a flight instructor may log PIC flight time for all flight time while serving as the authorized instructor in an operation if the instructor is rated as PIC of that aircraft. However, the manufacturer's instructor pilot would not be an authorized instructor pursuant to part 61.

Considering the various functions a test pilot performs during the course of their duties (e.g., test flights, filing flight plans, conducting departures and instrument approaches, etc.) and accounting for an instructor pilot's duties and responsibilities (e.g., developing, validating, and delivering the manufacturer's proposed training curriculum), the FAA proposed alternate logging requirements in § 194.217(c) for test pilots and in § 194.219(c) for instructor pilots. The FAA did not receive any comments to these provisions. This final rule adopts these provisions as proposed (in addition to the reduction in PIC flight time in a powered-lift as described in section V.F.2. of this preamble). Therefore, § 194.217(c) will permit the test pilots to log PIC flight time for flights when they are the sole manipulator of the controls of the experimental powered-lift despite the fact that they are not rated in the aircraft. The test pilot must act as PIC of the experimental powered-lift in accordance with an LOA issued by the Administrator and the flight must be conducted for the purpose of research and development or showing compliance with the regulations in accordance with the powered-lift's experimental certificate. Similarly, § 194.219(c) will permit the instructor pilots to log PIC flight time for flights when they are serving as an instructor pilot for the manufacturer of an experimental powered-lift for which the pilot is not rated. The instructor pilot must act as PIC of the experimental aircraft in accordance with an LOA issued by the Administrator and the flight must be conducted for the purpose of crew training in accordance with the powered-lift's experimental certificate.

d. FAA Test Pilots and FAA ASIs

As discussed in section V.A. of this preamble, the FAA adopts the requirement that pilots hold a type

received the required training that is appropriate to the pilot certification level, aircraft category, class, and type rating (if a class or type rating is required) for the aircraft to be flown and have received an endorsement for solo flight in that aircraft from an authorized instructor.

²²⁷ FCL.820(d).

²²⁸ AMC1 FCL.820(d), Condition 1 courses for aeroplanes.

²²⁹ § 61.129(e)(2)(i).

²³⁰ 88 FR 38946 at 38969 (June 14, 2023).

²³¹ The "sole occupant" provision is intended to recognize the solo flight time that is required under the aeronautical experience requirements for certificates and ratings. Because student pilots seeking an initial category and class rating or certificated pilots who are adding a new rating to their pilot certificate are not yet rated, this section recognizes this solo time as PIC time without the pilot having to be rated in the aircraft. Section 61.31(d)(2) permits pilots to act as PIC of an aircraft when not rated in the aircraft provided they have

rating for the powered-lift the pilot seeks to operate. Accordingly, FAA test pilots and ASIs are subject to the same pilot certification requirements. However, as written, the SFAR would preclude an FAA test pilot or ASI from using the same flexibilities that manufacturer test pilots and instructor pilots may use.

At this time, the manufacturers' test pilots and instructor pilots are the only pilots who have significant experience operating the civilian powered-lift that are planning to come to market. Similarly, the FAA employs test pilots and ASIs involved in the certification process for manufacturers that are pursuing a type certificate in a powered-lift. FAA test pilots and ASIs play a significant role in the type certification of newly designed aircraft, powered-lift included, without which new entrant aircraft would not be able to enter civil operations. These individuals employed by the FAA are also issued authorizations to operate the aircraft, intricately involved in development of the manufacturer's training program, and acquire significant experience and knowledge in the particular powered-lift to facilitate the type certification process.

FAA test pilots are pilots employed by the FAA who facilitate type certification of the performance, stability, and control requirements of new or modified aircraft. FAA test pilots enable the type certification compliance and certification process through flight testing of avionics, propulsion, and mechanical/electrical systems, as well as other equipment installations on aircraft to which they are assigned. An FAA test pilot also participates as a subject matter expert on type certification board meetings with the manufacturer, flight safety review board meetings, and FSBs, as necessary. Through qualitative and quantitative flight tests and evaluation of engineering data on modified and new type design, the FAA test pilots oversee and ensure compliance with applicable airworthiness requirements eventually culminating in the type certification of an aircraft. In addition to these duties, FAA test pilots maintain a high level of pilot proficiency and currency in categories and classes of aircraft for the projects they are assigned. Currently, there are a small number of FAA test pilots who hold powered-lift category ratings.

Similarly, ASIs are employed by the FAA and maintain involvement early in the type certification process of new aircraft. These ASIs evaluate detailed flight characteristics of aircraft certification projects to establish

training requirements for FAA operations inspectors responsible for evaluating and approving training programs set forth by the manufacturer. ASIs develop a detailed knowledge of the aircraft's systems to ensure operational safety of the aircraft through the training program. Like FAA test pilots, FAA ASIs also serve as members of type certification boards and advisors to aircraft certification on flight operations problems regarding newly designed aircraft being type certificated and introduced into revenue service. Other duties of inspectors include recommending amendments to proposed manufacturer crew training, participating in the development of approved AFMs, and representing flight standards in conducting operational suitability flight evaluations.

Therefore, FAA test pilots and ASIs possess unique experience parallel to that of a manufacturer's test pilots that merits their inclusion in the alternate experience requirements to receive a powered-lift category, instrument, and type rating. While the FAA did not initially propose to extend the SFAR to this population, the FAA finds it necessary to facilitate FAA test pilots and ASIs performing official job functions to receive a pilot certificate with a powered-lift category rating to support the pipeline of powered-lift certification.

Accordingly, this final rule makes several minor revisions in §§ 194.203, 194.217, and 194.219 to add FAA test pilots and ASIs into the alternate SFAR framework to obtain a commercial pilot certificate with a powered-lift category rating. Additionally, the FAA adds a definition of "FAA test pilot" and "aviation safety inspector" to § 194.103. The FAA notes that FAA test pilots and FAA ASIs are added into the provisions facilitating an alternate framework to obtain an instrument-powered-lift rating, however, those provisions are discussed in section V.F of this preamble.

First, to define the exact population of FAA pilots that may use the alternate framework, the FAA adopts two new definitions in § 194.103 for the purpose of part 194. Specifically, an "aviation safety inspector" will be defined as a pilot employed by the FAA to conduct operations of a powered-lift for the purpose of establishing a type rating in that particular powered-lift under part 21, as appropriate. Similarly, an "FAA test pilot" will be defined as a pilot employed by the FAA to conduct operations of a powered-lift for the purpose of establishing a design approval that leads to an aircraft type certificate for that particular powered-

lift under part 21. These narrowly scoped definitions function to ensure the FAA pilot utilizing the relief is performing official FAA job duties and will have experience and familiarity specific to the type of powered-lift for which the pilot will seek a type rating, parallel to that experience expected of a manufacturer's test pilots and instructor pilots.

Next, § 194.203 sets forth alternate qualification requirements for certain flight instructors. This section provides that, in addition to the provisions specified in § 61.3(d)(3), a flight instructor certificate issued under part 61 is not necessary to conduct flight training if the training is given by an instructor pilot in a powered-lift at the manufacturer, provided the training is conducted in accordance with the manufacturer's training curriculum and is given to either (1) a test pilot, or (2) certain persons authorized by the Administrator for the purpose of training in a powered-lift training program.²³² Because FAA test pilots and ASIs will receive training during the type certification process through their testing, compliance, and evaluation flights, this final rule adds FAA test pilots and ASIs to the population covered by § 194.203(a) in new paragraph (a)(3). The FAA test pilot or ASI may only receive training from an instructor pilot without a part 61 flight instructor certificate if received for the purpose of establishing a type rating in a powered-lift as part of the FAA ASI's official job functions or for the purpose of establishing a design approval that leads to an aircraft type certificate for that particular powered-lift under part 21 as part of the FAA test pilot's official job functions.

Additionally, § 194.213 provides alternate endorsement requirements for certain persons seeking a powered-lift rating. Specifically, § 194.213(a) permits an instructor pilot or a management official to provide endorsements to certain persons. To account for FAA test pilots and ASIs, the FAA adds new paragraph (a)(1)(iii), which permits a manufacturer's instructor pilot to provide an FAA test pilot or FAA ASI the required logbook or training record endorsements under parts 61 and 194 for a commercial pilot certificate with a powered-lift category rating, an instrument-powered-lift rating, a powered-lift type rating, or a flight

²³² Specifically, an initial check pilot, chief instructor, assistant chief instructor, or training center evaluator for the purpose of initiating training in a powered-lift under an approved training program under part 135, 141, or 142. This final rule adopts the section as proposed, as discussed in section V.G. of this preamble.

instructor certificate with powered-lift ratings. Again, the FAA test pilot or ASI must be performing official job functions for the purposes delineated in the respective definition to utilize the alternate requirement.

As the preceding sections have detailed, § 194.217 provides the alternate aeronautical experience and logging requirements for a commercial pilot certificate with a powered-lift category rating specifically for manufacturer test pilots. As stated, the FAA proffers the alternate requirements for test pilots to extend to FAA test pilots and ASIs. Therefore, the FAA adds this population of pilots in § 194.217 through revisions in paragraphs (a), (b), (b)(1), (b)(1)(ii), (b)(2) through (b)(4), and (c)(1), and a new paragraph (a)(3). The FAA notes that § 194.217(b)(3) permits the aeronautical experience requirement in § 61.129(e)(4) by logging at least 10 hours of solo flight time under an endorsement from an instructor pilot or by performing the duties of PIC in an experimental powered-lift with a test pilot or an instructor pilot onboard. While the regulation would permit another test pilot to be onboard the flight with a test pilot performing the duties of PIC in an experimental powered-lift, the FAA is not adopting a parallel provision to permit a FAA test pilot or ASI to be on board a flight with another FAA test pilot or ASI performing the duties of PIC.

The FAA contemplated this alternative option but did not find this to be in the interest of safety. The instructor pilot and test pilots from the manufacturer are the most knowledgeable in the aircraft. Ensuring that instructor pilots or test pilots from the manufacturer are on board the flight with an FAA test pilot or ASI ensures that a pilot with significant experience and knowledge on that OEM's powered-lift is performing the duties of PIC, thereby ensuring an equivalent level of safety. Additionally, the FAA makes two conforming amendments to § 194.219, which sets forth the alternate aeronautical experience and logging requirements for a commercial pilot certificate with a powered-lift category rating for instructor pilots, as an outgrowth of the inclusion of FAA test pilots and ASIs.

First, one criteria for an instructor pilot to meet the alternate requirements for § 61.129(e)(3) and (4) requires the instructor pilot to have provided the manufacturer's proposed training curriculum to a test pilot, within certain parameters. Because FAA test pilots and ASIs will receive the proposed training curriculum from an instructor pilot, the

FAA revises § 194.219(b)(1)(i) to include this population of pilots in the criteria as applicants an instructor pilot could receive credit for delivering the training program. Second, this final rule adds FAA test pilot and ASIs to the group of persons permitted to be onboard the experimental powered-lift while an instructor pilot performs the duties of PIC to satisfy the aeronautical experience requirement in § 61.129(e)(4), which is set forth in new § 194.219(b)(3)(iii).

ii. Initial Cadre Instructors: Alternate Aeronautical Experience and Logging Requirements for Powered-Lift Category Ratings

As acknowledged in the NPRM,²³³ the alternate experience and logging requirements for test pilots and instructor pilots would enable individuals to obtain powered-lift ratings on their pilot certificates. However, the FAA found that those alternate requirements alone would be insufficient to develop enough personnel to support training in a powered-lift in an approved training program under part 135, 141, or 142.

The FAA did not propose relief to the qualifications required of persons who provide training and checking for an approved training curriculum under parts 135, 141, and 142 (*i.e.*, part 135 check pilots, part 141 assistant chief instructors and chief instructors, and part 142 training center evaluators). Specifically, under part 135 and the provisions of this final rule, a part 135 check pilot must hold the certificates and ratings required to serve as PIC in the aircraft (*i.e.*, at least a commercial pilot certificate with a powered-lift category rating, instrument powered-lift rating, and appropriate type rating).²³⁴ Under part 141, an assistant chief instructor or chief instructor must hold a powered-lift category rating on both their commercial pilot certificate and their flight instructor certificate as well as a powered-lift type rating on their commercial pilot certificate.²³⁵ A part 142 TCE must hold the certificates and ratings in which they are instructing or checking for that aircraft.²³⁶

To build the initial cadre of instructors and address these obstacles, the FAA's intended framework uses test pilots and instructor pilots to build the initial cadre of instructors (*e.g.*, a qualified instructor for a part 142 training center), who would then

provide training under a part 135, 141, or 142 approved training program. To facilitate this, the FAA proposed § 194.221(a) to permit persons who are authorized to serve as initial check pilots, chief instructors, assistant chief instructors, or training center evaluators to receive the training for powered-lift ratings at a manufacturer.

Eve opposed the initial cadre framework proposed by the NPRM, stating that training the initial cadre of instructors after the FSB process concludes will delay civilian powered-lift operations. Eve stated that the FAA's proposal to require flight hours in a certificated aircraft is burdensome and unfeasible. Eve emphasized that they did not disagree with utilizing test pilots and instructor pilots to qualify the initial cadre of instructors but asserted that the FAA should allow the initial cadre of instructors to be qualified in parallel with the aircraft certification and FSB processes, as is the FAA's current practice with the introduction of new aircraft types.²³⁷ UPS FF also contended that requiring a powered-lift to be type-certificated before an operator can implement its training program would result in an undue financial burden and unnecessary delays in developing an initial cadre. Specifically, UPS FF recommended revising the SFAR to allow manufacturers to provide instruction to an operator prior to type certification, utilizing FAA guidance for the use of experimental aircraft for commercial flight instruction.

The FAA does not find the initial cadre of instructors to be similarly situated to test pilots and instructor pilots to warrant an equivalent level of relief in the alternate framework. Test pilots and instructor pilots at the manufacturer are involved in development and testing of prospective aircraft toward the eventual type

²³⁷ EVE specifically recommended the FAA follow similar processes for initial cadre preparation as is currently the practice in accordance with FAA Order 8900.1, Volume 3, Chapter 54, Section 2 *Part 142 Training Centers: Training, Qualification, and Designation of Training Center Instructors and Evaluators* as well as those set forth in Air Transportation Job Task Analysis (AT JTA) 4.1.202 *Conduct a Flight Standardization Board (FSB) Evaluation*. EVE noted that once a powered-lift category requirement was removed, the FAA would be able to follow these two reference guidance documents. The FAA notes that regardless of whether a category rating is required, this is the current practice that the FAA would follow to procedurally accomplish an FSB in a powered-lift. Specifically, in regard to ELEMENT 8.3 *Receive FSB training*, the initial cadre of participants of the FSB would be receiving the applicable training from the provider and the FAA predicated the alternate experience for test pilots and instructor pilots with the expectation that the FAA would follow these procedures when conducting an FSB.

²³³ 88 FR 38970 (June 14, 2023).

²³⁴ See § 135.337(b)(1) and SFAR PROVISION.

²³⁵ See §§ 141.35(a)(1), 141.36(a)(1), 141.37(a)(2)(ii).

²³⁶ See § 142.47(a)(5).

certification of products and airframes. Test pilots and instructor pilots have significant experience throughout the production of the aircraft and have the background knowledge and skills to conduct quantitative and qualitative analysis, identify outcomes that may require the manufacturer to redesign or adjust design of aircraft components, which therefore results in the applicable flight experience necessary to accept a higher level of operating risk because of the experimental status of the aircraft. This warrants separate relief from that offered to the initial cadre of instructors because the initial cadre of instructors will not inherently have the equivalent level of experience of a manufacturer's test pilots and instructor pilots (*i.e.*, the initial cadre instructor would not have any prior experience in the category of powered-lift or intricate knowledge of the powered-lift type during its development). The FAA, therefore, adopts § 194.221(a) as proposed.

Test pilots and instructor pilots will receive an LOA provided to the manufacturer by the FAA to conduct very specific tasks in accordance with § 21.191(a), (b), and (c). The FAA would not consider issuing an LOA to an initial cadre of instructors unassociated with a manufacturer for these very specific purposes because they would not be carrying out the purposes of these experimental test flights. Once the aircraft is type certificated, the FAA proposed separate relief for an initial cadre of instructors to be trained by the particular powered-lift experts: test pilots and instructor pilots. Combining this responsibility with the duties assigned to the test pilots and instructor pilots, and authorized by the LOA, would complicate both the type certification and FSB process and the training of the initial cadre of instructors due to the fluidity of the aircraft and training program at that time.

Additionally, the FAA finds grouping the initial cadre of instructors in with the test pilots and instructor pilots would not be in the interest of safety due to the experimental status of the aircraft.²³⁸ The FAA finds it important for the initial cadre of instructors to be trained on the type-certificated aircraft as it will be available for training, testing, and civilian operations under the type certificate and under a more concrete training program. Specifically,

throughout the type certification process, the aircraft may change in design and programming and, likewise, throughout the FSB, the proposed training program may be revised. Until a type certificate is issued, aircraft design would not be solidified and any changes made, as well as associated knowledge of those changes, may not be transferred to the base of pilots in the initial cadre that would then be responsible for training at their respective certificate holder. For example, if an individual intended for the initial cadre of instructors trained on a unique handling characteristic, and that handling characteristic was modified as an outgrowth of the TC process, the individual may not receive the appropriate training for the modified characteristic in the fluidity of the powered-lift and training program. This differs for test pilot and instructor pilots because of their in-depth and firsthand involvement with the development of the aircraft and training program and with TC and FSB processes.

CAE and NBAA expressed concern that the proposal requires initial cadre instructors and TCEs to be trained by the manufacturer, which gives a significant competitive advantage to manufacturers. CAE and NBAA stated that this (1) eliminates the ability for part 142 training centers to qualify initial cadre instructors and TCEs by their own means, and (2) creates a backlog for training with the potential for manufacturers to solely determine who may be trained and when training may occur. CAE and NBAA emphasized the burden this would place on manufacturers to train in volume to scale the industry.

First, the FAA disagrees that the proposal reduces the ability for air agencies to qualify initial cadre instructors and TCEs by their own means as compared to the competitive advantage the manufacturer may have. The lack of powered-lift in operations today inherently requires the manufacturer to be significantly involved in the certification framework. At the onset of powered-lift entering the market, test pilots and instructor pilots at the manufacturer will be the only qualified individuals to deliver training in the respective OEM's powered-lift, which the FAA expects to form the initial foundation of pilots. After the initial cadre of instructors for parts 141 and 142 air agencies is trained, certificate holders may operate within their approved training programs. In other words, reliance on the manufacturer as the sole training option would significantly lessen after certification of the initial cadre of

instructors. This is the same general concept as the status quo for entrance of new aircraft types: at the onset, the manufacturer serves as the most qualified individual to train FAA inspectors and test pilots and industry personnel, after which industry stakeholders springboard subsequent populations of pilots through part 61 training or enrollment at air agencies (*e.g.*, parts 141 and 142). Therefore, the FAA does not view the alternate framework set forth by the SFAR²³⁹ as narrowly tailored for manufacturers, but rather leverages the current concept with facilitating frameworks to achieve initial commercial entrance of powered-lift into civilian operations while balancing the interest of safety.

In sum, when an operator, pilot school, or training center sends an individual to the manufacturer for training in a powered-lift, the individual would not be fully qualified as a check pilot, chief instructor, assistant chief instructor, or training center evaluator for powered-lift, but each would be considered a candidate for their respective positions.²⁴⁰ To ensure an appropriate level of oversight, the FAA proposed §§ 194.203(a)(2), 194.213(a)(1)(ii), and 194.221(a)(1), which are adopted herein, permit those individuals who are authorized by the Administrator through a temporary letter of approval (authorizing the individual to be a candidate for an operator, pilot school, or training center for the purpose of establishing sufficient qualified personnel) to receive training in a powered-lift at the manufacturer. After the individual completes the training program, the individual may pursue certification in accordance with current practice (*e.g.*, complete a practical test to receive the appropriate powered-lift ratings and could obtain a powered-lift category rating on their flight instructor certificate in accordance with subpart H of part 61), as well as deliver the training curriculum under their respective part in accordance with current practice (for example, receive a permanent letter of approval to be a check airman under part 135 or a TCE under part 142).

²³⁹ The FAA notes also that other manufacturers have obtained part 142 training center certificates and, in some instances, part 141 pilot school certificates, to facilitate initial training and certification in their aircraft. The FAA anticipates that the relief provided to the persons who serve as test pilots and instructor pilots for powered-lift manufacturers will enable the manufacturers to support training and qualification of other training providers' personnel.

²⁴⁰ In addition, for part 135 check pilot applicants and part 142 TCEs, the initial cadre check airmen or initial cadre TCE process will apply.

²³⁸ The FAA notes that manufacturers may not support this type of access to their powered-lift in the experimental phase to persons not under an employment contract, contractor agreements, or nondisclosures with the manufacturer for intellectual property and proprietary trade secret purposes.

a. Aeronautical Experience Requirements Concerning Training (§ 61.129(e))

The FAA proposed alternate aeronautical experience requirements in § 194.221(b) to facilitate training and certification of the initial cadre of instructors and overcome similar training obstacles as those faced by test pilots and instructor pilots, as previously discussed. In sum, certain provisions throughout § 61.129(e) require training and flight hours to be conducted with an authorized instructor, as defined in part 61, onboard the powered-lift. As with test pilots and instructor pilots, the person receiving the manufacturer's training from an instructor pilot may not have an authorized instructor, as defined in § 61.1, providing the flight training or training in preparation for the practical test. Notwithstanding the general opposition to the initial cadre framework addressed in the previous section, the FAA did not receive comments on the specific provisions set forth in § 194.221(a) and (b)(1) through (3) to address these obstacles. The FAA adopts these provisions as proposed.

Therefore, § 194.221(b) allows the requisite training to occur with an instructor pilot at the manufacturer in lieu of a part 61 authorized instructor. First, § 194.221(b)(1) will permit the individual to satisfactorily complete the manufacturer's training curriculum in the powered-lift in place of the requirement in § 61.129(e)(3), which requires 20 hours of training on the areas of operation listed in § 61.127(b)(5) from an authorized instructor. The training curriculum must include 20 hours of flight training on the areas of operation listed in § 61.127(b)(5) and be provided by an instructor pilot at the manufacturer. Additionally, pursuant to § 194.221(b)(1)(ii), the individual must receive an endorsement in their logbook or training record from the instructor pilot certifying that the training was completed. Second, § 194.221(b)(2) will permit to permit the preparation for the practical test to be completed with an instructor pilot rather than an authorized instructor.²⁴¹ Finally, § 61.129(e)(4) requires an applicant for a powered-lift category rating to obtain either 10 hours of solo flight time in a powered-lift or 10 hours of flight time performing the duties of PIC in a

powered-lift with an authorized instructor onboard; the FAA in § 194.221(b)(3) will permit the instructor pilot to replace the authorized instructor in § 61.129(e)(4). Also, as noted earlier, § 194.221(a)(2) will require that the flights are conducted in type-certificate powered-lift at the manufacturer.

b. Alternate Aeronautical Experience Logging PIC Flight Time (§ 61.129(e)(2))

The FAA proposed alternate logging requirements in § 194.221(c) to overcome PIC logging obstacles as set forth in § 61.51(e), similar to those faced by test pilots and instructor pilots, as previously discussed.²⁴² In section V.J. of this preamble, the FAA explained that a reduction in PIC time is warranted from 50 hours to 35 hours. Therefore, the initial cadre of instructors who would train with the manufacturer under the SFAR would be required to obtain 35 hours of PIC flight time in powered-lift. As discussed, under § 61.51(e)(1), a pilot may log PIC time when the pilot is (i) the sole manipulator of the controls of an aircraft for which the pilot is rated (category, class, and type rating as appropriate), or (ii) the sole occupant of an aircraft. The initial cadre of instructors who attend training at a manufacturer would not yet be rated in the powered-lift, so they would not be able to log PIC time as sole manipulator of the controls. Additionally, because the majority of the flight time with the manufacturer would consist of training time with an instructor pilot, the person would not be able to log this time as PIC time as the sole occupant of the powered-lift. The FAA proposed § 194.221(c) to address this obstacle; notwithstanding the general opposition to the initial cadre framework addressed in the previous section, the FAA did not receive comments on this specific provision set forth in § 194.221(c). Therefore, this final rule adopts these alternate logging provisions and reduces the maximum logging time when the pilot is the sole manipulator of the controls of a powered-lift for which the pilot is not yet rated from 40 hours, as proposed, to 25 hours as subsequently discussed.

Specifically, as noted in section V.J. of this preamble, the FAA reduced the PIC flight time required for all pilots under the SFAR to 35 hours instead of 50 hours. It, therefore, follows that this alternate logging requirement adopted in this final rule would now enable

persons to log 25 hours of PIC flight time for flights when they are obtaining flight training on the areas of operation specified in § 61.127(b)(5).²⁴³ Therefore, to establish the initial cadre of persons who would initiate training in a powered-lift in accordance with an approved training program under part 135, 141, or 142, § 194.221(c) will permit those persons who would receive training at the manufacturer to log up to 25 hours of PIC flight time toward the 50-hour requirement during flights when the person is the sole manipulator of the controls of the powered-lift for which the person is not rated. Pursuant to the conditions adopted in § 194.221(c)(1) through (3), the person must be manipulating the controls of the powered-lift and performing the duties of PIC with an instructor pilot onboard, and the flight must be conducted in accordance with the manufacturer's training curriculum.

The FAA found that the flight time permitted under the proposed alternate requirement would be valuable for the purposes of logging PIC flight time for a powered-lift category rating because the pilot would be solely manipulating the controls of the powered-lift, thereby obtaining experience with its flight and handling characteristics, while simultaneously exercising the duties of PIC. By exercising the duties of PIC, the pilot would experience increased responsibilities during the flight (compared to a typical training flight in an aircraft in which they are not yet rated), including heightened decision-making. The FAA noted that these pilots would still be required to obtain the last 10 hours of PIC flight time as solo flight time under § 61.51(e).²⁴⁴

iii. Pilots Receiving Training Under an Approved Training Program

a. Alternate Requirements for a Commercial Pilot Certificate With a Powered-Lift Category Rating

The NPRM acknowledged an obstacle created in § 61.51(e)(1) for persons seeking to obtain a powered-lift category rating on their commercial pilot certificate outside a manufacturer's training curriculum (*i.e.*, under an

²⁴¹ To the extent that instructor pilots may hold the necessary certificates and ratings to be an authorized instructor as defined in § 61.1 in a powered-lift, those instructor pilots would be able to provide endorsements without need for this relief.

²⁴² As proposed, § 194.221(c) would have allowed an applicant for a commercial pilot certificate with a powered-lift category rating to log up to 40 hours of the 50 hours of pilot-in-command flight time required by § 61.129(e)(2)(i).

²⁴³ As detailed in this section, an applicant for a powered-lift category rating would be required to obtain either 10 hours of solo flight time in a powered-lift or 10 hours of flight time performing the duties of PIC in a powered-lift with an authorized instructor onboard. Therefore, with the total time being reduced to 35 hours of PIC, the FAA has likewise adjusted the 40 hours to 25 to account for the last 10 hours being conducted as solo or supervised by an authorized instructor.

²⁴⁴ The solo flight endorsement required under § 61.31(d)(2) may be provided by an instructor pilot in lieu of an authorized instructor in accordance with § 194.213(a).

approved training program at a part 135 operator or a part 141 or 142 air agency). Specifically, pilots would be unable to log PIC flight time in a powered-lift in accordance with § 61.51(e)(1)(i) because they would not yet be rated in the aircraft. Thus, at the commercial pilot level, a person would have to obtain the 50 hours of PIC time required by § 61.129(e)(2)(i) as the sole occupant of the powered-lift under solo endorsements from an authorized instructor. The FAA proposed § 194.223(c) to cure this logging obstacle. As subsequently discussed, this final rule adopts § 194.223(c) as proposed with one minor revision.

As discussed in section V.F.2. of this preamble as it applies to the initial cadre of instructors, the reduction in PIC flight time in a powered-lift from 50 hours to 35 hours necessitates an aligning reduction in the allowance to log up to 40 hours of PIC flight time provided in § 194.223(c). Using the same ratio, this final rule reduces 40 hours to 25 hours. An applicant would still be required to obtain the remaining 10 hours of PIC time as the sole occupant of the powered-lift under an instructor endorsement.

Therefore, § 194.223(c) will permit certain applicants for a commercial pilot certificate with a powered-lift category rating to log up to 25 hours of PIC flight time toward the 35-hour requirement during flights when the pilot is the sole manipulator of the controls of the powered-lift for which the pilot is not rated. Conditions to utilize this relief will require (1) the applicant to manipulate the controls of the powered-lift with an authorized instructor onboard, (2) the applicant to perform the duties of PIC, and (3) the flight to be conducted in accordance with an approved training program under part 135, 141, or 142.²⁴⁵ This PIC flight time may be logged when the applicant is obtaining flight training on the areas of operation specified in § 61.127(b)(5) under an approved part 135, 141, or 142 training program.

An individual commenter questioned whether the 40 hours (now 25 hours as adopted by this final rule) of flight time would be required in every make and model of powered-lift within the powered-lift category.

The FAA notes the PIC flight time required by § 61.129(e) is category specific, including § 194.216(a) and certain time within § 61.129(e)(2)(ii) as applicable to the powered-lift category, not powered-lift type specific.

Therefore, an applicant could log time gained in multiple powered-lift toward the aeronautical experience, given the applicant meets the conditions for logging PIC flight time in § 61.51(e)(1)(i) or the alternate logging requirements in § 194.223(c). In other words, the same general framework to obtain any other category or class rating on a commercial pilot certificate would apply (e.g., to obtain an airplane single-engine rating, an applicant must log at least 100 hours of PIC flight time, which includes at least 50 hours in airplanes, pursuant to § 61.129(a)(2); the regulation does not specify the class or type of airplane).

b. Use of a Full Flight Simulator for PIC Time for a Commercial Pilot Certificate With a Powered-Lift Category Rating

The FAA proposed in § 194.223(d) to permit an applicant for a commercial pilot certificate with a powered-lift category who is accomplishing training under an approved program under part 135, 141, or 142 to credit a maximum of 15 hours obtained in an FFS toward the 50-hour PIC flight time requirement in § 61.129(e)(2)(i), provided the aeronautical experience was obtained performing the duties of PIC in a Level C or higher FFS that represents the powered-lift category. Many commenters urged the FAA to provide further credit for simulator training or expand the scope of FSTD for credit. Because the FAA expands this credit to the broader group of pilots in § 194.216(b) of this final rule, section V.F of this preamble discusses the proposal, comments received, and final rule action.

3. Obtaining an Instrument-Powered-Lift Rating (§ 61.65(f))

Section 61.65 provides the requirements to obtain an instrument rating, including the general aeronautical knowledge, flight proficiency, and aeronautical experience requirements for an instrument-powered-lift rating. Because pilots are unable to satisfy several of the aeronautical experience requirements for an instrument-powered-lift rating for the same reasons that pilots are unable to satisfy certain requirements for a commercial pilot certificate with a powered-lift rating, as previously discussed, the NPRM proposed alternate pathways to obtain this rating.

First, as previously discussed, adopted § 194.215 would limit the alternate aeronautical experience and logging requirements for obtaining an instrument-powered-lift rating to those persons who already hold (1) at least a commercial pilot certificate with at least an airplane category and single- or

multiengine class rating or a rotorcraft category and helicopter class rating and (2) the corresponding instrument rating. Aligning with the framework proposed, and adopted by this final rule, for a commercial certificate with a powered-lift category rating, the FAA proposed alternate experience and logging requirements to obtain an instrument-powered-lift rating for the same populations: (1) test pilots and instructor pilots, (2) the initial cadre of instructors, and (3) pilots receiving training under an approved training program.

The FAA did not receive comments regarding the proposed alternate framework for an instrument-powered-lift rating and provides a brief summary of each framework element herein. As discussed in section V.F.2.i.d. of this preamble, FAA test pilots and ASIs were unintentionally excluded from the proposal and added in this final rule. Other than this addition subsequently discussed, the FAA adopts the alternate framework to obtain an instrument-powered-lift rating as proposed. Alternate requirements for cross-country flights, which are generally applicable, are discussed later in this section.

i. Test Pilots and Instructor Pilots: Alternate Aeronautical Experience and Logging Requirements for Instrument-Powered-Lift Rating

Sections 194.225 and 194.227 will set forth the alternate aeronautical experience and logging requirements for test pilots and instructor pilots seeking an instrument-powered-lift rating. In §§ 194.225(a) and 194.227(a), these alternate requirements will apply if the flights are conducted in an experimental aircraft at the manufacturer and the test pilots or instructor pilots are authorized by the Administrator to act as PIC of the experimental powered-lift. The alternate aeronautical experience requirements are set forth in § 194.225(b)(1) through (4) for test pilots and § 194.227(b)(1) through (4) for instructor pilots. Similarly, the alternate logging requirements will be set forth in §§ 194.225(c) for test pilots and 194.227(c) for instructor pilots.

a. Aeronautical Experience Requirements Involving Instrument Training (§ 61.65(f)(2))

First, § 61.65(f)(2) requires 40 hours of actual or simulated instrument time in the areas of operation listed under § 61.65(c), of which 15 hours must be received from an authorized instructor who holds an instrument-powered-lift rating. The FAA found it necessary to propose an alternate to the requirement for a part 61 authorized instructor for

²⁴⁵ Training under part 135, 141, or 142 is discussed in more detail in section V.G. of this preamble.

test pilots or instructor pilots to accomplish the 15 hours of instrument training on the areas of operation listed in § 61.65(c), as required by § 61.65(f)(2). Therefore, under § 194.225(b)(1), a test pilot will be permitted to satisfactorily complete the manufacturer's training curriculum in the experimental powered-lift with an instructor pilot. Similarly, under § 194.227(b)(1), the instructor pilot will be able to credit the time spent providing the manufacturer's training curriculum to another instructor pilot or a test pilot toward the training required by § 61.65(f)(2). The manufacturer's training curriculum must include 15 hours of instrument training on the areas of operation listed in § 61.65(c).

For the purpose of verifying satisfactory completion of the alternate experience requirement to an examiner, the FAA proposed to require the test pilot or instructor pilot to receive an endorsement in their logbook or training record. Under § 194.225(b)(1)(ii), a test pilot will be required to receive an endorsement from the instructor pilot who provided the training, certifying that the test pilot satisfactorily completed the manufacturer's training curriculum in the experimental powered-lift. Under § 194.227(b)(1)(ii), an instructor pilot will be required to receive an endorsement from a management official within the manufacturer's organization certifying that the instructor pilot has provided the manufacturer's training curriculum to a test pilot.

Second, § 61.65(f)(2)(i) requires the aforementioned instrument time (*i.e.*, that set forth by § 61.65(f)(2)) to include 3 hours of instrument flight training from an authorized instructor in a powered-lift within 2 calendar months before the date of the instrument rating practical test. Sections 194.225(b)(2) (for test pilots) and 194.227(b)(2) (for instructor pilots) will permit the preparation for the instrument rating practical test to be completed with an instructor pilot rather than an authorized instructor. To enable the examiner to verify that the preparation was completed, under § 194.213 the applicant may obtain the endorsement from the instructor pilot, rather than an authorized instructor under § 61.65(a)(6), who certifies that the applicant is prepared for the practical test.

Third, the instrument time referenced in § 61.65(f)(2) must include instrument flight training on cross-country flight procedures, including one cross-country flight in a powered-lift with an authorized instructor that is performed under IFR, when a flight plan has been

filed with an ATC facility.²⁴⁶ The cross-country flight must include 250 nautical miles along airways or by directed routing from an ATC facility, an instrument approach at each airport, and three different kinds of approaches with the use of navigation systems.²⁴⁷ Sections 194.225(b)(3) (for test pilots) and 194.227(b)(3) (for instructor pilots) will allow test pilots or instructor pilots to perform instrument training on cross-country flight procedures referenced in § 61.65(f)(2)(ii) in an experimental powered-lift with an instructor pilot rather than an authorized instructor. The applicant will be required to receive a logbook or training record endorsement but may obtain such from the instructor pilot to certify that the applicant completed the cross-country flight with the instructor pilot.²⁴⁸

b. Aeronautical Experience Requirements Involving Logging PIC Flight Time (§ 61.65(f)(1))

Section 61.65(f)(1) requires a person who applies for an instrument-powered-lift rating to log at least 50 hours of cross-country time as PIC, 10 hours of which must be in a powered-lift. As discussed in the NPRM, the FAA recognized the obstacle with logging PIC time in accordance with § 61.51(e)(1) for the same reasons stated in section V.J of this preamble. Accordingly, consistent with the alternate logging requirements proposed for persons seeking to add a powered-lift category rating on a commercial pilot certificate, § 194.225(c) will permit test pilots at the manufacturer to log PIC flight time for the purpose of satisfying the 10-hour cross-country requirement in § 61.65(f)(1) when the test pilot is the sole manipulator of the controls of an experimental powered-lift even if the test pilot is not rated for the aircraft. To log this time, the test pilot must act as PIC of the experimental powered-lift in accordance with a letter of authorization issued by the Administrator. In addition, the flight must be conducted for the purpose of research and development or showing compliance with the regulations in accordance with the experimental certificate issued to the powered-lift pursuant to § 21.191.

Similarly, § 194.227(c) will allow instructor pilots to log PIC flight time for the purpose of satisfying the 10-hour cross-country requirement in § 61.65(f)(1) when the pilot is serving as an instructor pilot for the manufacturer

of an experimental powered-lift for which the instructor pilot is not rated under certain conditions. The pilot must act as pilot-in-command of the experimental powered-lift in accordance with a letter of authorization issued by the Administrator and the flight must be conducted for the purpose of crew training in accordance with the experimental certificate issued to the powered-lift pursuant to § 21.191.

c. FAA Test Pilots and ASIs

As discussed in section V.F.2.i.d. of this preamble, adopting the aforementioned SFAR provisions as proposed would preclude an FAA test pilot or ASI from utilizing the same flexibilities given to manufacturer test pilots and instructor pilots. For the same reasons discussed herein, the FAA finds it appropriate to add FAA test pilots and ASIs into the alternate framework to obtain an instrument-powered-lift rating.²⁴⁹

Therefore, to facilitate this relief, this final rule adds FAA test pilots and ASIs to the following paragraphs:

§ 194.225(a), (b), (b)(1), (b)(1)(ii), (b)(2) through (b)(4), (c), and (c)(1). FAA test pilots and ASIs will be able to utilize the same provisions available to a manufacturer's test pilots, as previously summarized. Additionally, while no amendment is necessary, the FAA notes that, like test pilots, FAA test pilots and ASIs would be a population of pilots that the instructor pilot will be able to credit the time spent providing the manufacturer's training curriculum under § 194.227(b)(1).

ii. Initial Cadre Instructors: Alternate Aeronautical Experience and Logging Requirements for Instrument-Powered-Lift Ratings

In the NPRM, the FAA proposed alternate experience and logging requirements for certain requirements in § 61.65(f) to facilitate initial training and certification of persons who have been authorized to serve as the initial cadre of instructors in § 194.229. Under § 194.229(a), which will set forth the applicability provisions, the alternate requirements will apply if the applicants are authorized by the Administrator to serve in the instructor positions²⁵⁰ in an approved training program under part 135, 141, or 142 and the flights are conducted in type-certificated powered-lift at the manufacturer.

²⁴⁶ § 61.65(f)(2)(ii).

²⁴⁷ § 61.65(f)(2)(ii)(A) through (C).

²⁴⁸ Section VI.B.1. of this preamble discusses additional relief from the requirement to file an IFR flight plan for certain pilots.

²⁴⁹ FAA test pilots and ASIs would be defined under new § 194.103, as discussed in section V.F.3.i.c. of this preamble.

²⁵⁰ In other words, check pilots, chief instructors, assistant chief instructors, and TCEs.

a. Aeronautical Experience Requirements Involving Training (§ 61.65(f))

As with test pilots, the FAA will permit initial check pilots, chief instructors, assistant chief instructors, or training center evaluators to receive the 15 hours of instrument training on the areas of operation listed in § 61.65(c) from an instructor pilot in lieu of an authorized instructor in § 194.229(b)(1). The instructor pilot will be required to conduct the training in accordance with the manufacturer's training curriculum. Additionally, these persons will be required to obtain a logbook or training record endorsement from the instructor pilot certifying satisfactory completion of the manufacturer's training curriculum for the same reasons the test pilot is required to receive such an endorsement.

Additionally, the instructor pilot may replace the authorized instructor for (1) the 3 hours of instrument flight training in a powered-lift in preparation for the practical test for an instrument-powered-lift rating within 2 calendar months before the date of the practical test in § 61.65(f)(2)(i), and (2) the cross-country flight prescribed by § 61.65(f)(2)(ii). Further, the person receiving the training at the manufacturer may obtain an endorsement from the instructor pilot certifying the completion of this cross-country flight. Section 194.229(b)(2) and (b)(3) will prescribe these requirements, respectively.

b. Aeronautical Experience Requirements Involving Logging PIC Flight Time (§ 61.65(f)(1))

In the NPRM, the FAA recognized the obstacle of logging PIC time in accordance with § 61.51(e)(1) for the reasons previously discussed in section V.J. of this preamble. Accordingly, consistent with the alternate logging requirements adopted herein for persons seeking to add a powered-lift category rating on a commercial pilot certificate, § 194.229(c) will allow a person receiving training at the manufacturer to log PIC flight time for the purpose of satisfying the 10-hour cross-country requirement in § 61.65(f)(1) despite not being rated in the powered-lift in certain conditions. To log this time, the applicant will be required to solely manipulate the controls of the powered-lift with an instructor pilot onboard and perform the duties of PIC; additionally, the flight will be required to be conducted in accordance with the manufacturer's training curriculum for the powered-lift.

iii. Pilots Receiving Training Under an Approved Training Program: Use of a Full Flight Simulator for Instrument Training for an Instrument-Powered-Lift Rating

Because the FAA proposed alternate pathways for personnel from part 135, 141, and 142 certificate holders to obtain the experience necessary to be eligible for the initial powered-lift ratings on pilot and flight instructor certificates, these certificate holders will have access to a pool of authorized instructors to conduct training under their approved training programs. Therefore, the FAA did not find it necessary to enable alternate experience requirements for pilots receiving training under an approved training program that substitute instructor or test pilots for authorized instructors.

Rather, the FAA found that temporarily permitting pilots receiving training under an approved training program²⁵¹ to credit some cross-country time obtained in a Level C or higher FFS would not adversely affect safety in light of the skills the pilot would develop in the FFS and the narrow applicability of the alternate requirement to seasoned pilots who already hold a commercial pilot certificate with an instrument rating. Therefore, the FAA proposed § 194.231(c) to temporarily permit a maximum of 4 hours obtained in a Level C or higher FFS to be credited toward the flight time requirement in § 61.65(f)(1), which requires an applicant to obtain 10 hours of cross-country time²⁵² as PIC in a powered-lift. The 4 hours must include experience performing the duties of PIC during a simulated cross-country flight in a Level C or higher FFS that represents the powered-lift category and that includes the performance of instrument procedures under simulated instrument conditions. This relief only extends to those applicants and FFS sessions under a training program approved under part 135, 141, or 142. Furthermore, the FAA proposed that a minimum of Level C FFS would be required to ensure the appropriate level of aerodynamic modeling, visual fidelity, and motion cueing to replicate the powered-lift.

FSI recommended the FAA revise § 194.231 to remove the requirement for a Level C or higher FFS and permit the training in any approved FSTD. FSI

²⁵¹ Adopted § 194.231(a) sets forth the general applicability requirements to utilize the crediting provisions subsequently discussed.

²⁵² Pursuant to § 61.1, cross-country time must involve the use of dead reckoning, pilotage, electronic navigation aids, radio aids, or other navigation systems to navigate to the landing point.

stated that FFS Level C or higher training is expensive and restrictive and urged the FAA to consider, first, the simplified vehicle operation of powered-lift and, second, other modern technologically advanced FSTDs.

The FAA received a number of similar comments related to crediting time in a Level C or higher FFS in the context of the alternate framework for a commercial certificate with a powered-lift rating, as proposed in § 194.223(d). The FAA declines to expand the acceptable type and level of FSTD for credit to the aeronautical experience requirements of § 61.65(f)(1) for the reasons discussed in section V.F. of this preamble.

As noted in the preamble, generally cross-country time may not be credited in an FFS because it does not depict a realistic enroute environment under VMC (e.g., verifying waypoints utilizing pilotage and dead reckoning is limited by the visual display fidelity available in FFSs). The FAA acknowledges that under IMC conditions, however, the pilot is training on and testing on the pilot's ability to use instrument navigation to fly along routes depicted by navigational information via enroute and terminal charts, which is different from verifying visual reference with the use of visual waypoints. Therefore, the FAA maintains it is appropriate to permit some cross-country time to be credited in an FFS because the display and flightdeck information will align with the environment the pilot would operate in flight, but also maintains that the credit should be limited for the same reasons as those comprehensively discussed in section V.J. of this preamble. The ratio of time (i.e., four hours in the simulator combined with the skills the seasoned pilot would acquire from conducting 6 hours of cross-country time in the NAS) in a Level C or higher FFS would ensure the pilot has sufficient experience to apply for an instrument-powered-lift rating. Therefore, the FAA adopts the amendment as proposed.

4. Alternate Requirements for Cross-Country Flights for Commercial Pilot Certificate, Instrument Rating, and Private Pilot Certificate

Finally, upon evaluation of the expected range capabilities of powered-lift, the FAA determined that the distances specified in the definition of "cross-country time" in § 61.1 and the specific cross-country flights prescribed in part 61 may not be feasible for the powered-lift coming to market. Therefore, the FAA proposed several alternate provisions to facilitate a pilot's ability to complete and log cross-

country time while ensuring the experience meets the essential objectives of pilot training. The FAA received many comments on these cross-country proposals, which are considerably intertwined. Therefore, this section, first, summarizes all cross-country proposals, second, responds to applicable comments, and third, discusses cross-country tangentially related proposals and final rule actions.

i. Summary of Proposed Cross-Country Alternate Means

To Log Cross-Country Time in Powered-Lift

First, cross-country time is currently defined in § 61.1(b). Within § 61.1(b), there are multiple definitions of cross-country time that are applicable based on how the cross-country time is used to meet aeronautical experience requirements. To meet the current definition of cross-country time for aeronautical experience for powered-lift ratings, the flight time²⁵³ aligns with that of airplanes and must include a landing point that is at least a straight-line distance of more than 50 nautical miles from the original point of departure, except for an ATP certificate and military pilots who qualify for a commercial pilot certificate under § 61.73, whereby cross-country time for aeronautical experience does not require a landing point. Given the significant disparity between the range capabilities of airplanes and the emerging powered-lift currently going through aircraft certification, the FAA found it unnecessary to require cross-country time in a powered-lift to include the same distance as that required for airplanes and, therefore, proposed to add § 194.201 as a temporary provision that would reduce the general distance for logging cross-country time in a powered-lift from 50 nautical miles to 25 nautical miles.

Specifically, as proposed, the rule would permit a person to log flight time in a powered-lift as cross-country time²⁵⁴ when that time (1) includes a point of landing that is at least a straight-line distance of more than 25 nautical miles from the original point of departure, and (2) involves the use of dead reckoning, pilotage, electronic navigation aids, radio aids, or other navigation systems to navigate to the landing point. While the FAA proposed

to permit a pilot to log shorter cross-country flights as cross-country time, the pilot would nevertheless be required to obtain the requisite hours of cross-country time in a powered-lift for the certificate or rating sought.²⁵⁵

Additionally, the FAA's proposed provision in § 194.201 would govern the logging of cross-country time in powered-lift for the purpose of meeting the aeronautical experience requirements of part 61 as a whole that apply to a powered-lift category rating, including the cross-country time required for an ATP certificate with a powered-lift category rating. Thus, a person would be permitted to log cross-country time in accordance with § 194.201 toward the 500 hours of cross-country time in § 61.163(a)(1). This proposal would equally apply to cross-country flight training time in a powered-lift required by § 61.109(e)(1) and solo cross-country time required by § 61.109(e)(5)(i).²⁵⁶

Summary of Specific Cross-Country Proposals for a Commercial Pilot Certificate

The FAA also proposed alternate cross-country aeronautical experience requirements to those set forth in § 61.129(e) for all applicants for a powered-lift category rating at the commercial pilot certificate level. In place of the long cross-country flight in § 61.129(e)(4)(i) (*i.e.*, 250 nautical miles), proposed § 194.233(b) would permit an applicant to complete a cross-country flight that consists of landings at a minimum of three points, with one segment consisting of a straight-line distance of at least 50 nautical miles from the original point of departure. As a result of reducing the straight-line distance from 250 nautical miles to 50 nautical miles, proposed § 194.233(b) would require an applicant seeking to comply with the alternate requirement to complete an additional cross-country flight of the same specified distance of 50 nautical miles. The proposed additional cross-country flight would have to be conducted to different points

of landing than the initial cross-country flight. The FAA noted, however, that the original point of departure may be the same, as pilots generally begin cross-country flights at their home airport.

Likewise, the FAA proposed alternate requirements for the cross-country requirements of § 61.129(e)(3)(ii) and (iii) (*i.e.*, straight-line distance of at least 100 nautical miles from the original departure point). Under proposed § 194.233(a), an applicant would be required to log at least one 2-hour cross-country flight in a powered-lift in daytime conditions (proposed § 194.233(a)(1)) and one 2-hour cross-country flight in a powered-lift in nighttime conditions (proposed § 194.233(a)(2)). Each of these proposed cross-country flights must consist of a total straight-line distance of 50 nautical miles from the original point of departure (rather than 100 nautical miles, which is currently required by § 61.129(e)(3)). As a result of reducing the straight-line distance from 100 nautical miles to 50 nautical miles, the FAA proposed in § 194.233(a)(3) to require an additional cross-country flight of the same specified distance of 50 nautical miles. Except for the original point of departure, the additional cross-country flight must include landings at different points than the points selected for the day and night cross-country flights. The NPRM did not propose to reduce the required flight time (2 hours).

The applicant for a commercial pilot certificate with a powered-lift category rating would still be required to receive and log ground training from an authorized instructor on the aeronautical knowledge areas specified in § 61.125(b). Additionally, the applicant would still be required to receive and log flight training from an authorized instructor on the areas of operation specified in § 61.127(b)(5), which includes navigation.²⁵⁷ Additionally, the applicant must meet the aeronautical experience requirements that apply to the powered-lift category rating (*e.g.*, 10 hours of cross-country time in a powered-lift) and pass the practical test on the areas of operation listed in § 61.127(b), which includes tasks on cross-country planning and navigation (*e.g.*, cross-country planning is a task under Preflight Preparation area of operation in the Commercial Pilot for Powered-Lift Category ACS).

²⁵³ See 14 CFR 1.1 for the definition of flight time.

²⁵⁴ Section 61.129(e)(2)(ii) requires an applicant for a commercial pilot certificate with a powered-lift category rating to acquire 10 hours of cross-country flight time as PIC in a powered-lift. Section 61.65(f) requires an applicant for an instrument-powered-lift rating to obtain 10 hours of cross-country flight time as PIC in a powered-lift.

²⁵⁵ While the FAA proposed to adopt provisions in the SFAR that would require cross-country flights with shorter minimum legs than those currently specified in § 61.129(e), the FAA noted that these requirements would serve as an alternative to the requirements set forth in § 61.129(e). Thus, an applicant for a commercial pilot certificate with a powered-lift category rating still has the option to complete the cross-country flights specified in § 61.129(e).

²⁵⁶ This merely reduces the distance requirements listed in §§ 61.109(e)(2)(i) and 61.109(e)(5)(ii) to mirror those required in § 61.109(c)(2)(i) and 61.109(c)(5)(ii) for helicopters. Private pilot applicants for a powered-lift rating must meet all other aeronautical experience requirements provided in § 61.109(e).

²⁵⁷ § 61.127(b)(5)(vii).

Summary of Specific Cross-Country Proposals for an Instrument-Powered-Lift Rating (§ 61.65(f))

Similarly, the FAA proposed alternate cross-country aeronautical experience requirements for all applicants for an instrument-powered-lift rating under § 61.65(f) in § 194.235. In place of the long cross-country flight in § 61.65(f)(2)(ii)(A) (*i.e.*, a flight of 250 nautical miles), proposed § 194.235(a)(2)(i) would permit an applicant to complete a cross-country flight that involves a distance of 100 nautical miles along airways or by directed routing from an ATC facility. To ensure the applicant for an instrument-powered-lift rating obtains experience comparable to that which would be obtained under the current regulation, the FAA proposed to require the applicant to complete an additional cross-country flight of the same specified distance of 100 nautical miles.

Under proposed § 194.235(a)(1), the applicant for an instrument-powered-lift rating would still be required to receive and log ground training from an authorized instructor (or from an instructor pilot) on the aeronautical knowledge areas set forth in § 61.65(b). The applicant would also still be required to receive and log flight training from an authorized instructor (or from an instructor pilot if the person receiving training is an eligible pilot under § 194.215) on the areas of operation specified in § 61.65(c).²⁵⁸ Furthermore, the applicant must meet the existing aeronautical experience requirements that apply to the instrument-powered-lift rating (*e.g.*, 10 hours of cross-country flight time as PIC in a powered-lift) and pass the practical test on the areas of operation in § 61.65(c).

The FAA also proposed in § 194.235(b) to provide relief from the requirement in § 61.65(f)(2)(ii) to perform instrument training on cross-country procedures under IFR and a flight plan filed with an air traffic control facility when an aircraft is not certificated for IFR. This relief is necessary to prevent a person from filing an IFR flight plan for a powered-lift that is certificated for VFR-only operations in violation of an aircraft's operating limitations under § 91.9. This relief would only be available when the pilot already holds an instrument airplane rating, an instrument helicopter

rating, or an ATP certificate, as these pilots would already have experience operating under IFR and will have been tested on instrument procedures and regulations governing IFR operations.

ii. Comments on the Proposed Cross-Country Alternate Means

ALPA supported the alternate cross-country framework whereby the NPRM reduced the straight-line distance from 250 nautical miles to 50 nautical miles in proposed § 194.233(b) with the proposed mitigations (*e.g.*, different landing points, additional cross-country flight), finding that the framework would still maintain adequate training and safety. Further, ALPA noted and supported that the FAA did not propose to reduce the minimum amount of cross-country time to be obtained in a powered-lift for a certificate.

Archer generally supported the FAA's acknowledgement that, first, a pilot must be trained on the navigation of a powered-lift from takeoff to different destinations than the original point of departure and, second, that the existing cross-country training requirements create barriers given the range and endurance inherent in the general array of powered-lift intended for civilian operations. While Archer specifically supported the proposed reduction from 50 to 25 nautical miles in § 194.201, Archer opposed the retention of the 2-hour endurance requirements and 50 and 100 nautical mile range requirements for the individual cross-country training flights in proposed §§ 194.233 and 194.235. Archer specifically stated that the FAA's citation of a powered-lift's range of 105 to 162 nautical miles represents the absolute maximum ranges for conventional takeoff and landing, without fuel reserves, at the beginning of battery life; Archer contended that a vertical takeoff and landing without fuel reserves near the end of battery life would reduce the operational range to 25 to 55 nautical miles. Similarly, Archer stated that the NPRM failed to address endurance limitations where the range is only 30 minutes (specifically, given the parameters of the previously described operation) and that the current operational range of powered-lift will be significantly less than the operational range of the majority of helicopters. Archer recommended the FAA implement a performance and cycle-based framework through the execution of realistic training flights of a length and endurance that are commensurate with those operations that will be conducted after the pilot obtains the required ratings. Additionally, Archer

recommended the FAA eliminate the 2-hour endurance requirement in § 194.233, reduce the required distance to 25 nautical miles in §§ 194.233 and 194.235, and add a provision in § 61.129(e)(2)(iii) allowing the powered-lift pilot to substitute 10 operating cycles for 10 hours of cross-country time.²⁵⁹

Similarly, FSI recommended the FAA align with ICAO Annex 1 recommendation 2.1.1.4, which FSI stated would remove the requirement for a powered-lift category rating, thereby removing the requirement for cross-country flight time. FSI stated that the lack of infrastructure will make cross-country training difficult due to the lack of places to charge electric aircraft. Additionally, FSI recommended that the FAA allow credit for cross-country time obtained for an airplane or helicopter rating and cross-country time conducted as a lost scenario in the approved FSTD, and that any cross-country flight time in the aircraft be accomplished after the practical test as part of supervised operating experience.

First, in regard to Archer's position to eliminate the 2-hour cross-country requirements set forth in proposed § 194.233(a)(1) and (2), the FAA considered the given capable ranges of various aircraft in the certification process. The required two hours establishes the minimum flight time of the entire flight: in other words, two hours is the total time necessary to encompass the associated distances and allow for the pilot to ensure appropriate performance planning.²⁶⁰ The alternate regulations will not preclude a pilot from stopping at an airport and charging, similar to how an airplane or helicopter stops along their filed route to get fuel. Given this flexibility on accomplishing the 2-hour requirement, the FAA does not find additional relief to be warranted. Second, Archer suggested the FAA further reduce the distance proposed in §§ 194.233 and 194.235 to 25 nautical miles because the endurance of some aircraft would be 30 minutes or less. The FAA has evaluated the active type certification projects for powered-lift and does not find any powered-lift with a range less than 50 nautical miles, regardless of length of time in flight capabilities, nor was the FAA provided with any supporting evidence of such a limitation during the

²⁵⁸ The FAA notes that the introductory language in § 61.65(f)(2) requires that the flight time under that section cover the areas of operation in § 61.65(c); therefore, the cross-country flight required under § 61.65(f)(2)(ii)(A) must cover those areas.

²⁵⁹ Archer specifically referenced §§ 121.434 and 61.159(b).

²⁶⁰ See Legal Interpretation to Olshock, Pan Am International Flight Academy (May 4, 2007).

comment period to warrant further relief.²⁶¹

Third, Archer urged the FAA to adopt a performance and cycle-based framework through execution of training flights of length and endurance that are commensurate with those operations to be conducted after the pilot obtains the required ratings. As previously discussed in section V.J. of this preamble, the FAA does not find this manner of cross-country flight experience would provide a level of experience commensurate with that required for initial powered-lift category and type certification for those reasons discussed in this preamble. Additionally, as a cycle-based substitution applies to cross-country aeronautical experience specifically, commenters did not provide the FAA with any information other than a topical suggestion as to how a performance or cycle-based framework would achieve a level of proficiency equal with that of a pilot receiving an initial powered-lift category rating. Further, a significant objective of cross-country flights is to expose a pilot to time in the category of aircraft where random events may occur in the airspace, including, for example, weather, delays, air traffic, and ATC communication. Another objective is to expose the pilot to unfamiliar terrain and different landing points than a pilot's base or familiar airport, thereby facilitating diverse experience in preflight planning. Without additional information for the FAA to evaluate, a cycle-based framework, which may be repetitive and offer little experience beyond a rudimentary traffic pattern, may not expose the pilot to these key objectives. An initial certification framework only encompassing familiar, smaller routes and circuits may not adequately equip the pilot with situational proficiency, for example, should the need arise to land at an unfamiliar landing site.

Finally, in response to FSI's comments, the FAA acknowledges there is an experience advantage by virtue of each pilot utilizing the relief provided by the SFAR holding certain certificates and ratings; however, the FAA does not find that this translates to synonymous experience such that vital training elements can be wholly eliminated or substituted. Performing a cross-country flight in an airplane or helicopter may be vastly different than performing a cross-country flight in a powered-lift.

While there are certain elements to a cross-country flight that are shared amongst categories of aircraft (e.g., use of navigation charts, communicating with ATC, operations in airspace, avoidance of traffic, runway incursions at unfamiliar airports), cross-country flight time provides experience in aircraft-specific characteristics. These characteristics include encountering different challenges in flightdeck management relative to the pilot's operation of the aircraft while acting as PIC (e.g., passenger briefing requirements, aircraft automation, use of appropriate checklists, dealing with inoperative equipment). These differences affect the performance of certain tasks, flightdeck management, and risk management during a cross-country flight and ultimately require a skill set that is unique to the category of aircraft such that a substitution would not ensure a pilot has proficiency in the powered-lift.

The FAA also finds that performing cross-country time as a lost procedures²⁶² scenario in an approved FSTD in lieu of cross-country in the aircraft would not provide an adequate substitution for the same reasons that powered-lift cross-country flights may present scenarios un contemplated in airplane or helicopter cross-country operations. The FAA already expects an applicant to be trained on lost procedures, as the commercial powered-lift ACS sets forth Lost Procedures as a Task under Area of Operation VII, Navigation.

To the extent that FSI calls attention to infrastructure issues, the FAA notes that the Department of Transportation published a Request for Information (RFI)²⁶³ in the **Federal Register** in 2023 seeking information from the OEM community to inform a short-term and long-term national strategy to integrate AAM into the NAS, including infrastructure considerations. Additionally, the Advanced Air Mobility Interagency Working Group (AAM IWG) is considering infrastructure challenges as part of this effort. The FAA notes that certain OEMs have utilized portable charging stations and even installed chargers at specific airports to help accommodate long-

distance flights.²⁶⁴ The FAA is an active member of the AAM IWG and will continue to collaborate on a national strategy to address infrastructure issues. However, the FAA does not see associated infrastructure challenges as reason to alter the aeronautical experience required of a pilot who is training to operate a powered-lift in the NAS in commercial, passenger-carrying operations. Experience gained in the aircraft must be predicated on the need to enhance the pilot's ability to operate a powered-lift, particularly outside the pilot's local operating environment.

iii. Specific Cross-Country Flights for Private Pilot Certificate (§ 61.109)

As discussed in the NPRM, the FAA proposed alternate pathways primarily for individuals at the commercial level to enable immediate commercial passenger-carrying operations. However, the FAA recognized that rationale for offering relief from the cross-country requirements for commercial pilots applies equally to an applicant for a private pilot certificate. Therefore, the FAA proposed to reduce the nautical mile distances in the aeronautical experience required to be eligible for a private pilot certificate. The FAA did not receive comments on the alternate aeronautical experience requirements for private pilots as set forth in proposed § 194.237 and adopts the amendments as proposed.

Specifically, alternate aeronautical experience requirements will allow an applicant for a private pilot certificate with a powered-lift category rating to complete the cross-country flights in § 61.109 at a reduced nautical mile distance. First, in place of the cross-country flight in § 61.109(e)(2)(i) (*i.e.*, night flight training that includes one cross-country flight over 100 nautical miles), § 194.237(a) will require an applicant to receive three hours of night flight training that includes two cross-country flights with each flight consisting of a total distance that exceeds 50 nautical miles. Additionally, in place of the solo cross-country flight that is currently listed in § 61.109(e)(5)(ii) (*i.e.*, 150 nautical miles total distance with one segment of the flight consisting of a straight-line distance of more than 50 nautical miles), § 194.237(b) will set forth alternate solo cross-country experience. Specifically, the applicant will be required to complete one solo cross-country flight of 100 nautical miles total distance with landings at three points

²⁶¹ The exemption process under part 11 would remain an option for powered-lift manufactured with a range capability of less than 50 nautical miles.

²⁶² Lost Procedures, which are described in the Pilot's Handbook of Aeronautical Knowledge, FAA-H-8083-25, consist of a series of tasks to perform should a pilot become lost while in flight. These procedures consist of climbing to increase radio and navigation reception, plotting position using onboard navigational equipment, communicating with ATC or Flight Service Stations, and if the situation is dire enough transmitting on emergency frequency and setting transponder to 7700.

²⁶³ Notice and Request for Information on Advance Air Mobility, 88 FR 31593 (May 17, 2023).

²⁶⁴ www.popsci.com/technology/alia-electric-aircraft-completes-journey/evtol.news/news/beta-flies-south-for-the-winter.

and with one segment of the flight consisting of a straight-line distance of more than 25 nautical miles (§ 194.237(b)(1)). The applicant will be required to complete an additional solo cross-country flight to be conducted in a powered-lift (§ 194.237(b)(2)). This additional solo cross-country flight will require landings at a minimum of three points, with one segment consisting of a straight-line distance of at least 50 nautical miles from the original point of departure. The additional cross-country flight will be required to be conducted to different points of landing than the initial cross-country flight.

While proposed § 194.237 reduces the required distances for the cross-country flights in § 61.109, it will not reduce the required flight time. A person seeking a private pilot certificate with a powered-lift category rating will still be required to obtain 3 hours of cross-country flight training in a powered-lift, pursuant to § 61.109(e)(1), and 5 hours of cross-country solo flight time in a powered-lift under § 61.109(e)(5)(i), as adopted by this final rule.²⁶⁵

iv. Part 141 Appendices

Certain existing minimum curriculum requirements for a part 141 pilot school seeking to use a powered-lift specified in the part 141 appendices mirror the cross-country requirements set forth in §§ 61.65(f), 61.109(e), and 61.129(e). As previously discussed, the FAA adopts alternate cross-country requirements in §§ 194.233, 194.235, and 194.237 and, therefore, proposed that part 141 pilot schools should be able to use these alternate cross-country distances.

The FAA did not receive comments on the provision and adopts § 194.239(b) to facilitate these substitutions. As set forth by § 194.239(b)(3), the part 141 training course using the alternate cross-country distances must include an additional cross-country flight consistent with the requirements of §§ 194.233, 194.235, and 194.237, as applicable.

Additionally, as discussed in section V.F.2. of this preamble, this final rule reduces the amount of PIC time in a powered-lift set forth by § 61.129(e)(2)(i) from 50 hours to 35 hours. However, the FAA does not find a conforming amendment is necessary to account for the part 141 appendices in the SFAR similar to the amendments to account for the alternate cross-country

requirements because the PIC requirements are subject to § 141.55(d) which allows a pilot school to apply and receive approval for a reduced hour curriculum in accordance with the appropriate appendix of part 141.

v. Technical Correction and Nomenclature Change

The NPRM proposed a minor technical correction to the definition of cross-country time in § 61.1(b). Specifically, the definition lists seven paragraphs, but incorrectly only references up to the sixth (*i.e.*, paragraphs (ii) through (vi) rather than paragraphs (ii) through (vii)). The FAA proposed to correct the cross-reference in paragraph (i) of the definition to refer to paragraphs (ii) through (vii).

Additionally, the FAA noted that the nomenclature concerning “cross-country time” is inconsistent throughout part 61. The NPRM proposed to remove “cross-country flight time” throughout part 61 and replace the term with the words “cross-country time.”

The FAA did not receive any comments to these proposals and adopts, first, the correction in § 61.1(b) definition of cross-country time and, second, the nomenclature change to “cross-country time” in the following provisions: §§ 61.65(d), (e), (f), (g) introductory text, (g)(1) and (2); 61.67(b)(3); 61.68(b)(3); 61.129(g)(2)(i); 61.159(a)(1), (a)(5)(i); 61.160(e), (f); 61.161(a)(1); 61.163(a)(1), (a)(3)(i); and 61.411(a)(1)(iii) and (iv), (c)(1)(iii) and (iv), (d)(1)(iii) and (iv), (f)(1)(iii) and (iv), (g)(1)(iii) and (iv).

5. Comments Pertaining to ATP Certificate Aeronautical Experience

Bristow urged the FAA to consider providing relief for pilots seeking to gain aeronautical experience toward an ATP with powered-lift rating. Specifically, Bristow highlighted concerns that without such relief, only a small pool of military pilots would be qualified to immediately enable entities to stand up powered-lift commuter services. Bristow supported aeronautical experience requirement relief for those persons seeking an ATP certificate with a powered-lift category rating under the premise that powered-lift operations and characteristics are different than those of conventional aircraft with operations that require an ATP certificate. Bristow stated that ATP certificates are essential to pilots of conventional aircraft to transport large groups of passengers over long distances at high altitudes and that the currently mandated 1,500 hours of experience teaches pilots how to respond to serious

situations in aircraft (*e.g.*, loss of an engine), handle unscripted and unanticipated operational events (*e.g.*, diversions), and experience operations in and out of different airports and operating environments with unique conditions and limitations. Bristow explained that, by contrast, powered-lift will function like taxis and busses as alternative to commercial aircraft services within a specific mile range at lower altitudes. Additionally, Bristow stated that powered-lift operations will follow set corridors with highly scripted operations and catastrophic events would not be as consequential due to built-in redundancies and autonomous systems.

Subpart G of part 61 prescribes the requirements for issuance of an ATP certificate and ratings, the conditions under which those certificates and ratings are necessary, and the general operating rules for persons who hold those certificates. Among other requirements, a person must meet the aeronautical experience requirements of subpart G that apply to the aircraft category and class rating sought before applying for the practical test. Section 61.163 sets forth the aeronautical experience requirements for a powered-lift category rating. Currently, a person must have at least 1,500 hours of total time as a pilot that includes at least: (1) 500 hours of cross-country flight time, (2) 100 hours of night flight time, (3) 250 hours in a powered-lift as a PIC (or as an SIC performing the duties of a PIC under the supervision of a PIC, or any combination thereof) that includes at least 100 hours of cross-country flight time and 25 hours of night flight time, and (4) 75 hours of instrument flight time in actual or simulated instrument conditions.²⁶⁶ Additionally, no more than 100 hours of the total aeronautical experience requirements may be obtained in an FSTD that represents a powered-lift if the training is obtained under a part 142 training center.²⁶⁷

The FAA did not propose relief to the aeronautical experience requirements for an ATP certificate with a powered-lift rating because the reasons that the FAA proposed, and adopts herein, relief for the PIC flight time in a powered-lift aeronautical experience requirements for a commercial pilot certificate with a powered-lift rating are not equally

²⁶⁵ Currently, § 61.109(e)(5) permits an applicant to obtain 10 hours of solo flight time in either an airplane or a powered-lift. For the reasons discussed in section V.I.1. of this preamble, the FAA proposed to amend § 61.109(e)(5) to require the solo flight time to be obtained in a powered-lift and adopts that amendment in this final rule.

²⁶⁶ § 61.163(a)(1)–(4). The FAA notes that, of the 75 hours of instrument flight time, a person is limited to no more than 25 hours of simulated instrument time in an FSTD (see § 61.163(a)(4)(i)). However, if training is completed in a course conducted by a part 142 training center, a person may credit a maximum of 50 hours of the 75 hours in an FSTD (see § 61.163(a)(4)(ii)).

²⁶⁷ § 61.163(b).

applicable. The FAA acknowledges that the flight regimes of a powered-lift and a helicopter are similar for purposes of airmen certification, to warrant a stronger emphasis on vertical take-offs and landings and transition into horizontal flight and reduction specifically to PIC in a powered-lift time, particularly given the prerequisites to use the SFAR where a pilot would have met the PIC requirements in another aircraft. The FAA further reasoned that this reduction in PIC flight time in a powered-lift and cross-country relief will be conducted under a part 135, 141, or 142 training program. These training programs inherently include safeguards such as greater oversight, structured programs, dedicated training facilities, and FAA-approved curriculum, which function to ensure the pilot engages in high-quality training events.

However, the FAA did not reduce the total amount of flight time required to apply for a commercial pilot certificate with a powered-lift category rating, nor will this final rule reduce the total amount of flight time required for an ATP certificate with a powered-lift category rating for the same reasons. Specifically, as discussed in section

V.F.4.ii. of this preamble, accruing experience in the aircraft through general minimum flight time requirements builds the pilot's proficiency in responding to an array of environmental and decisional situations. While this time is significantly lower for an ATP certificate with a rotorcraft category, helicopter class rating than for an ATP certificate with an airplane category rating (*i.e.*, 300 hours), the FAA does not have, nor has been presented with, data or supporting evidence that a reasonable safety basis exists to warrant a significant reduction of hours, especially where the intended operations for powered-lift include immediate passenger-transporting commercial operations.

Additionally, the pilot flight time required for an ATP certificate with a powered-lift category rating is generalized pilot time such that a person's previously held experience in an airplane or helicopter will constitute a sizeable portion of required time. Specifically, only 250 hours of the flight time set forth by § 61.163 is required to take place in a powered-lift. The FAA does not find this to be an insurmountable amount of hours given

the proficiency requirements expected of a pilot transporting passengers in commercial operations.²⁶⁸ Therefore, the FAA declines to provide any further relief from the requirements of § 61.163 outside of the alternate definition of cross-country time, which would apply to the cross-country requirement in § 61.163(a)(3)(i).

6. Alternate Experience and Logging Summaries

i. Summary Tables for Obtaining a Commercial Pilot Certificate With Powered-Lift Rating

As noted, this rule finalizes requirements to facilitate airmen certification for a commercial pilot certificate with a powered-lift rating involving several alternate experience and logging requirements. To facilitate readability of the alternate requirements that would apply to persons seeking powered-lift ratings, the FAA has compartmentalized the rule language into individual sections depending on the powered-lift ratings sought. Tables 3, 4, and 5 contain the proposed alternate provisions for a commercial pilot certificate with a powered-lift rating.

TABLE 3—ALTERNATE PROVISIONS FOR A COMMERCIAL PILOT CERTIFICATE WITH A POWERED-LIFT CATEGORY RATING: TEST PILOTS AND INSTRUCTOR PILOTS

Current flight time requirements (§ 61.129(e))	Alternate provisions for test pilots, FAA test pilots, and FAA ASIs *	Alternate provisions for instructor pilots *
Powered-Aircraft Time		
100 hours in powered-aircraft, of which 50 hours must be in a powered-lift	<i>No alternative.</i>	<i>No alternative.</i>
PIC Flight Time		
100 hours of PIC flight time, which includes at least— (1) 50 hours in a powered-lift, and (2) 50 hours in cross-country flight of which 10 must be in powered-lift	100 hours of PIC flight time which includes at least— (1) 35 hours in a powered-lift of which 15 may be in a Level C or higher FFS; and (2) 50 hours in cross-country flight of which 10 must be in powered-lift. A test pilot, FAA test pilot, or ASI who is not rated in the powered-lift may log PIC flight time in the experimental powered-lift if (1) the test pilot is the sole manipulator of the controls, (2) the test pilot is acting as PIC, and (3) the flight is conducted for the purpose of R&D or showing compliance. See §§ 194.216 and 194.217(c).	100 hours of PIC flight time, which includes at least— (1) 35 hours in a powered-lift of which 15 may be in a Level C or higher FFS; and (2) 50 hours in cross-country flight of which 10 must be in powered-lift. An instructor pilot who is not rated in the powered-lift may log PIC flight time in the experimental powered-lift if (1) acting as PIC, and (2) the flight is conducted for the purpose of crew training. See §§ 194.216 and 194.219(c).

²⁶⁸ § 61.163(a)(3).

TABLE 3—ALTERNATE PROVISIONS FOR A COMMERCIAL PILOT CERTIFICATE WITH A POWERED-LIFT CATEGORY RATING: TEST PILOTS AND INSTRUCTOR PILOTS—Continued

Current flight time requirements (§ 61.129(e))	Alternate provisions for test pilots, FAA test pilots, and FAA ASIs *	Alternate provisions for instructor pilots *
Training on the Areas of Operation listed in § 61.127(b)(5)		
20 hours of training on the areas of operation listed in § 61.127(b)(5) that includes at least—	Test pilot, FAA test pilot, or ASI may receive this training from an instructor pilot (rather than an authorized instructor) if (1) training is conducted in accordance with the manufacturer's training curriculum, and (2) test pilot, FAA test pilot, or ASI receives endorsement from instructor pilot certifying satisfactory completion of the curriculum. See § 194.217(b)(1).	In lieu of receiving this training, an instructor pilot may meet this requirement by providing the manufacturer's training curriculum to a test pilot, FAA test pilot or ASI, which includes 20 hours of training on the areas of operation listed in § 61.127(b)(5). The instructor pilot must receive endorsement from management official certifying that instructor pilot provided the training. See § 194.219(b)(1).
(1) 10 hours of instrument training using a view-limiting device including attitude instrument flying, partial panel skills, recovery from unusual flight attitudes, and intercepting and tracking navigational systems. 5 hours of the 10 hours required on instrument training must be in a powered-lift.	Test pilot, FAA test pilot or ASI may receive this instrument training from instructor pilot in an experimental powered-lift in accordance with the manufacturer's proposed training curriculum. See § 194.217(b)(1).	Instructor pilot may satisfy this requirement by providing instrument training to test pilot, FAA test pilot, or ASI in accordance with the manufacturer's proposed training curriculum. The instructor pilot must receive an endorsement from management official certifying that instructor pilot provided the training. See § 194.219(b)(1).
(2) The following cross-country flights— One 2-hour cross country flight in a powered-lift in daytime conditions that consists of a total straight-line distance of more than 100 nautical miles from the original point of departure; and One 2-hour cross country flight in a powered-lift in nighttime conditions that consists of a total straight-line distance of more than 100 nautical miles from the original point of departure; and	Test pilot, FAA test pilot, or ASI may complete all of the following cross-country flights— One 2-hour cross country flight in a powered-lift in daytime conditions that consists of a total straight-line distance of more than 50 nautical miles from the original point of departure; One 2-hour cross country flight in a powered-lift in nighttime conditions that consists of a total straight-line distance of more than 50 nautical miles from the original point of departure; and An additional cross-country flight with landings at a minimum of three points, with one segment consisting of a straight-line distance of at least 50 nautical miles from the original point of departure. The additional cross-country flight must include landings at different points than the first two cross-country flights. See § 194.233(a).	Instructor pilot may complete all of the same alternate cross-country flights as test pilot, FAA test pilot or ASI. See § 194.233(a).
(3) 3 hours in a powered-lift with an authorized instructor in preparation for the practical test within the preceding 2 calendar months from the month of the test.	Test pilot, FAA test pilot, or ASI may accomplish the practical test preparation with an instructor pilot (rather than an authorized instructor). See § 194.217(b)(2).	Instructor pilot may accomplish the practical test preparation with another instructor pilot (rather than an authorized instructor). See § 194.219(b)(2).
Solo Flight Time or Flight Time Performing the Duties of PIC		
Ten hours of solo flight time in a powered-lift or 10 hours of flight time performing the duties of PIC in a powered-lift with an authorized instructor on board (either of which may be credited toward the flight time requirement under § 61.129(e)(2), on the areas of operation listed in § 61.127(b)(5)) that includes—	Test pilot, FAA test pilot, or ASI may complete 10 hours of solo flight time under an endorsement from an instructor pilot or 10 hours of flight time performing the duties of PIC in a powered-lift with either a test pilot or an instructor pilot onboard. See § 194.217(b)(3).	The alternate provision for test pilots, FAA test pilot or ASI also applies to instructor pilots. See § 194.219(b)(3).
(1) One cross-country flight of not less than 300 nautical miles total distance with landings at a minimum of three points, one of which is a straight-line distance of at least 250 nautical miles from the original departure point. However, if this requirement is being met in Hawaii the longest segment need only have a straight-line distance of at least 150 nautical miles; and	Test pilot, FAA test pilot, or ASI may complete two cross-country flights with landings at a minimum of three points, with one segment consisting of a straight-line distance of at least 50 nautical miles from the original point of departure. The second cross-country flight must include landings at different points than the first cross country flight. See § 194.233(b).	Instructor pilot may complete the same alternate cross-country flights as test pilot, FAA test pilot, or ASI. See § 194.233(b).

TABLE 3—ALTERNATE PROVISIONS FOR A COMMERCIAL PILOT CERTIFICATE WITH A POWERED-LIFT CATEGORY RATING: TEST PILOTS AND INSTRUCTOR PILOTS—Continued

Current flight time requirements (§ 61.129(e))	Alternate provisions for test pilots, FAA test pilots, and FAA ASIs *	Alternate provisions for instructor pilots *
(2) 5 hours in night VFR conditions with 10 takeoffs and 10 landings (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower.	<i>No alternative.</i>	<i>No alternative.</i>

* To use the alternate provisions below, the flights must be conducted in an experimental powered-lift at the manufacturer and the test pilots, ASIs and instructor pilots must be authorized by the Administrator to act as PIC of the experimental powered-lift. See proposed §§ 194.217(a) and 194.219(a).

TABLE 4—ALTERNATE PROVISIONS FOR A COMMERCIAL PILOT CERTIFICATE WITH A POWERED-LIFT CATEGORY RATING: INITIAL CADRE OF CHECK PILOTS, CHIEF INSTRUCTORS, ASSISTANT CHIEF INSTRUCTORS, AND TRAINING CENTER EVALUATORS

Current flight time requirements (§ 61.129(e))	Alternate provisions for initial cadre of check pilots, chief instructors, assistant chief instructors, and TCEs * (herein referred to as applicants)
Powered-Aircraft Time	
100 hours in powered-aircraft, of which 50 hours must be in a powered-lift	No alternative.
PIC Flight Time	
100 hours of PIC flight time, which includes at least— (1) 50 hours in a powered-lift, and (2) 50 hours in cross-country flight of which 10 must be in powered-lift	100 hours of PIC flight time, which includes at least— (1) 35 hours in a powered-lift, 15 of which may be in a Level C or higher FFS; and (2) 50 hours in cross-country flight of which 10 must be in powered-lift. An applicant who is not rated in the powered-lift may log up to 25 hours of PIC flight time in a powered-lift for flights that are conducted in accordance with a manufacturer's training curriculum if the applicant is (1) the sole manipulator of the controls, (2) manipulating the controls of the powered-lift with an instructor pilot onboard, and (3) performing the duties of PIC. See §§ 194.216 and 194.221(c).
Training on the Areas of Operation listed in § 61.127(b)(5)	
20 hours of training on the areas of operation listed in § 61.127(b)(5) that includes at least— (1) 10 hours of instrument training using a view-limiting device including attitude instrument flying, partial panel skills, recovery from unusual flight attitudes, and intercepting and tracking navigational systems. 5 hours of the 10 hours required on instrument training must be in a powered-lift. (2) The following cross-country flights— One 2-hour cross country flight in a powered-lift in daytime conditions that consists of a total straight-line distance of more than 100 nautical miles from the original point of departure; and One 2-hour cross country flight in a powered-lift in nighttime conditions that consists of a total straight-line distance of more than 100 nautical miles from the original point of departure; and (3) 3 hours in a powered-lift with an authorized instructor in preparation for the practical test within the preceding 2 calendar months from the month of the test.	An applicant may receive this training from an instructor pilot (rather than an authorized instructor) if (1) training is conducted in accordance with the manufacturer's training curriculum, and (2) applicant receives endorsement from instructor pilot certifying satisfactory completion of the curriculum. See § 194.221(b)(1). An applicant may receive this instrument training from instructor pilot in a type certificated powered-lift in accordance with the manufacturer's training curriculum. See § 194.221(b)(1). An applicant may complete all of the following cross-country flights— One 2-hour cross country flight in a powered-lift in daytime conditions that consists of a total straight-line distance of more than 50 nautical miles from the original point of departure; One 2-hour cross country flight in a powered-lift in nighttime conditions that consists of a total straight-line distance of more than 50 nautical miles from the original point of departure; and An additional cross-country flight with landings at a minimum of three points, with one segment consisting of a straight-line distance of at least 50 nautical miles from the original point of departure. The additional cross-country flight must include landings at different points than the first two cross-country flights. See § 194.233(a). An applicant may accomplish the practical test preparation from an instructor pilot (rather than an authorized instructor). See § 194.221(b)(2).

TABLE 4—ALTERNATE PROVISIONS FOR A COMMERCIAL PILOT CERTIFICATE WITH A POWERED-LIFT CATEGORY RATING: INITIAL CADRE OF CHECK PILOTS, CHIEF INSTRUCTORS, ASSISTANT CHIEF INSTRUCTORS, AND TRAINING CENTER EVALUATORS—Continued

Current flight time requirements (§ 61.129(e))	Alternate provisions for initial cadre of check pilots, chief instructors, assistant chief instructors, and TCEs * (herein referred to as applicants)
Solo Flight Time or Flight Time Performing the Duties of PIC	
Ten hours of solo flight time in a powered-lift or 10 hours of flight time performing the duties of PIC in a powered-lift with an authorized instructor on board (either of which may be credited toward the flight time requirement under § 61.129(e)(2), on the areas of operation listed in § 61.127(b)(5)) that includes—	An applicant may complete 10 hours of solo flight time under an endorsement from an instructor pilot or 10 hours of flight time performing the duties of PIC in a powered-lift with an instructor pilot on-board (rather than an authorized instructor). See § 194.221(b)(3).
(1) One cross-country flight of not less than 300 nautical miles total distance with landings at a minimum of three points, one of which is a straight-line distance of at least 250 nautical miles from the original departure point. However, if this requirement is being met in Hawaii the longest segment need only have a straight-line distance of at least 150 nautical miles; and	An applicant may complete two cross-country flights with landings at a minimum of three points, with one segment consisting of a straight-line distance of at least 50 nautical miles from the original point of departure. The second cross-country flight must include landings at different points than the first cross country flight. See § 194.233(b).
(2) 5 hours in night VFR conditions with 10 takeoffs and 10 landings (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower.	No alternative.

* To use the alternate provisions below, the flights must be conducted in a type-certificated powered-lift at the manufacturer and the applicant must be authorized by the Administrator to serve as an initial check pilot, chief instructor, assistant chief instructor, or training center evaluator for the purpose of initiating training in a powered-lift under an approved training program under part 135, 141, or 142, as appropriate. See § 194.221(a).

TABLE 5—ALTERNATE PROVISIONS FOR A COMMERCIAL PILOT CERTIFICATE WITH A POWERED-LIFT CATEGORY RATING: PERSONS RECEIVING TRAINING UNDER A PART 135, 141, OR 142 APPROVED TRAINING PROGRAM

Current flight time requirements (§ 61.129(e))	Alternate provisions for persons receiving training under a Part 135, 141, or 142 approved training program * (herein referred to as applicants)
Powered-Aircraft Time	
100 hours in powered-aircraft, of which 50 hours must be in a powered-lift	No alternative.
PIC Flight Time	
100 hours of PIC flight time, which includes at least— (1) 50 hours in a powered-lift, and (2) 50 hours in cross-country flight of which 10 must be in powered-lift	100 hours of PIC flight time, which includes at least— (1) 35 hours in a powered-lift, 15 of which may be in a Level C or higher FFS, and (2) 50 hours in cross-country flight of which 10 must be in powered-lift. An applicant who is not rated in the powered-lift may log up to 25 hours of PIC flight time in a powered-lift for flights that are conducted in accordance with an approved training program under part 135, 141, or 142 if the applicant is (1) the sole manipulator of the controls, (2) manipulating the controls of the powered-lift with an authorized instructor onboard, and (3) performing the duties of PIC. See §§ 194.216 and 194.223(c).
Training on the Areas of Operation listed in § 61.127(b)(5)	
20 hours of training on the areas of operation listed in § 61.127(b)(5) that includes at least—	No alternative.
(1) 10 hours of instrument training using a view-limiting device including attitude instrument flying, partial panel skills, recovery from unusual flight attitudes, and intercepting and tracking navigational systems. 5 hours of the 10 hours required on instrument training must be in a powered-lift.	No alternative.

TABLE 5—ALTERNATE PROVISIONS FOR A COMMERCIAL PILOT CERTIFICATE WITH A POWERED-LIFT CATEGORY RATING: PERSONS RECEIVING TRAINING UNDER A PART 135, 141, OR 142 APPROVED TRAINING PROGRAM—Continued

Current flight time requirements (§ 61.129(e))	Alternate provisions for persons receiving training under a Part 135, 141, or 142 approved training program* (herein referred to as applicants)
(2) The following cross-country flights— • One 2-hour cross country flight in a powered-lift in daytime conditions that consists of a total straight-line distance of more than 100 nautical miles from the original point of departure; and • One 2-hour cross country flight in a powered-lift in nighttime conditions that consists of a total straight-line distance of more than 100 nautical miles from the original point of departure; and (3) 3 hours in a powered-lift with an authorized instructor in preparation for the practical test within the preceding 2 calendar months from the month of the test.	An applicant may complete all of the following cross-country flights— • One 2-hour cross country flight in a powered-lift in daytime conditions that consists of a total straight-line distance of more than 50 nautical miles from the original point of departure; • One 2-hour cross country flight in a powered-lift in nighttime conditions that consists of a total straight-line distance of more than 50 nautical miles from the original point of departure; and • An additional cross-country flight with landings at a minimum of three points, with one segment consisting of a straight-line distance of at least 50 nautical miles from the original point of departure. The additional cross-country flight must include landings at different points than the first two cross-country flights. See § 194.233(a). No alternative.

Solo Flight Time or Flight Time Performing the Duties of PIC

Ten hours of solo flight time in a powered-lift or 10 hours of flight time performing the duties of PIC in a powered-lift with an authorized instructor on board (either of which may be credited toward the flight time requirement under § 61.129(e)(2), on the areas of operation listed in § 61.127(b)(5)) that includes—	No alternative.
(1) One cross-country flight of not less than 300 nautical miles total distance with landings at a minimum of three points, one of which is a straight-line distance of at least 250 nautical miles from the original departure point. However, if this requirement is being met in Hawaii the longest segment need only have a straight-line distance of at least 150 nautical miles; and (2) 5 hours in night VFR conditions with 10 takeoffs and 10 landings (with each landing involving a flight in the traffic pattern) at an airport with an operating control tower.	An applicant may complete two cross-country flights with landings at a minimum of three points, with one segment consisting of a straight-line distance of at least 50 nautical miles from the original point of departure. The second cross-country flight must include landings at different points than the first cross country flight. See § 194.233(b). No alternative.

* To use the alternate provisions below, the applicant must receive training at an approved training program under part 135, 141, or 142 for the purpose of obtaining a powered-lift category rating.

ii. Summary Tables for Obtaining an Instrument-Powered-Lift Rating

As noted, this rule finalizes requirements to facilitate airmen certification for an instrument-powered-

lift rating involves several alternate experience and logging requirements. To facilitate readability of the alternate requirements that will apply to persons seeking powered-lift ratings, the FAA has compartmentalized the rule

language into individual sections depending on the powered-lift ratings sought. Tables 6, 7, and 8 summarize the alternate provisions for an instrument-powered-lift rating.

TABLE 6—ALTERNATE PROVISIONS FOR AN INSTRUMENT-POWERED-LIFT RATING: TEST PILOTS AND INSTRUCTOR PILOTS

Current flight time requirements (§ 61.65(f))	Alternate provisions for test pilots, AA test pilots, and FAA ASIs *	Alternate provisions for instructor pilots *
Cross-Country Time as PIC		
50 hours of cross-country time as PIC, of which 10 hours must have been in a powered-lift.	A test pilot, FAA test pilot or ASI who is not rated in the powered-lift may log PIC flight time in the experimental powered-lift toward the 10-hour cross-country time requirement if (1) the test pilot is the sole manipulator of the controls, (2) the test pilot acting as PIC of the powered-lift, and (3) the flight is conducted for the purpose of R&D or showing compliance. See § 194.225(c).	An instructor pilot who is not rated in the powered-lift may log PIC flight time in the experimental powered-lift toward the 10-hour cross-country time requirement if (1) acting as PIC of the powered-lift, and (2) the flight is conducted for the purpose of crew training. See § 194.227(c).

TABLE 6—ALTERNATE PROVISIONS FOR AN INSTRUMENT-POWERED-LIFT RATING: TEST PILOTS AND INSTRUCTOR PILOTS—Continued

Current flight time requirements (§ 61.65(f))	Alternate provisions for test pilots, AA test pilots, and FAA ASIs *	Alternate provisions for instructor pilots *
Instrument Time on the Areas of Operation Listed in § 61.65(c)		
40 hours of actual or simulated instrument time in the areas of operation listed in § 61.65(c), of which 15 hours must have been received from an authorized instructor who holds an instrument-powered-lift rating, and the instrument time includes: (1) 3 hours of instrument flight training from an authorized instructor in a powered-lift that is appropriate to the instrument-powered-lift rating within 2 calendar months before the date of the practical test; and (2) Instrument flight training on cross-country flight procedures, including one cross-country flight in a powered-lift with an authorized instructor that is performed under IFR, when a flight plan has been filed with an ATC control facility, that involves— • A flight of 250 nautical miles along airways or by directed routing from an ATC facility; • An instrument approach at each airport; and • Three different kinds of approaches with the use of navigation systems.	A test pilot, FAA test pilot or ASI may receive 15 hours of instrument training on the areas of operation listed in § 61.65(c) from an instructor pilot (rather than an authorized instructor) if (1) the training is conducted in accordance with the manufacturer's proposed training curriculum, and (2) the test pilot, FAA test pilot or ASI receives endorsement from instructor pilot certifying satisfactory completion of the curriculum. See § 194.225(b)(1). Test pilot, FAA test pilot, or ASI may accomplish the practical test preparation with an instructor pilot (rather than an authorized instructor). See § 194.225(b)(2). • Test pilot, FAA test pilot, or ASI may complete the cross-country flight with an instructor pilot (rather than an authorized instructor). • Instead of completing one cross-country flight of 250 nautical miles, a test pilot, FAA test pilot, or ASI may complete two cross-country flights, each of which must involve a flight of 100 nautical miles along airways or by directed routing from an ATC facility.¹ See §§ 194.225(b)(4) and 194.235(a).	In lieu of receiving the 15 hours of instrument training on the areas of operation listed in § 61.65(c), an instructor pilot may provide this instrument training to the test pilot, FAA test pilot or ASI in accordance with the manufacturer's proposed training curriculum. Instructor pilot must receive endorsement from management official certifying that instructor pilot provided the training. See § 194.227(b)(1). Instructor pilot may accomplish the practical test preparation with another instructor pilot (rather than an authorized instructor). See § 194.227(b)(2). • Instructor pilot may complete the cross-country flight with another instructor pilot (rather than an authorized instructor). • Instructor pilot may complete the same alternate cross-country flights as test pilot. See §§ 194.227(b)(4) and 194.235(a).

*To use the alternate provisions below, the flights must be conducted in an experimental powered-lift at the manufacturer and the test pilots, ASIs and instructor pilots must be authorized by the Administrator to act as PIC of the experimental powered-lift. See §§ 194.225(a) and 194.227(a).

¹ The other requirements in § 61.65(f)(2)(ii) would continue to apply for persons not utilizing the relief under proposed § 194.235(b). Thus, each cross-country flight with the reduced 100-nautical mile distance must be performed under IFR when a flight plan has been filed with an ATC facility and must involve (1) an instrument approach at each airport and (2) three different kinds of approaches with the use of navigation systems.

TABLE 7—ALTERNATE PROVISIONS FOR AN INSTRUMENT-POWERED-LIFT RATING: INITIAL CADRE OF CHECK PILOTS, CHIEF INSTRUCTORS, ASSISTANT CHIEF INSTRUCTORS, AND TRAINING CENTER EVALUATORS

Current flight time requirements (§ 61.65(f))	Alternate provisions for initial cadre of check pilots, chief instructors, assistant chief instructors, and TCEs * (herein referred to as applicants)
Cross-Country Time as PIC	
50 hours of cross-country time as PIC, of which 10 hours must have been in a powered-lift.	An applicant who is not rated in the powered-lift may log PIC flight time in the powered-lift toward the 10-hour cross-country time requirement for flights that are conducted in accordance with a manufacturer's training curriculum if the applicant is (1) the sole manipulator of the controls, (2) manipulating the controls of the powered-lift with an instructor pilot onboard, and (3) performing the duties of PIC. See § 194.229(c).

Instrument Time on the Areas of Operation listed in § 61.65(c)

40 hours of actual or simulated instrument time in the areas of operation listed in § 61.65(c), of which 15 hours must have been received from an authorized instructor who holds an instrument-powered-lift rating, and the instrument time includes:	An applicant may receive 15 hours of instrument training on the areas of operation listed in § 61.65(c) from an instructor pilot (rather than an authorized instructor) if the training is conducted in accordance with the manufacturer's training curriculum, and the applicant receives endorsement from instructor pilot certifying satisfactory completion of the curriculum. See § 194.229(b)(1).
(1) 3 hours of instrument flight training from an authorized instructor in a powered-lift that is appropriate to the instrument-powered-lift rating within 2 calendar months before the date of the practical test; and	An applicant may accomplish the practical test preparation from an instructor pilot (rather than an authorized instructor). See § 194.229(b)(2).

TABLE 7—ALTERNATE PROVISIONS FOR AN INSTRUMENT-POWERED-LIFT RATING: INITIAL CADRE OF CHECK PILOTS, CHIEF INSTRUCTORS, ASSISTANT CHIEF INSTRUCTORS, AND TRAINING CENTER EVALUATORS—Continued

Current flight time requirements (§ 61.65(f))	Alternate provisions for initial cadre of check pilots, chief instructors, assistant chief instructors, and TCEs * (herein referred to as applicants)
(2) Instrument flight training on cross-country flight procedures, including one cross-country flight in a powered-lift with an authorized instructor that is performed under IFR, when a flight plan has been filed with an ATC control facility, that involves— • A flight of 250 nautical miles along airways or by directed routing from an ATC facility; • An instrument approach at each airport; and • Three different kinds of approaches with the use of navigation systems.	• Applicant may complete the cross-country flight with an instructor pilot (rather than an authorized instructor). • Instead of completing one cross-country flight of 250 nautical miles, an applicant may complete two cross-country flights, each of which must involve a flight of 100 nautical miles along airways or by directed routing from an ATC facility.¹ See §§ 194.229(b)(4) and 194.235(a).

*To use the alternate provisions below, the flights must be conducted in a type-certificated powered-lift at the manufacturer and the applicant must be authorized by the Administrator to serve as an initial check pilot, chief instructor, assistant chief instructor, or training center evaluator for the purpose of initiating training in a powered-lift under an approved training program under part 135, 141, or 142, as appropriate. See § 194.229(a).

¹ The other requirements in § 61.65(f)(2)(ii) would continue to apply for persons not utilizing the relief under proposed § 194.235(b). Thus, each cross-country flight with the reduced 100-nautical mile distance must be performed under IFR when a flight plan has been filed with an ATC facility and must involve (1) an instrument approach at each airport and (2) three different kinds of approaches with the use of navigation systems.

TABLE 8—ALTERNATE PROVISIONS FOR AN INSTRUMENT-POWERED-LIFT RATING: PERSONS RECEIVING TRAINING UNDER A PART 135, 141, OR 142 APPROVED TRAINING PROGRAM

Current flight time requirements (§ 61.65(f))	Alternate provisions for persons receiving training under a Part 135, 141, or 142 approved training program * (herein referred to as applicants)

Cross-Country Time as PIC

50 hours of cross-country time as PIC, of which 10 hours must have been in a powered-lift.	An applicant may credit up to 4 hours obtained in a Level C or higher FFS toward the requirement to obtain 10 hours of cross-country time as PIC in a powered-lift if (1) the FFS represents the powered-lift category, (2) the applicant was performing the duties of PIC, (3) the flight simulates a cross-country flight and includes the performance of instrument procedures under simulated instrument conditions and (3) the flights are conducted in accordance with an approved training program under part 135, 141 or 142. See § 194.231(c).

Instrument Time on the Areas of Operation listed in § 61.65(c)

40 hours of actual or simulated instrument time in the areas of operation listed in § 61.65(c), of which 15 hours must have been received from an authorized instructor who holds an instrument-powered-lift rating, and the instrument time includes: at least— (1) 3 hours of instrument flight training from an authorized instructor in a powered-lift that is appropriate to the instrument-powered-lift rating within 2 calendar months before the date of the practical test; and (2) Instrument flight training on cross-country flight procedures, including one cross-country flight in a powered-lift with an authorized instructor that is performed under IFR, when a flight plan has been filed with an ATC control facility, that involves— • A flight of 250 nautical miles along airways or by directed routing from an ATC facility; • An instrument approach at each airport; and • Three different kinds of approaches with the use of navigation systems.	<i>No alternative.</i> <i>No alternative.</i> Instead of completing one cross-country flight of 250 nautical miles, an applicant may complete two cross-country flights, each of which must involve a flight of 100 nautical miles along airways or by directed routing from an ATC facility. ¹ See §§ 194.231(b) and 194.235(a).

*To use the alternate provisions below, the applicant must receive training at an approved training program under part 135, 141, or 142 for the purpose of obtaining a powered-lift category rating.

¹ The other requirements in § 61.65(f)(2)(ii) would continue to apply for persons not utilizing the relief under proposed § 194.235(b). Thus, each cross-country flight with the reduced 100-nautical mile distance must be performed under IFR when a flight plan has been filed with an ATC facility and must involve (1) an instrument approach at each airport and (2) three different kinds of approaches with the use of navigation systems.

7. Alternate Endorsement Requirements for Certain Persons Seeking Powered-Lift Ratings

Under the traditional airman certification framework in part 61, an applicant for a certificate or rating must

receive certain endorsements from an authorized instructor.²⁶⁹ The FAA identified the same barriers to endorsements as previously discussed

²⁶⁹ For example, §§ 61.31(d)(2), 61.51(h).

in sections V.F.2. and V.F.3. of this preamble insofar as part 61 defines “authorized instructor,” in pertinent part, as a person who holds a flight instructor certificate issued under part 61. Additionally, § 61.195(b) restricts a

flight instructor from conducting training in an aircraft unless the flight instructor holds the appropriate ratings on their flight instructor certificate. Instructor pilots at the manufacturer will provide training to test pilots, FAA test pilots, FAA ASIs, and the initial cadre of instructors, but may not meet the definition of “authorized instructor” under part 61. Additionally, the SFAR will permit instructor pilots to credit training they provide, which would create a barrier in receiving an endorsement, as the FAA maintains the concept of a general prohibition on self-endorsement.²⁷⁰ Therefore, the FAA proposed an alternate endorsement pathway in § 194.213. The FAA did not receive any comments specifically pertaining to the alternate endorsement requirements proposed in § 194.213 and adopts the section with two minor revisions, subsequently discussed.²⁷¹

The NPRM proposed § 194.213(a)(1) to permit instructor pilots to provide the required logbook or training record endorsements contained in part 61 for a commercial pilot certificate with a powered-lift category rating, an instrument-powered-lift rating, a powered-lift type rating, or a flight instructor certificate with powered-lift ratings to applicants who are (1) test pilots for the manufacturer of an experimental powered-lift, or (2) persons authorized by the Administrator to serve as an initial check pilot, chief instructor, assistant chief instructor, or training center evaluator (TCE) for the purpose of initiating training in a powered-lift under an approved training program under part 135, 141, or 142.²⁷²

Because this final rule extends the alternate pathway afforded to test pilots to FAA test pilots and ASIs (*i.e.*, §§ 194.217 and 194.225), new § 194.213(a)(1)(iii) adds FAA test pilots and aviation safety inspectors into the population of pilots for which an instructor pilot may provide an endorsement (*i.e.*, aligning with test pilots). Additionally, the FAA notes that § 194.219(b)(3) permits an instructor

pilot to satisfy the aeronautical experience requirement in § 61.129(e)(4) by logging at least 10 hours of solo flight time under an endorsement from another instructor pilot. Similarly, § 194.227(b)(3) permits an instructor pilot to accomplish the cross-country flight specified in § 61.65(f)(2)(ii) for an instrument-powered-lift rating without an authorized instructor, provided, in pertinent part, the instructor pilot obtains a logbook or training record endorsement from the instructor pilot certifying that the person completed the cross-country flight. Because these regulations permit an instructor pilot to provide an endorsement to another instructor pilot, but the instructor pilot will not be a part 61 authorized instructor, this final rule adds instructor pilots to the alternate endorsement requirements in § 194.213(a)(1)(i).

G. Training in an Approved Program Under Parts 135, 141, and 142

As discussed in section V.F.7. of this preamble, the FAA is adopting alternate requirements for a person to obtain a commercial pilot certificate with a powered-lift category rating and an instrument-powered-lift rating. Because the alternate eligibility framework provides relief to applicants under the SFAR, the FAA found it appropriate to limit the circumstances under which an applicant could use the relief. As discussed in the NPRM,²⁷³ the FAA found that part 135 operators, part 141 pilot schools, and part 142 training centers would best facilitate a training program aligned with the alternate framework set forth in the SFAR. Specifically, part 141 pilot schools and part 142 training centers are already structured to provide alternate methods to obtain training and testing for part 61 certification, including established mechanisms and oversight for curriculum, facilities, and personnel. Conversely, no regulatory framework generally exists for part 135 operators to conduct training and testing for initial ratings under part 61 because part 135 training and checking is primarily structured to qualify pilots to serve in a particular aircraft within the part 135 operational environment. However, the FAA found it appropriate to facilitate an option of training, testing, and checking for a powered-lift rating for part 135 operators for the limited purpose of the SFAR, as proposed in the NPRM and subsequently discussed herein.²⁷⁴

Therefore, the NPRM proposed that, to be eligible for some of the alternate requirements, a pilot must satisfactorily complete the applicable curricula for those ratings in an approved training program under part 135, 141, or 142. As proposed, after completion of the approved curricula, a person would be required to satisfactorily complete the applicable practical test to obtain the powered-lift rating.

The proposal to facilitate the alternate requirements via a training program under parts 141 and 142 and expand training program privileges to part 135 operators received general support. Specifically, AWPC agreed with the FAA’s approach that the SFAR training must be conducted as an approved course under part 135, 141, or 142, citing the clearly defined prerequisites to entry and the highly standardized and regulated course of instruction that would be offered. GAMA echoed this support, stating that relief provided in the SFAR necessitates training in approved courses under part 135, 141, or 142 to ensure standardized instruction with defined prerequisites.²⁷⁵ A4A also expressed general support and further recommended that the training curricula across all parts be required to comply with standardized curricula design, learning objectives, performance tasks, and evaluation criteria as determined by the FAA for the training and qualification of powered-lift pilots and flight instructors.

The following sections summarize the facilitation of the alternate requirements in each part and discuss comments received.

1. Part 135

As previously discussed, part 135 training and checking²⁷⁶ is traditionally intended to qualify a pilot to serve in a particular aircraft in a specific part 135 operation, whereby the pilot would already hold the certificates and ratings for such operations when they are hired. The following sections V.G.1.i. through v. of this preamble discuss the FAA’s proposal to modify this traditional framework as it pertains to training curricula, curriculum content, pilot eligibility, instructor qualifications, and

precedent-setting. See §§ 61.157(c), 61.157(f), and 61.63(d)(6)(ii).

²⁷⁵ Section V.F. of this preamble addresses GAMA’s additional comments pertaining to a competency and training-oriented curriculum, rather than an hours-based approach.

²⁷⁶ Part 135 training and checking typically includes policies and procedures specific to the part 135 operator and operation: for example, crew resource management, flight planning procedures, authorized approach procedures, and operations in weather conditions.

²⁷⁰ See § 61.195(i).

²⁷¹ The FAA notes that Eve provided a comment related to endorsements in the context of ICAO Annex 2.1.1.4. Specifically, Eve stated that the FAA should remove § 194.213 because 2.1.1.4 and removal of the category rating would no longer necessitate alternate flight instructor endorsements. Because the FAA is not implementing 2.1.1.4, as discussed at length in section V.F.3.i. of this preamble, this recommendation is rendered inapplicable.

²⁷² Under proposed § 194.213(a)(2), certain management officials within the manufacturer’s organization may provide an endorsement to an instructor pilot who provided the manufacturer’s training curriculum to a test pilot (§§ 194.219(b)(1)(ii) and 194.227(b)(1)(ii)). The final rule adopts this provision as proposed.

²⁷³ 88 FR 38946 at 38990 (June 14, 2023).

²⁷⁴ The FAA notes that this concept of crediting training in the operator’s approved training program toward training and endorsements requirement to certain part 61 requirements is not wholly

checking and testing to implement a training regime for powered-lift ratings for part 135 operators.

i. Airman Certification Training Curricula

To facilitate part 135 operators in establishing and implementing a training curriculum under which pilots can obtain the powered-lift ratings required for part 135 operations, the FAA proposed a temporary provision in § 194.243(a)(1). Under the proposed § 194.243(a)(1), a part 135 certificate holder would be able to implement a training curriculum to satisfy: (1) ground training, flight training, and aeronautical experience requirements in § 61.65 for an instrument rating;²⁷⁷ (2) ground training, flight training, and aeronautical experience requirements in § 61.63(b) for the addition of an aircraft category rating to a commercial pilot certificate; and (3) ground and flight training requirements in § 61.63(d) to add a type rating to a commercial pilot certificate. These sections would permit a part 135 operator to provide the necessary experience and training for their initial pilots to receive part 61 certificates, as well as qualify their pilots for part 135 operations.

As noted in the NPRM, a part 135 operator is not required to offer this part 61 training. Rather, this provision is intended to provide flexibility for part 135 operators to develop a sufficient number of qualified pilots for its operations. The FAA envisions that the pilots would complete the certification training before transitioning to the operator's part 135 training; however, the FAA would approve one curriculum if it meets all of the part 61 aeronautical experience requirements and the part 135 training requirements. A part 135 operator who wants to provide this type of training to its pilots would submit their curricula to the responsible Flight Standards Office for approval in accordance with § 135.325.²⁷⁸

²⁷⁷ As discussed in the NPRM, some part 135 operators will likely conduct only VFR operations. However, the FAA proposed that powered-lift pilots conducting VFR operations must nevertheless hold an instrument-powered-lift rating similar to the instrument-airplane rating that is required for pilots conducting part 135 VFR airplane operations. For reasons discussed in section V.J.5. of this preamble, powered-lift pilots will be required to hold an instrument rating even when operating under VFR. To facilitate pilots receiving an instrument rating, the FAA will allow part 135 operators to provide training for instrument ratings under an approved airman certification curriculum.

²⁷⁸ The FAA notes that guidance will be updated specifically in FAA Order 8900.1 Volume 3, Chapter 19 (*Flightcrew Member Training and Qualification Programs*) and Chapter 20 (*Check Airman, Instructor, and Supervisor Programs for Part 121 and 135 Certificate Holders*) to inform FAA ASIs on the approval and surveillance

Commenters generally supported the FAA's proposal to permit a part 135 certificate holder to provide training for powered-lift category and type ratings on a commercial certificate and an instrument-powered-lift rating through their approved curriculums. AWPC stated they agree with the FAA's approach to requiring this training through approved programs under parts 135, 141, and 142 because these courses apply defined prerequisites and deliver a highly standardized and regulated course of instruction. CAE also generally supported the FAA's proposal stating it would ensure standardized and regulated instruction with defined prerequisites. L3 Harris and Archer further echoed this support. Additionally, AWPC, CAE, GAMA, Archer, and L3Harris recommended that the FAA should add language to § 61.71 to include part 135 as an approved training program for powered-lift to clarify that graduates of a part 135 approved certification program have met the requirements of part 61.

Section 61.71 sets forth special rules for graduates of an approved training program outside of part 61. Specifically, § 61.71 acknowledges approved training programs under parts 141 and 142 as meeting the applicable aeronautical experience, aeronautical knowledge, and area of operation requirements under certain circumstances.²⁷⁹ Section 61.71(b) further acknowledges part 121 air carrier approved training curriculum and proficiency checks in certain circumstances as meeting the applicable requirements for an ATP certificate under § 61.157. The FAA determined it is unnecessary to revise § 61.71 to include part 135 training programs because part 194 contains the necessary language that enables part 135 operators to conduct part 61 training. As part 194 contains temporary allowances, it would not be appropriate to make a permanent amendment to § 61.71 because the SFAR explicitly allows conduct notwithstanding provisions in part 61. Section 194.243 and the amendment to § 61.1(a)²⁸⁰ would

structure of part 135 powered-lift training programs. This guidance will be integrated into FAA Order 8900.1 upon final rule publication and implementation.

²⁷⁹ § 61.71(a).

²⁸⁰ Specifically, under § 61.1(a), part 61 prescribes the requirements for issuing pilot, flight instructor, and ground instructor certificates, ratings, and authorizations; the conditions under which those certificates, ratings, and authorizations are necessary; the privileges and limitations of those certificates, ratings, and authorizations; and the requirements for issuing such certificates and ratings for persons who have taken courses approved by the Administrator under other parts of chapter I of title 14 of the Code of Federal Regulations. The FAA proposed to revise § 61.1(a)

sufficiently integrate part 135 training in lieu of certain part 61 requirements.

ii. Curriculum Content

Under proposed § 194.243(a)(1), an operator would be able to seek approval to offer training in conjunction with its part 135 operator training to qualify its pilots for part 135 operations. As proposed, the curriculum content from a part 135 operator seeking to provide this training would involve foundational ground and flight training that may be nontraditional or inapplicable to part 135 operations (*i.e.*, aeronautical experience such as solo flight time, cross-country flight time, or certain maneuvers in the ACS). As explained in the NPRM, the airman certification curriculum would be required to satisfy the aeronautical experience requirements, including (1) the 20 hours of training, in § 61.129(e) (as required by § 61.63(b)) or the applicable alternate requirements set forth by proposed part 194, (2) the requirements for an instrument rating in § 61.65(f) or the applicable alternate requirements set forth by proposed part 194, and (3) the requirements for adding a type rating in § 61.63(d).²⁸¹

Further, under § 135.324, a certificate holder may contract with or otherwise arrange to use the services of a part 142 training center to conduct training, testing, and checking, subject to certain training center requirements. This existing provision would be equally applicable to a part 135 operator's approved certification curricula under the SFAR (*i.e.*, a part 142 training center could deliver the part 135 operator's approved certification curriculum). Likewise, the operator could send its pilots to a part 141 pilot school or part 142 training center to obtain the necessary powered-lift ratings before returning to the part 135 operator to complete the required part 135 training and checking.

The FAA received comments from NATA and A4A (discussed below) encouraging use of the standardized curriculum approach to the certification curriculum in § 194.243(a), but otherwise the FAA received no substantive comments pertaining to the content of the proposed curriculum.

to account for part 194 requirements, similar to the allowance for current part 107, which would sufficiently integrate the part 135 training program in tandem with new § 194.243.

²⁸¹ As discussed in the NPRM, operators seeking to provide type ratings to powered-lift pilots who already hold powered-lift category ratings and instrument-powered-lift ratings would follow existing regulations in the same manner as operators using airplanes and rotorcraft can provide training and testing that result in the pilot receiving a type rating.

Accordingly, § 194.243(a) is adopted as proposed.

NATA recommended the FAA consider the standardized curriculum program for part 135 operators. NATA stated that the standardized curriculum concept, supported by FAA and industry in enabling safety and administrative benefits, provides a means to standardize curricula offered by part 142 training centers to part 135 operators as an option to meet the training requirements of part 135. NATA emphasized benefits such as enhanced training, testing, and checking; leveraging experience; streamlined approval processes; and administrative efficiencies. A4A echoed this general sentiment, recommending that part 141 pilot schools, part 142 training centers, and part 135 operators be required to comply with standardized curricula design, learning objectives, performance tasks, and evaluation criteria developed by the FAA.

The standardized curriculum concept provides a means to standardize curricula offered by part 142 training centers to part 135 operators as an option to meet the training requirements of subpart H of part 135.²⁸² This concept aims to provide an efficient means for approving training curricula for a specific aircraft or series of aircraft offered by part 142 training centers while increasing the consistency of training, testing, and checking delivered to part 135 operators. To note, standardized curriculum is not a complete training program;²⁸³ rather, it is the aircraft-specific segment of the part 135 training to be delivered by a part 142 training center in accordance with § 135.324(b) (and all applicable requirements under part 135). Traditionally, the Training Standardization Working Group (TSWG) collaborates with stakeholders to develop and recommend a standardized curriculum to the ARAC for a specific aircraft fleet. In turn, the ARAC presents the recommendations to the FAA for review, consideration, and possible publication and implementation.²⁸⁴ Once published by the FAA, if the POI determines it fits the needs of the operator, the standardized curriculum is considered to meet the aircraft-specific

requirements of a part 135 training program.

The FAA finds that part 135 training programs facilitating the entrance of this new category of aircraft must remain flexible and adaptive for the operator, retaining the ability to evolve with emerging trends, safety concerns, and operational considerations as powered-lift operations mature. The FAA agrees that the use of standardized curriculum could provide a benefit to part 135 powered-lift operators in the future. However, the FAA finds it impractical and premature to establish a TSWG and develop a standard part 135 curriculum for a powered-lift because no certificated powered-lift have completed the FSB process and, therefore, no operators currently use powered-lift (or qualified powered-lift FFS).²⁸⁵ However, the SFAR would not foreclose this as an option in the future should a specific type of powered-lift with a similar training footprint emerge along with significant insight into the training and operation of that powered-lift to develop a standardized curricula.

iii. Pilot Eligibility

The FAA also proposed eligibility standards for the pilots who may be trained under a part 135 airman certification training curriculum, which would be set forth by proposed § 194.243(a)(3). As proposed, a certificate holder may train a pilot for powered-lift ratings only if the pilot is employed by the part 119 certificate holder. The pilots would also be required to meet the certificate and rating requirements of proposed § 194.215(a) (*i.e.*, at least a commercial pilot certificate with either (1) an airplane category rating with single- or multiengine class rating and an instrument-airplane rating, or (2) a rotorcraft category rating with a helicopter class rating and an instrument-helicopter rating).

The FAA did not receive any comments on the proposed part 135 pilot eligibility provisions and adopts the provision as proposed.

iv. Part 135 Instructors

Currently, instructors in part 135 are not required to hold a part 61 flight instructor certificate. Rather, a part 135 instructor must meet the requirements set forth in §§ 135.338 and 135.340.²⁸⁶

While the traditional part 135 instructor focuses on training pilots in the specific aircraft and operation, part 135 instructors under the SFAR will be training pilots on basic airman certification requirements (*i.e.*, part 61 requirements). To provide training on basic airman certification requirements, a person must generally hold a part 61 flight instructor certificate with appropriate ratings. Specifically, pursuant to § 61.3(d)(2), a person must hold a flight instructor certificate issued under part 61 to give training required to qualify a person for solo flight and solo cross-country flight and to give certain endorsements.²⁸⁷

The FAA recognizes there are certain scenarios, though, where a flight instructor certificate is not required. Under the narrowly tailored exception in § 61.3(d)(3)(ii), a flight instructor certificate is not required to provide training and endorsements if provided by the holder of an ATP certificate with the appropriate rating in accordance with an approved air carrier training program under part 121 or 135. However, when a pilot traditionally receives training at a part 135 operator, the pilot already holds the appropriate category and class ratings on their commercial pilot certificate. Therefore, the instructor pilot who holds an ATP certificate but not a part 61 flight instructor certificate would be training a pilot who already demonstrated the basic airman certification proficiency and competency to the airman certification standards. This is unlike the framework adopted in this final rule whereby the part 135 approved training program will include foundational training and testing required to add category and instrument ratings to a commercial pilot certificate in lieu of part 61 requirements.²⁸⁸

The FAA found it necessary to prevent a situation under which a part 135 instructor who holds an ATP certificate with powered-lift ratings

holding the airman certificates and ratings, successfully completing the required aircraft training phases, etc.), satisfactorily complete the approved part 135 instructor ground and flight training, and undergo continued observation by an FAA inspector, an operator check airman, or an aircrew designated examiner employed by the operator to ensure the quality and effectiveness of the instruction after initial instructor acceptance.

²⁸⁷ See § 61.3(d)(2)(ii) through (iv).

²⁸⁸ Because approved training programs under part 135 do not include training and testing required to add category and instrument ratings to a commercial pilot certificate, nor does part 61 accept part 135 training and checking activity in lieu of part 61 requirements for a commercial pilot certificate, the exception in § 61.3(d)(3)(ii) does not currently apply and creates a safety gap in allowing the holder of an ATP certificate to provide part 61 certification training. See § 61.167(a) for ATP certificate holder training privileges.

²⁸² www.faa.gov/pilots/training/standardized_curriculum.

²⁸³ The certificate holder would still be required to develop some training curricula on their own, such as an indoctrination or special operations curriculum.

²⁸⁴ See AC 142–1 *Standardized Curricula Delivered by Part 142 Training Centers*.

²⁸⁵ The TSWG model is based on leveraging industry expertise to make recommendations to the FAA on part 135 curriculum content. Without any powered-lift currently operating, it will take time for the requisite expertise to develop in industry to properly inform the TSWG process.

²⁸⁶ These requirements include that the instructor be PIC qualified for the aircraft and operation (*e.g.*,

could provide training in a powered-lift to pilots seeking to add a powered-lift category rating and an instrument-powered-lift rating to their commercial pilot certificate through the part 135's airman certification curriculum. Specifically, as discussed in the NPRM, the FAA determined that a person must hold a flight instructor certificate issued under part 61 with the appropriate ratings to provide training for the purpose of adding a powered-lift category rating or an instrument rating to a commercial pilot certificate. This determination was based on the lack of powered-lift experience held by pilots completing the part 135 training program (who would be completing basic airman certification requirements) and the curriculum content required for the issuance of a commercial pilot certificate with a powered-lift category rating and an instrument-powered-lift rating (*i.e.*, foundational ground and flight training and aeronautical experience not traditionally included in a part 135 training curriculum.)²⁸⁹

The holder of a flight instructor certificate with a powered-lift category rating would be qualified to provide training on the tasks and maneuvers required in the approved certification training curriculum because the tasks and maneuvers are included on the powered-lift flight instructor practical test.²⁹⁰ Additionally, the flight instructor would have demonstrated the ability to provide effective training on the foundational tasks and maneuvers, demonstrate the skills required to perform those tasks and maneuvers within the approved standards, and analyze and correct common errors that occur during training of those tasks and maneuvers. For these reasons, the FAA proposed § 194.243(a)(2) to require an instructor in a part 135 airman certification training program to hold a flight instructor certificate with a

powered-lift category rating and instrument-powered-lift rating issued under part 61 (in addition to meeting the qualification requirements of §§ 135.338 and 135.340).

To ensure the narrow exception in § 61.3(d)(3)(ii) is not expanded in light of the FAA's proposal, the FAA proposed § 194.203(b) to specify that a person must hold a flight instructor certificate with the appropriate powered-lift ratings to conduct training in accordance with a training curriculum approved to meet the requirements of § 194.243(a)(1). Additionally, to ensure the ATP privileges contained in § 61.167(a) are not expanded as a result of the SFAR, the FAA proposed a limitation in § 194.205 to prohibit a person who holds an ATP certificate with powered-lift ratings from instructing other pilots in accordance with an approved training program under part 135 for the purpose of obtaining a commercial pilot certificate with a powered-lift category rating or an instrument-powered-lift rating.

ALPA and an individual commenter supported the requirement that part 135 instructors providing training for a commercial pilot certificate with powered-lift ratings and an instrument-powered-lift rating hold a part 61 flight instructor certificate with appropriate ratings. The individual stated that the SFAR would enable the part 135 instructors to provide foundational flight training to someone who does not already hold the category rating at the commercial level, which necessitates instructors trained under the same requirements as part 61 instructors in the interest of ensuring safety and effective training. ALPA supported the FAA's conclusion, as set forth in the preamble to the NPRM, that a person with a flight instructor certificate would be best suited to provide training on the foundational tasks, maneuvers, and skills, and provide any corrective feedback and analysis.

FlightSafety International, UPS Flight Forward (UPS FF), and L3Harris commented on the FAA's proposal to require a part 61 flight instructor certificate to provide training under the SFAR at a part 135 operator. FlightSafety International did not appear to disagree with the general concept to require a flight instructor certificate for part 135 instructors under the SFAR, but rather commented on the proposal in the context of aligning the type rating requirement with ICAO Annex 1, section 2.1.1.4. Specifically, FlightSafety International recommended the FAA revise proposed § 194.203(b) to require a flight instructor under part 135

to hold any category or class flight instructor certificate with the appropriate powered-lift type rating only (rather than a flight instructor certificate with a powered-lift category and type rating). FlightSafety International also proposed similar revisions (*i.e.*, any flight instructor certificate with only a powered-lift type rating) in §§ 194.205 and 194.243.

UPS FF opposed the flight instructor certificate requirement, stating that part 135 operators and part 121 airlines have long relied on the regulatory allowance to train and qualify pilots without holding a part 61 flight instructor certificate and asserted that such a requirement would result in less experienced part 135 instructors or add a financial burden to operators that fund their instructors in the completion of part 61 instructor training. UPS FF urged the FAA to take several factors into consideration, including a perceived pilot shortage, the introduction of new and unique aircraft into commercial service, and the desire to have experienced pilots training new entrants. UPS FF suggested the FAA leverage the Aircrew Program Designee (APD) process to support part 135 operators conducting training and checking resulting in the issuance of both a category and type rating to a part 61 certificate. Similarly, L3Harris opposed the requirement, stating it would not add any value or safety to the certification process and will burden instructors at air carriers.

First, for the reasons stated in section VII.A. of this preamble, the FAA is not implementing ICAO Annex 1, section 2.1.1.4 therefore FSI's suggestions are likewise not adopted.

As previously discussed, UPS FF correctly notes that parts 121 and 135 operators have traditionally relied on the allowance to train and qualify pilots without holding a part 61 flight instructor certificate. However, this allowance is narrowly tailored to the training and checking designed to prepare a pilot to operate in accordance with the air operator's certificate for which they are employed and for certification purposes extends solely to training required for a type rating. Under the new requirements in the SFAR, certificate holders under part 135 may submit a curriculum constituting a comprehensive airman certification training framework, which would go beyond the traditional scope of a part 135 training program. In other words, part 135 certificate holders are not presently permitted to train pilots for their initial part 61 category ratings and, therefore, the corresponding instructor

²⁸⁹ For the issuance of a powered-lift category rating on a commercial pilot certificate, the training must cover the knowledge areas specified in § 61.125(b) and the areas of operation contained in § 61.127(b)(5). For the issuance of an instrument-powered-lift rating, the training must cover the knowledge areas specified in § 61.65(b) and the areas of operation contained in § 61.65(c).

²⁹⁰ See Commercial Pilot for Powered-Lift Category ACS (FAA-S-ACS-2) and Flight Instructor for Powered-Lift Category ACS (FAA-S-ACS-27), both incorporated by reference under §§ 61.14 and 61.43(a). Because § 61.43(a) requires an applicant to perform the tasks specified in the areas of operation contained in the applicable ACS (or PTS), a person seeking a flight instructor certificate with a powered-lift category rating would be trained and tested on their understanding of these tasks and maneuvers, their application of that knowledge to manage associated risks, and their ability to demonstrate the appropriate skills and provide effective instruction for each of these tasks and maneuvers.

pilots are not required to hold part 61 flight instructor certificates.

The certification activity currently allowed to be accomplished through the completion of a certificate holder's training program is not analogous to the new certification curriculum for a commercial pilot certificate and instrument rating. First, to the extent that § 61.157(f) allows checks at an operator to satisfy the practical test requirements for an ATP certificate, the ATP certificate practical test requires no additional training but rather is an experience-based eligibility (*e.g.*, 1,500 total time as a pilot, etc.). Conversely, a commercial pilot certificate requires an applicant to complete training and acquire flight experience. To the extent that § 61.157(c) allows pilots training under a part 135 training program to forego the flight training for a type rating in § 61.157(b)(1) if they present a training record that shows completion of a certificate holder's approved training program for the aircraft type that also is distinguishable because a certificate holder's training program, like training for a type rating, is aircraft type specific. Accordingly, there is a correlation between the content of the operator's training program and the type rating training. It is for the exact reasons cited by UPS FF and L3Harris—the introduction of new and unique aircraft, a lack of experienced powered-lift pilots, and the desire to have experienced pilots training new entrants—that the FAA maintains the need for proficient flight instructors, who have been trained and tested themselves on these foundational airman certification tasks, maneuvers, and instructional abilities, to provide part 61 training.

Commenters recommended leveraging the aircrew program designee (APD) process to reduce the reliance on instructors holding a part 61 flight instructor certificate. An APD for an operator is a check pilot employed by the operator who is qualified and authorized to certify other pilots by conducting a certification examination, giving the operator the ability to facilitate certain airman certification for ATP certificates and type ratings (§§ 61.63 and 61.157). Under the SFAR, the company may still leverage APDs to conduct evaluations required for the newly enabled ratings. However, the use of an APD program does not reduce the importance of using a pilot with a flight instructor certificate for initial certification training and ensuring basic flight concepts are taught by an appropriately rated individual with an understanding of training initial applicants. Therefore, the SFAR would

not foreclose the use of an APD process under part 135, but individuals who provide flight training must be appropriately qualified as set forth in the SFAR.

The FAA notes that the requirement to hold a part 61 flight instructor certificate with powered-lift ratings applies only to part 135 instructors who train pilots seeking to obtain their initial powered-lift category and instrument ratings under a part 135 training program. The FAA is not altering the ability of an operator to use pilots who possess an ATP certificate to provide training under their approved part 135 training program with qualified PICs that hold their ATP certificate, as is the current status quo. This SFAR provision would only apply to training for initial powered-lift ratings under the part 135 training program to meet the part 61 requirements concurrently.

Therefore, this final rule adopts the part 135 flight instructor certificate provisions as proposed.

v. Checking and Testing

Part 135 initial training culminates in evaluations of the pilot's proficiency through the completion of a competency check under § 135.293(b) and, if conducting operations under IFR, a PIC instrument proficiency check under § 135.297. The FAA proposed several provisions in § 194.243(b) pertaining to part 135 airman certification and checking, which are adopted herein as proposed with one addition in new § 194.243(b), as subsequently discussed. First, § 194.243(b)(1) permits, at the completion of the certification curriculum and the part 135 operator training, a pilot to apply to add a powered-lift category rating concurrently with an instrument-powered-lift rating and an initial powered-lift type rating to their commercial pilot certificate if the person successfully completes the written or oral testing under § 135.293(a)(2) and (3), a competency check under § 135.293(b), and an instrument proficiency check under § 135.297 provided certain conditions are met.²⁹¹ Under § 194.243(b)(1)(iii)(A), the competency check must include the maneuvers and procedures required for

the issuance of a commercial pilot certificate with a powered-lift category rating and a powered-lift type rating.²⁹² Similarly, the instrument proficiency check must meet the requirements of § 135.297 as applicable to a PIC holding a commercial pilot certificate, which includes the maneuvers and procedures required for the issuance of an instrument-powered-lift rating.²⁹³ As described in §§ 135.293(e) and 135.297(c), competent performance of each maneuver and procedure on the competency check and instrument proficiency check requires that the pilot be the obvious master of the aircraft, with the successful outcome of the maneuver never in doubt. Finally, as set forth by § 194.243(c), the testing, competency check, and instrument proficiency check would be administered by an ASI or APD who is authorized to perform competency checks and instrument proficiency checks for the certificate holder, or a TCE with appropriate certification authority who is also authorized to perform competency checks and instrument proficiency checks for the certificate holder.

As proposed, certain part 135 regulations that apply to the competency check and instrument proficiency checks will not apply to the recognition of part 135 competency checks and instrument proficiency checks under the SFAR for initial certification purposes (*i.e.*, to meet § 194.243(b)(1)(iii)). Specifically, under § 194.243(b)(2), the allowance in § 135.301(b), which permits a pilot who fails a maneuver on a check to receive additional training and then repeat the maneuver, will not be applicable to the competency check and instrument proficiency check under the SFAR.²⁹⁴ Lastly, the allowance in § 135.293(d), which permits the substitution of a § 135.297 instrument proficiency check for a competency check, will not apply to the competency check for the powered-lift category rating. These exclusions are set forth in § 194.243(b)(3).

§ 61.43(a).

ALPA provided recommendations regarding competency checks, including

²⁹¹ As noted in the NPRM, the FAA recognizes that certain PICs in part 135 would not be required to complete an instrument proficiency check under § 135.297 (*e.g.*, PICs and SICs serving in VFR only operations and SICs serving in IFR operations). However, if the operator opts to pursue a training program under the SFAR to issue an instrument-powered-lift rating, the person would be required to successfully complete the § 135.297 instrument proficiency check to meet the requirements of proposed § 135.243(b) (see section V.J.5. of this preamble) and existing § 135.245(a).

²⁹² See §§ 61.127(b)(5), 61.157(e)(3), and appendix A to part 61.

²⁹³ Since the instrument proficiency check is being used to meet the practical test requirements for an instrument-powered-lift rating, the check must include all approaches required by the Instrument Rating—Powered-Lift ACS, even if the pilot will not be authorized to conduct one or more of those approaches during part 135 operations (*e.g.*, circling approaches).

²⁹⁴ In other words, the pilot would be expected to meet the same standards as those set forth in

the maneuvers and procedures required to issue a commercial pilot certificate with powered-lift category rating. Specifically, ALPA recommended the use of “continuing qualifications standards” as outlined in part 135, which ALPA stated are foundational in training and passing pilots in part 135. Additionally, ALPA urged the FAA to provide standards and guidance for test pilots choosing the maneuvers for the competency checks because the lack of a structured approach would increase a safety risk in validating a pilot’s competency. Finally, ALPA sought clarification on the outcome in a scenario where a pilot unsatisfactorily performs on a check and must recheck. ALPA specifically requested the FAA to comment on waiting periods and additional training requirements for such pilots.

First, in regard to ALPA’s suggestion that a continuing qualification standard be mandated amongst powered-lift operators, the FAA notes that all part 135 operators would be required to adhere to the regulations as applicable in part 135 and is unclear what additional qualifications standards ALPA contends would be beneficial for pilots. ALPA’s use of the term “continuing qualification” could be interpreted as the establishment of an Advanced Qualification Program (AQP), which is discussed in section V.G.1.v of this preamble. Any part 135 operator has the option of implementing an AQP, subject to approval by their POI; it is not, however, mandatory for powered-lift unless they operate as a commuter operation as required in § 194.247. While the FAA does not foresee a high volume of commuter powered-lift operations at the onset of this SFAR, these operations will eventually emerge; the FAA expects pilots to obtain the qualifications (ATP certificate) and manufacturers to develop aircraft that would meet the regulatory thresholds for commuter operations. However, any additional continuing qualification requirement would be difficult to standardize at this time for the same reasons that the FAA finds a standardized curriculum premature to implement. Additionally, the FAA notes that the SFAR would not foreclose an operator from initiating any additional benchmarks or qualification checks that operator deems necessary for safe operation. For example, Archer discussed imposition of a 500-hour minimum flight hour experience level for pilots in anticipation of part 135 PIC responsibilities. Similarly, Lilium indicated they would impose real-time monitoring through approved remote

technology to ensure operational safety is maintained during flight training.

In addition to the items outlined in the checking modules and because competency and proficiency checks can now result in a commercial pilot certificate with a powered-lift category and type rating and an instrument-powered-lift rating, the checking event will be required to accomplish all the required tasks in the appropriate ACS for a pilot applicant employed at a certificate holder. Specifically, under § 194.243(b)(1)(iii)(A), the competency check would be required to include the maneuvers and procedures required for the issuance of a commercial pilot certificate with a powered-lift category rating, an instrument-powered-lift rating, and a powered-lift type rating. Similarly, under § 194.243(b)(1)(iii)(B), the instrument proficiency check must meet the requirements of § 135.297 as applicable to a PIC holding a commercial pilot certificate, except that the instrument approaches to be included must include all instrument approaches required for the issuance of an instrument-powered-lift rating.

The FAA agrees with ALPA’s general contention that ASIs, APDs, and TCEs²⁹⁵ should be provided guidance and standards to conduct the checks pursuant to § 194.243(b). Currently, tables for pilot proficiency checks are outlined in FAA Order 8900.1.²⁹⁶ These tables will be updated with this final rule to account for checking modules in a powered-lift to include basic checking modules for a § 135.293 VFR competency check, § 135.293 IFR competency check, § 135.297 instrument proficiency check, and NVG tasks to be accomplished when appropriate.

Because § 61.43 requires the practical test for the issuance of a rating include all tasks specified in the areas of operation contained in the applicable ACS as incorporated by reference in § 61.14, it follows that the corresponding check must include these tasks as well. For purposes of training program submission, the FAA notes that a certificate holder’s module format may be either a simple outline, a table such as those contained in aforementioned FAA Order 8900.1 tables, or any other format that the POI finds clearly establishes the methods to be used and elements and events to be checked.

To the extent that ALPA sought clarification on unsatisfactory

performance during a check and the process for rechecking, as previously stated, the FAA excluded the use of certain part 135 regulations traditionally applicable to the competency check and instrument proficiency checks, as provided in § 194.243(b)(2). Section 135.301(b) allows that, if a pilot fails a maneuver on a check, the person giving the check may provide the pilot with additional training during the check and then the pilot must repeat the failed maneuver. The FAA chose to foreclose this option if an individual was obtaining an initial category certificate or rating to align with how a part 61 pilot certificate is granted today in alignment with § 61.43(c) which specifies that, if a pilot fails any area of operation, that pilot fails the practical test. For evaluations and checks not resulting in the issuance of a pilot applicant’s initial powered-lift ratings, the provisions in § 135.301 would be available as they normally are.

Further, because these checks essentially serve as a practical test for certification, successful completion of which is essential to ensuring comprehensive pilot proficiency, the FAA finds it necessary to treat checks in the same manner as a practical test in part 61 when a person cannot successfully demonstrate a task or maneuver. Where a check under part 135 would typically permit the pilot to receive additional training and repeat the maneuver, this final rule adopts new § 194.243(b)(4) that mirrors current § 61.49(a). In the case of a failed maneuver, the check will be recorded as an unsatisfactory evaluation and a notice of disapproval will be issued. To qualify for a recheck, the applicant will be required under § 194.243(b)(4) to (1) receive necessary training from an authorized instructor or instructor pilot and (2) obtain an endorsement from the authorized instructor or instructor pilot who conducted the training and determination that the applicant is proficient to pass the test attesting to the training.²⁹⁷ A new application for the ratings would have to be made prior to a subsequent attempt. The retraining could not occur as part of the same flight and evaluation sequence because the person would be required to reapply for the check after receiving training and an endorsement.

2. Part 141 Pilot Schools

As previously discussed, part 141 pilot schools serve as a structured

²⁹⁵ While ALPA cited test pilots as choosing the maneuvers, the FAA notes that ASIs, APDs, and TCEs conduct checks for part 135 checks.

²⁹⁶ See Volume 3, Chapter 19, Section 7, tables 3–70 and 3–71.

²⁹⁷ The applicant will also be required to comply with any requirements provided in the approved part 135 training manual for that operator.

program²⁹⁸ under which a person may obtain part 61 certificates and ratings; the FAA proposed to allow part 141 pilot schools to offer the training for the alternate experience requirements set forth by the SFAR. The FAA did not propose any relief from the personnel requirements of a part 141 pilot school (*i.e.*, subpart B of part 141). As such, an instructor at a part 141 pilot school would be required to hold a powered-lift category rating and an instrument-powered-lift rating on their commercial pilot certificate and a flight instructor certificate with a powered-lift rating or instrument-powered-lift rating.²⁹⁹ The instructor will also be required to hold a type rating on their pilot certificate that corresponds to the aircraft in which the training will be provided. As discussed in the NPRM, the FAA anticipates part 141 pilot schools will obtain the necessary training for powered-lift ratings from the manufacturers through the alternate pathways, discussed in section V.B. of this preamble, and the initial pool of instructors from the military pilots with certificates and ratings through the provisions of § 61.73.

Specific to part 141 pilot school requirements, CAE and NBAA stated that the requirement for Chief Instructors, Assistant Chief Instructors, and Designated Pilot Examiners to acquire the proposed 50 hours in type (or combined with a simulator of Level C or higher)³⁰⁰ will be difficult as there are currently no powered-lift to use for training and/or testing. Similarly, both commenters stated that flight training organizations and students will experience a burden in finding a powered-lift for training and testing toward a powered-lift rating for non-commercial use.

The FAA agrees with CAE and NBAA that the lack of civilian powered-lift for training and testing will create a unique burden for flight training organizations and students insofar as populations of pilots seeking training will not have

ready access to the aircraft like those populations currently enjoy with airplanes and helicopters. The intent of the SFAR and the respective alternate frameworks set forth by this final rule work in tandem to alleviate that burden as much as possible while upholding a level of safety for pilots seeking to engage in civilian commercial operations commensurate with the existing high level of safety for those operations.

The FAA notes that the SFAR does not solely address the facilitation of commercial operations. Rather, as stated in the NPRM, the intention expressed by industry to introduce these aircraft immediately into passenger-carrying commercial operations instigated the reconsideration of the existing airman regulations for powered-lift and address the absence of specific regulations for pilots in part 135, specifically. However, the SFAR does not create any additional barriers for “non-commercial” operations and, in fact, includes part 141 personnel along with part 135 and part 142 personnel in the opportunity to obtain training at the manufacturer for the purpose of forming the initial cadre of instructors. In addition, the FAA proposed, and adopts in this final rule as discussed in section V.F. of this preamble, alternative requirements for private pilot certification. In the context of a part 141 pilot school, once a population of qualified personnel exists, the part 141 pilot school would be free to apply to deliver any powered-lift training curriculum they are qualified to provide (*e.g.*, a private pilot certification course).

3. Part 142

A part 142 training center, likewise, provides an alternate means to accomplish part 61 training and certification, established primarily in response to advancement in flight simulation technology in the late 1990s.³⁰¹ Aligned with the intent for part 141 pilot schools, the FAA anticipates that a part 142 training center will establish the initial cadre of flight instructors under the SFAR’s alternate requirements by obtaining the necessary training at the manufacturer (see section V.F.2. of this preamble). After such, the part 142 training center could establish powered-lift training curricula utilizing the qualified TCEs to provide training to other instructor personnel at the training center.

Part 142 contains its own requirements for flight instructor

eligibility in § 142.47. Section 142.47(a)(3) requires an instructor who is instructing in an aircraft in flight to be qualified under the flight instructor requirements in subpart H of part 61. To the extent that a part 142 training center will obtain approval for a curriculum that includes a portion of flight training in a powered-lift in flight, the training center instructors will be required to hold the appropriate powered-lift ratings on their pilot and flight instructor certificates.³⁰² For instructors who conduct training in an FSTD, § 142.47(a)(5) requires that an instructor satisfy one of three options to provide instruction: (1) meet the commercial aeronautical experience requirements of § 61.129(a), (b), (c), or (e), as applicable, excluding the required hours of instruction in preparation for the commercial pilot practical test; (2) meet the ATP aeronautical experience requirements of §§ 61.159, 61.161, or 61.163,³⁰³ as applicable, if instructing in an FSTD that represents an “airplane requiring a type rating” or instructing in a curriculum leading to the issuance of an ATP certificate or added rating to an ATP certificate in any category of aircraft; or (3) be employed as an FSTD instructor for a training center providing instruction and testing to meet the requirements of part 61 on August 1, 1996.

Essentially, notwithstanding the third option, in the current regulatory environment, the part 142 instructor seeking to instruct in a powered-lift FSTD for a commercial pilot certificate would only be required to meet the aeronautical experience requirements for a commercial pilot certificate with a powered-lift category rating. Because § 142.47(a)(5)(ii) applies only to airplanes requiring a type rating, persons instructing in an FSTD in a powered-lift (which would all require a type rating under this final rule, as discussed in section V.A. of this preamble) would only be required to meet the aeronautical experience requirements of a commercial certificate with a powered-lift category rating (*i.e.*, § 61.129(e)), unlike how airplanes requiring a type rating are treated. In other words, § 142.47(a)(5)(ii) would be

²⁹⁸ For the purpose of this preamble, when referring to training program under part 141, the FAA considers this term synonymous with training course outline or training curriculum. The FAA is noting the slight differentiation in terms here for clarification.

²⁹⁹ § 141.33(a)(3). See also 141.35(a)(1), 141.36(a)(1), and 141.37(a)(2)(ii).

³⁰⁰ The FAA notes that there are no specific requirements of time in an aircraft to receive a type rating. See § 61.63(d). The FAA understands this comment to mean the 50 hours of PIC time in a powered-lift, as the commenters both specified this amount of time earlier in their comments when remarking on similar concerns in the context of part 142. The FAA finds this comment is addressed in section V.F.2. of this preamble, where the FAA describes the reduction of PIC time in a powered-lift to 35 hours.

³⁰¹ Aircraft Flight Simulator Use in Pilot Training, Testing, and Checking and at Training Centers, 61 FR 34508 (July 2, 1996).

³⁰² In addition to § 142.47(a)(3), § 142.49 sets forth training center instructor and evaluator privileges and limitations and restricts a training center from allowing an instructor to provide flight training in an aircraft unless that instructor is qualified and authorized in accordance with subpart H of part 61 (Flight Instructors Other than Flight Instructors with a Sport Pilot Rating).

³⁰³ These sections set forth the aeronautical experience requirements for a commercial certificate with an airplane single-engine rating, airplane multiengine rating, helicopter rating, and powered-lift rating.

inapplicable because the person instructing in a powered-lift FSTD would not be representing an airplane (the first criteria in the paragraph), nor would the person be instructing in a curriculum leading to the issuance of an ATP certificate or an added rating to an ATP certificate (the second criteria in the paragraph). In the NPRM, the FAA also noted this discrepancy concerning helicopters requiring a type rating.

As comprehensively discussed in the NPRM,³⁰⁴ the FAA found it necessary to ensure a person instructing in an FSTD for an aircraft requiring a type-rating possess a higher level of experience than that required for a commercial pilot certificate due to technological advancements in type-rated aircraft. Therefore, the FAA proposed to impose the same standard for powered-lift and rotorcraft instructors providing training in an FSTD as those required for airplanes by replacing the word “airplane” with “aircraft” in § 142.47(a)(5)(ii).

Most existing rotorcraft training center instructors already meet the aeronautical experience requirements of § 142.47(a)(5)(ii) for rotorcraft that require type ratings or do not offer standalone type-rated rotorcraft curriculum (e.g., the training center offers an ATP curriculum for the type-rated rotorcraft, thereby falling into the criteria in the second part of § 142.47(a)(5)(ii)). However, to facilitate integration of this regulatory change while not disrupting current practice for those instructors who may not currently satisfy this standard, the FAA proposed to except instructors that are currently instructing in an FSTD that represent a rotorcraft requiring a type rating from this proposed requirement in new § 147.47(a)(5)(ii)(A) and (B).

Additionally, the FAA recognized that implementation of this regulation may delay some operators initially by the lack of pilots possessing an ATP certificate with the appropriate powered-lift ratings. The FAA noted the availability of deviation authority in § 142.9 for powered-lift instructors (and rotorcraft instructors, given the regulatory change for this population of instructors). Section 142.9 functions to provide an avenue for relief from the ATP experience requirements of § 142.47(a)(5)(ii) if the FAA determines that it would not adversely affect the quality of instruction or evaluation.³⁰⁵

Many commenters, including NBAA, CAE,³⁰⁶ and Archer, opposed the FAA’s proposal to replace the term “airplane” with “aircraft,” thereby expanding the requirement for an FSTD instructor to meet the aeronautical experience requirements of §§ 61.159, 61.161, or 61.163, as applicable. Specifically, Archer stated the proposal is devoid of a clear, safety-based justification and lacks necessary supporting data to warrant its adoption. Archer urged the FAA to consider that the underlying reason for the type rating was the inability to establish coherent classes and recognize that if the FAA did establish classes of powered-lift then the type-rating requirement would disappear, as would the corresponding requirement for FSTD instructors in § 142.47(a)(5)(ii). Archer stated that the aeronautical experience requirements for FSTD instructors of large, complex, and turbojet powered type-rated airplanes should not be equally applicable to powered-lift because powered-lift are simple to fly and will be flown by predominantly commercial pilots without an ATP certificate. Archer also emphasized the comparison of the aeronautical experience expected from parts 141 and 135 instructors compared to part 142 instructors. Archer stated that the same FSTD that would require an instructor with an ATP certificate or equivalent aeronautical experience at a part 142 training center could be used for training under part 135 or 141 with only an authorized instructor, resulting in a burden to part 142 training centers. In sum, Archer urged the FAA to maintain the existing language in § 142.47(a)(5)(ii) preserving the distinction between “airplane” and “aircraft.” If the FAA continued to believe the proposed change is necessary, Archer provided suggested revised language to exempt part 142 powered-lift and rotorcraft FSTD instructors who also instruct in the aircraft being simulated from the

policies that the training center proffers in support of its request for relief.

³⁰⁶ CAE and NBAA echoed their previous sentiment in the context of training in accordance with part 141 under the SFAR. They again stated that requiring the initial cadre of TCEs to be trained by the manufacturer would create a backlog for training by preventing part 142 training centers from qualifying initial instructors and TCEs. They estimated part 142 training centers would need 7 to 9 instructors per simulator, which will be difficult to achieve given (1) the perceived atypical requirement for a training center instructor to be a CFI, and (2) the requirement for instructors to have a powered-lift category rating. The commenters recommended removing the powered-lift category rating and the requirement for training center instructors to hold a CFI with no additional information on how these instructors would be alternatively and sufficiently qualified.

requirement to hold an ATP certificate or equivalent experience. Archer also disagreed with the FAA’s reliance on § 142.9 as an avenue for relief from the ATP experience requirements of § 142.47(a)(5)(ii), stating that the deviation approach may be cumbersome and elongated. GAMA requested the FAA apply ICAO Annex 1 language (*i.e.*, add a powered-lift type rating to an existing commercial certificate with airplane or helicopter ratings) and clarify that an instructor pilot may meet the aeronautical experience requirements of § 61.159 (airplane) or § 61.161 (rotorcraft), as appropriate to the specific aircraft type. GAMA also suggested the training instructor requirements to be specified in the FSB report for that aircraft.

First, Archer is correct that the FAA found it premature to identify concrete sets of similar characteristics to establish powered-lift classes at this time due to the wide variance in complexity, design, flight, and handling characteristics between powered-lift. This forms the basis for the requirement of a type rating. The operational characteristics and introduction of novel aircraft and operations necessitate that a person providing instruction maintain a higher threshold of proficiency in areas such as interacting with air traffic control, operating in an airport environment, navigating the operational challenges of flying the aircraft in weather, using crew resource management, and resolving maintenance discrepancies, all while complying with FAA regulations, procedures, manuals, and authorizations. Archer may be correct that some powered-lift may be simple to fly; however, the FAA does not have an adequate sample size with which to determine whether powered-lift are sufficiently simple enough such that training qualifications in an FSTD should be decreased. While one powered-lift may be overwhelmingly autonomous, another may encompass largely manual operations.

However, the FAA recognizes that, to Archer’s point, the underlying reasons for establishing a type rating for all powered-lift do not substantially align with the reasons an airplane or helicopter may require a type rating under § 61.31. Specifically, under § 61.31(a), a person who acts as a PIC of a large aircraft,³⁰⁷ turbojet-powered airplane, or other aircraft as specified by the Administrator through aircraft type certificate procedures must hold a type

³⁰⁷ Pursuant to 14 CFR 1.1, large aircraft means aircraft of more than 12,500 pounds, maximum certificated takeoff weight.

³⁰⁴ 88 FR 38946 at 38996 (June 14, 2023).

³⁰⁵ See FAA Order 8900.1, Vol. 3, Ch. 54, Sec. 4. The FAA may consider the level of safety purportedly achieved by the request, the proposed revisions to the training center’s operating procedures and Quality Management Systems, and any accompanying justification, procedures, or

rating for that aircraft. The FAA determined the speed, complexity, and operating characteristics of large aircraft require the PIC to demonstrate proficiency in operating the specific aircraft; similarly, the FAA determined that the performance, environment, and operating characteristics of turbojet-powered airplanes require the PIC to demonstrate proficiency in operating the specific airplane.³⁰⁸ As adopted by this final rule, a PIC will be required to hold a type rating for every powered-lift to account for the lack of classes established at this time and diversity in powered-lift configurations, controls, and operating characteristics. It follows that not every powered-lift will be equally complex as a large aircraft or turbojet airplane just by virtue of requiring the pilot to hold a type rating under § 61.31(a).

Therefore, this final rule revises the proposed replacement in § 142.47(a)(5)(ii) of “airplane” requiring a type rating with generalized “aircraft” requiring a type rating (*i.e.*, enveloping large airplanes, large helicopters, turbojet powered airplanes, and all powered-lift, despite the size or engine type). Rather, this final rule will extend the requirements of current § 142.47(a)(5)(ii) to rotorcraft requiring a type rating (as proposed), “large” powered-lift (*i.e.*, powered-lift of more than 12,500 pounds maximum certificated takeoff weight), and turbojet powered powered-lift.³⁰⁹ This amendment holds powered-lift akin to the airplane type rating requirement, recognizing that large powered-lift and powered-lift that operate with turbojet engines are complex, high-speed, and high-altitude, and, therefore, require an increased caliber of experience when instructing in the simulator. Since every powered-lift requires a type rating, to avoid being overly expansive, the amendment does not tie the ATP experience requirement for powered-lift to those having a type rating, but instead to what normally triggers a type rating requirement in airplanes and helicopters. Part 142 instructors seeking to instruct in an FSTD representing a powered-lift of 12,500 pounds maximum certificated takeoff weight or less and powered-lift that do not use turbojet engines would not be required to meet the ATP requirements set forth

by § 142.47(a)(5)(ii); these instructors could simply meet the applicable aeronautical experience requirements of § 61.129(e) as set forth in § 142.47(a)(5)(i).

To improve readability of the regulation, the FAA adopts the revisions to § 142.47(a)(5)(ii) in a revised format. The introductory text in § 142.47(a)(5) will require a person to meet at least one of the requirements in paragraphs (i) through (iii). These are the three options currently in paragraph (a)(5)(i) through (iii) but, as subsequently discussed, this final rule adds an exception in new paragraph (a)(5)(iv). Paragraphs (a)(5)(i) and (iii) will retain the current requirement set forth in the regulations, respectively. Paragraph (a)(5)(ii) will require a person to meet the aeronautical experience requirements of §§ 61.159, 61.161, or 61.163, as applicable, in the scenarios set forth by new paragraph (a)(5)(ii)(A) (in an FSTD representing an airplane or rotorcraft requiring a type rating, a powered-lift over 12,500 pounds, or a turbojet powered powered-lift, with one exception) and new paragraph (a)(5)(ii)(B) (in a curriculum leading to the issuance of an ATP certificate or an added rating to an ATP certificate). Section 142.47(a)(5)(iv) will set forth the aforementioned exception to § 142.47(a)(5)(ii)(A). Specifically, new § 142.47(a)(5)(iv) excepts a person employed as an instructor and instructing in an FSTD representing a rotorcraft requiring a type rating from meeting the aeronautical experience requirements of § 142.47(a)(5)(ii) if the person is not instructing in a curriculum leading to the issuance of an ATP certificate or an added rating to an ATP certificate and the person was employed and met the remaining applicable requirements of § 142.47 on March 21, 2025. The FAA notes that exception was proposed in the NPRM but is simply redesignated in the adoption of this final rule.

Finally, the FAA recognizes that a person who obtains a commercial pilot certificate with a powered-lift category rating in accordance with the SFAR will not technically have met the aeronautical experience requirements set forth by § 61.129(e). For example, a pilot will have only completed 35 hours of PIC time in a powered-lift (§ 194.216(a)) rather than 50 hours (§ 61.129(e)(2)(i)).³¹⁰ Under current § 142.47(a)(5)(i), that fully certificated pilot would be required to seek 15 more

hours of PIC time in a powered-lift to meet the aeronautical experience requirements of § 61.129(e)(2)(i). The FAA does not find that a person should be required to attain additional experience after the person has met the regulatory aeronautical experience requirements as set forth in part 61 or through an abbreviated experience regulation (*i.e.*, part 141) and proven proficiency through the practical test. Therefore, this final rule adds the qualification option of simply holding a commercial pilot certificate with the appropriate ratings. The FAA emphasizes that meeting the aeronautical experience requirements as currently required remains an option without holding the certificate itself, as well. For these same reasons, this final rule adds the option to hold an unrestricted ATP certificate with the appropriate ratings to § 142.47(a)(5)(ii).

Finally, NBAA and CAE stated that, normally, part 142 training center instructors do not need to hold a flight instructor certificate or a flight instructor certificate with an instrument rating, but the SFAR requires a powered-lift type rating, instrument-powered-lift rating, a flight instructor certificate, and a flight instructor certificate with an instrument rating. The two commenters noted that if the aircraft is not type-certificated to enable IFR operations, the flight instructor certificate with instrument rating and instrument rating in the aircraft type will not be required. In sum, NBAA and CAE recommended that the FAA should continue the long-time policy that training center instructors do not need to hold the flight instructor certificate or flight instructor certificate with instrument rating provided they hold an ATP certificate.

The FAA agrees with NBAA and CAE that part 142 does not always require a flight instructor certificate or a flight instructor certificate with an instrument rating to instruct,³¹¹ and this final rule does not change the status quo expected of part 142 instructors outside of the previously discussed revisions in § 142.47(a)(5), which do not involve flight instructor certificate requirements. Specifically, this final rule continues to uphold the requirements of § 142.47, as discussed herein. In other words, if instructing in an FSTD for any curriculum, a part 142 instructor is not required to hold a flight instructor certificate. However, under § 142.47(a)(3), a training center instructor providing training in an

³⁰⁸ Pilot Rating Requirements, NPRM, 29 FR 13038 (Sep. 17, 1964). Pilot Rating Requirements, final rule, 30 FR 11903 (Sep. 17, 1965).

³⁰⁹ This corrects a discrepancy made in the 1996 final rule (61 FR 34508, July 2, 1996) whereby the word “airplane” was unintentionally substituted for “aircraft”, excluding rotorcraft complex enough to require a type rating from the ATP experience requirements.

³¹⁰ A similar gap exists for those pilots certificated in accordance with part 141 where a person may be eligible for a certificate after completing an abbreviated number of aeronautical experience hours.

³¹¹ Per § 142.47 a flight instructor certificate is only required if instructing in an aircraft in flight under a part 142 training center.

aircraft in flight must be qualified in accordance with subpart H of part 61, which includes the requirement to hold a flight instructor certificate. As with training in flight in airplanes and rotorcraft conducting at a part 142, flight training in a powered-lift in flight will require the part 142 instructor to hold a flight instructor certificate with the appropriate ratings.

H. Practical Tests

1. Practical Test Equipment and Waiver Authority

Section 61.43 provides the general procedures for a practical test. The FAA recently completed a rulemaking that amended § 61.43 to incorporate the PTSs and ACSs by reference (IBR).³¹² The rule revised § 61.43(a)(1) to delineate successful completion of the practical test as performing the tasks specified in the areas of operation contained in the applicable ACS or PTS. As it pertains to powered-lift, the FAA incorporated six powered-lift ACSs into part 61: (1) ATP and Type Rating for Powered-Lift Category, (2) Commercial Pilot for Powered-Lift Category, (3) Private Pilot for Powered-Lift Category, (4) Instrument Rating—Powered-Lift, (5) Flight Instructor for Powered-Lift Category, and (6) Flight Instructor Instrument for Powered-Lift Category. The six powered-lift ACSs specify the tasks within the given areas of operation that must be accomplished for purposes of receiving a powered-lift category rating, type rating, and/or instrument rating.

Correspondingly, § 61.45 sets forth the required aircraft and equipment for a practical test. Specifically, § 61.45(b) stipulates the equipment, other than controls, required of an aircraft used on the practical test and allows the use of an aircraft with operating characteristics that preclude the applicant from performing all the tasks for the practical test. However, when an applicant for a certificate or rating is unable to perform a required task due to aircraft capabilities, an appropriate limitation is placed on the applicant's certificate or rating. This limitation ensures the pilot cannot act as PIC of an aircraft that has capabilities that are inconsistent with the limitation on the pilot's certificate until the pilot satisfactorily demonstrates the task they have not performed.

Because the FAA will require that all pilots seeking to act as PIC of a powered-lift hold a type rating on their pilot certificate for the type of powered-lift they intend to operate, no need

exists for a limitation should the powered-lift be precluded from performing a task in an ACS. Therefore, the FAA proposed § 194.207(a) to permit an applicant to use a powered-lift that is precluded from performing all of the tasks required for the practical test without receiving a limitation on the applicant's certificate or rating. This would not adversely affect safety because the type-rated pilot could not act as PIC of a different powered-lift type that may perform untested task without completing another practical test in that type of powered-lift first, thereby demonstrating proficiency on the task that had been waived on the prior practical test.

As stated in the NPRM, because there are currently no type-certificated powered-lift, the FAA did not have the requisite information to determine which tasks might be deemed prohibited, unsafe, or incapable of being performed during the aircraft certification and evaluation processes to delineate such tasks in the proposed SFAR, nor was that information available for the IBR rule in the adoption of the six powered-lift ACSs. One commenter addressed the FAA's inability at this time to identify which tasks a powered-lift would be precluded from performing, suggesting that the FAA could address this information gap by speaking with the cadre of V-22, AW-609, V-280, F-35 and AV-8 test pilots and engineers via working groups.

As discussed in section V.B. of this preamble, the U.S. Armed Forces maintains and uses some of the powered-lift referenced by the commenter in military operations. However, no surplus military powered-lift have come into civil operations through the special airworthiness certification process nor does the FAA anticipate surplus military powered-lift to enter civil operations in the near term. Additionally, military aircraft may maintain certain characteristics that are unique to U.S. Armed Forces missions but are omitted in civilian powered-lift. For example, military powered-lift are used for applications ranging from troop and supply transport to attack operations. The technology, operating characteristics, and flight control implementation in military powered-lift may not correspond to the civilian operations anticipated for FAA type certificated powered-lift that are currently in development. Therefore, the information that may be gained by an inquiry into a specific military powered-lift and their operations will likely not result in meaningful or utile insights for determining appropriate

tasks to use or exclude in ACS development.

The FAA notes that this information continues to be unavailable to warrant making any permanent change to the final rule or the powered-lift ACSs at this time.³¹³ The FAA maintains that, because the tasks that a powered-lift may be incapable of performing and thus require waiver, as subsequently discussed, involve a fact-specific inquiry particular to a powered-lift type, the tailored type certification and FSB processes³¹⁴ are best suited to provide such information. Powered-lift types will be evaluated under the existing FSB process, which will determine the requirements for a pilot type rating, develop training objectives for the type rating, and conduct initial training for the manufacturer's pilots and FAA inspectors. The FSB would identify the operational limitations for the powered-lift type and ascertain what tasks in the ACS are inapplicable.³¹⁵ The FAA proposed to address training and testing on tasks a powered-lift is precluded from performing in §§ 194.207(b) and (c) and 194.239(a). The FAA did not receive comments on these provisions and adopts them as proposed, as subsequently summarized.

Therefore, because § 61.43(a) requires a pilot to demonstrate all tasks within the applicable ACS, the waiver authority in § 194.207(b) will account for the tasks inapplicable to a specific type of powered-lift. Waived tasks will be set forth in the limitations section of a designee's Certificate and Letter of Authority (CLOA) specific to each type of powered-lift in which the designee is authorized to conduct a practical test.

To account for the requirement that an applicant for a certificate or rating must receive and log flight training on

³¹³ Should information become available during the pendency of the SFAR revealing a certain task or element in the ACS as inapplicable to all powered-lift, the FAA could revise the ACSs through the rulemaking process at that time.

³¹⁴ The FSB is responsible for specification of minimum training, checking, currency, and type rating requirements, if necessary for U.S.-certificated civil aircraft. The Board members are drawn from the FAA's operations personnel (AED, headquarters, and Flight Standards field offices). See AC 120-53 as revised, Guidance for Conducting and Use of Flight Standardization Board Evaluations.

³¹⁵ The FAA understands there may be a scenario in which the type certification and FSB processes reveal additional tasks are necessary for certain powered-lift type ratings based on the powered-lift's unique characteristics. Should the FSB and type certification process reveal any additional tasks that are not accounted for in the ACS but are essential to the safe operation of the specific type of powered-lift, the FAA may set forth these tasks in a type-specific appendix to the powered-lift ACSs, which would be incorporated by reference under § 61.14 and appendix A to part 61 in accordance with the Administrative Procedure Act.

³¹² **IBR RULE CITATION**

the applicable areas of operation that apply to the aircraft category and class rating sought,³¹⁶ § 194.207(c) will relieve an applicant for a private pilot certificate or commercial pilot certificate with a powered-lift category rating concurrently with a powered-lift type rating³¹⁷ from the requirement to receive flight training on a task specified in an area of operation if the powered-lift is not capable of performing the task, provided the FAA has issued waiver authority for the task in accordance with the SFAR.

Similarly, part 141 pilot schools align their curriculum content for the issuance of a commercial pilot certificate with a powered-lift category rating with the areas of operation in part 61 via appendices to part 141. Therefore, under § 194.239(a), a part 141 pilot school seeking approval of a course in a powered-lift resulting in a private or commercial pilot certificate will be permitted to waive training on a task specified in an area of operation if the powered-lift to be used in the course is not capable of performing the task and the FAA has issued waiver authority for that task in accordance with § 194.207(b).

The FAA also recognized that waived tasks may create a unique situation for those pilots seeking to serve as SIC in powered-lift operations. Section V.C. of this preamble discusses SIC considerations.

2. Permit Applicants To Take a Powered-Lift Type Rating Practical Test Without Concurrently Obtaining an Instrument-Powered-Lift Rating (§ 61.63(d))

Section 61.63(d) contains the eligibility requirements for a person seeking an aircraft type rating (on a certificate other than an ATP certificate), which would be directly applicable to powered-lift rating applicants. Specifically, § 61.63(d)(1) requires an applicant for an aircraft type rating or an aircraft type rating to be completed concurrently with an aircraft category rating to hold or concurrently obtain an appropriate instrument rating, except as provided in § 61.63(e). Additionally, § 61.63(d)(4) requires the applicant to perform the type rating practical test in actual or simulated instrument conditions, except as provided in § 61.63(e). Under § 61.63(e),

an applicant who provides an aircraft that is not capable of the instrument maneuvers and procedures required on the practical test may apply for the type rating or a type rating in addition to the category rating, but the type rating will be limited to “VFR only.” The NPRM proposed two circumstances under which the applicant should not be required to hold or concurrently obtain an appropriate instrument rating, subsequently discussed.

i. Applicants for an Initial Powered-Lift Type Rating To Be Obtained Concurrently With a Powered-Lift Category Rating

The FAA proposed, and adopts in this final rule, that all powered-lift would require a type rating to operate, as discussed in section V.A. of this preamble. Under the FAA’s current certification framework, an applicant for a powered-lift type rating would normally be required to take three practical tests concurrently: the practical tests for (1) a powered-lift type rating, (2) powered-lift category rating, and (3) an instrument-powered-lift rating because there would be no powered-lift for which a type rating is not required (*i.e.*, allowing the pilot to obtain a powered-lift category rating or instrument rating prior to the type rating).³¹⁸ Therefore, to obtain all three ratings, the applicant would be required to satisfactorily complete three practical tests concurrently. The FAA did not propose any change that would allow an applicant to apply for their initial powered-lift type rating without concurrently obtaining a powered-lift category rating. Rather, the FAA proposed in § 194.211(b)(1) to enable an applicant to take the instrument-powered-lift rating independent from the practical tests for the powered-lift category and type ratings.

The FAA did not propose to amend § 61.63(e), which sets forth the requirements for aircraft not capable of instrument maneuvers and procedures. Therefore, if a powered-lift is not capable of performing instrument maneuvers and procedures, an applicant for a type rating in that powered-lift

may obtain a “VFR only” limitation in accordance with § 61.63(e).

To provide flexibility consistent with that provided to applicants for an airplane or helicopter type rating,³¹⁹ the FAA proposed § 194.211(b) to allow an applicant for a powered-lift type rating to take the type rating practical test independent of the practical test for the instrument-powered-lift rating. Proposed § 194.211(b)(2) would also relieve an applicant from being tested on the areas of operation listed in § 61.157(e) that consist of performing instrument maneuvers and procedures in actual or simulated instrument conditions on the type rating practical test. As stated in the ATP and Type Rating for the Powered-Lift Category ACS, the applicant seeking a “VFR only” type rating would conduct tasks that are normally performed by reference to the instruments using visual references. Upon successful completion of the practical test for the type rating, the applicant would receive the powered-lift type rating with a “VFR only” limitation on their pilot certificate.

The purpose of issuing the “VFR only” type rating to an applicant who is applying for a powered-lift type rating concurrently with a powered-lift category rating is to reduce the burden on the applicant by enabling them to take the instrument rating practical test at a later date. Because the applicant will have obtained the 3 hours of flight training in preparation for the instrument rating practical test within the 2 calendar months preceding the month of the practical test for the type rating and category rating, the FAA found it reasonable to propose § 194.211(b)(3) to require the applicant to obtain the instrument-powered-lift rating and remove the “VFR only” limitation for the type rating within 2 calendar months from the month in which the applicant passes the type rating practical test.³²⁰ Under

³¹⁹ Under the current certification regime, a person seeking an airplane or helicopter type rating would normally already hold the required instrument rating. However, these persons could also seek to add the associated instrument rating at the same time as a type rating if they didn’t currently hold the associated instrument rating. In the case of an initial powered-lift certification the applicant would need to take the private or commercial test, the instrument rating test and the type rating test all at once. The SFAR removes the requirement to take all three tests at once, allowing the instrument rating to be taken at a later date.

³²⁰ The FAA notes that under current § 61.133(b)(1), a person who applies for a commercial pilot certificate with a powered-lift category rating would receive a limitation if that person does not hold an instrument-powered-lift rating. The limitation would prohibit the

³¹⁶ §§ 61.107(a), 61.127(a).

³¹⁷ The FAA does not find relief is needed in the case of a person who applies for an aircraft type rating added to an ATP certificate (or a type rating concurrently completed with an ATP certificate) because § 61.157(b) requires flight training from an authorized instructor on the areas of operation that apply to the aircraft type rating.

³¹⁸ Under § 61.63(e)(1), an applicant for a type rating or a type rating in addition to an aircraft category and/or class rating who provides an aircraft that is not capable of the instrument maneuvers and procedures required on the practical test may apply for the type rating, but the type rating will be limited to “VFR only.” Section 61.63(e)(1)(ii) sets forth how to remove the limitation. In this case, the applicant would only need to successfully accomplish two practical tests (*e.g.*, the practical test for the powered-lift category rating and the practical test for a powered-lift type rating) because of the exception set forth in current § 61.63(d)(1).

§ 194.211(b)(5), if a person does not remove the limitation within 2 calendar months from the month in which the person completed the type rating practical test, then the powered-lift type rating for which the “VFR only” limitation applies will become invalid for use until the person removes the limitation in accordance with § 194.211(b)(4) (*i.e.*, the person may no longer exercise the privileges associated with the type rating and the “VFR only” limitation).

To remove the “VFR only” limitation, proposed § 194.211(b)(4) would require the pilot to: (1) pass an instrument rating practical test in a powered-lift in actual or simulated conditions, and (2) pass a practical test in the powered-lift for which the “VFR only” limitation applies on the appropriate areas of operation listed in § 61.157(e) that consist of performing instrument maneuvers and procedures in actual or simulated instrument conditions. The FAA recognized that there would exist several overlapping tasks required for an instrument rating and the instrument tasks required for a type rating in order to remove the “VFR only” limitation. Therefore, proposed § 194.211(d) permits the pilot to perform the task a single time provided it is performed to the highest standard required for the task.³²¹

The proposed language in § 194.211(b)(4) concerning the completion of the type rating practical test differs slightly from the language in § 61.63(e)(1)(ii)(B), in that it permits a person to remove a “VFR only” limitation for that aircraft type after the applicant passes a practical test in that type of aircraft on the appropriate instrument maneuvers and procedures in § 61.157. The FAA’s proposed language in § 194.211(b)(4) clarifies that the cross-reference to § 61.157 refers to the areas of operation of which the practical test for a type rating is

comprised (*i.e.*, specifically the areas of operation listed in § 61.157(e)(3)).³²² Furthermore, the FAA notes that, pursuant to § 61.63(d)(4), the type rating practical test must be performed in actual or simulated instrument conditions. For consistency with current § 61.63(d)(4), proposed § 194.211(b)(4)(ii) would make clear that the practical test required to remove the “VFR only” limitation for a powered-lift type rating, which is a component of the powered-lift type rating practical test, must be completed in actual or simulated instrument conditions.³²³

To note, the FAA did not propose to amend § 61.63(d)(1). Rather, § 194.211 simply adds an option in the SFAR for applicants to take the instrument rating practical test separate from the practical tests for a powered-lift type rating and a powered-lift category rating. Thus, applicants for a powered-lift type rating would still have the option to take all three practical tests concurrently pursuant to § 61.63(d)(1).

The FAA received several comments on this proposed framework.

GAMA,³²⁴ CAE, Eve, and a Joint letter from AOPA, GAMA, HAI, NATA, NBAA, and VFS largely opposed the FAA’s proposal, noting that the SFAR effectively creates a powered-lift instrument rating requirement by requiring the “VFR Only” limitation to be removed within 2 calendar months. Although CAE, Eve, and the joint letter commenters generally supported the option for a private pilot to retain the

VFR only limitation, they specifically opposed the requirement for a pilot to remove this rating in order to continue to exercise commercial pilot privileges, citing that proposal was inconsistent for pilots exercising the privileges of a private or commercial pilot certificate if the pilot were not operating under IFR rules. To support their position, these commenters noted that certain helicopter pilots conducting VFR only operations under part 135 are not required to hold an instrument rating in accordance with § 135.243(b)(4). CAE and the joint commenters drew parallels that because powered-lift have vertical takeoff and landing capabilities, they should also not be required to have an instrument rating. These commenters argued that a type rating practical test would also mitigate any concerns because the ATP ACS would ensure that the pilot would have enough instrument training and proficiency specific to the powered-lift type in which the rating is sought.

CAE specifically argued that a separate instrument-powered-lift rating is unnecessary since many instrument skills and knowledge items are agnostic to the aircraft category in which they take place. CAE also argued that the safety objective for VFR only items is to exit inadvertent IMC conditions in which an airplane or helicopter instrument rating would be sufficient to prepare a pilot for in a powered-lift. They also argued that under current regulations, an airplane instrument rating serves as an instrument rating for glider pilots in accordance with § 61.3(e)(3). L3Harris echoed this sentiment and recommended the FAA allow for an instrument rating held in any category to be sufficient so long as a pilot holds an airplane category rating with instrument-airplane or instrument-helicopter rating. FSI recommended the FAA delete the VFR only requirement for a commercial pilot seeking a powered-lift rating because it is too restrictive and would not allow the pilot to build time and experience in the aircraft. They further suggested that the pilot would continue to build valid experience while operating in VFR conditions.

First, the FAA notes that currently a private pilot that receives a type rating on an airplane that requires a type rating (large or turbojet powered), for example, must either hold an instrument rating or concurrently receive an instrument rating at the time of the practical test in accordance with § 61.63(d). Additionally, if the aircraft is not capable of instrument maneuvers and procedures the applicant for a type rating may be issued a VFR only

commercial pilot from carrying passengers for hire in powered-lift on cross-country flights in excess of 50 nautical miles or at night.

³²¹ For example, a person would be required to perform precision approach procedures on both the instrument rating practical test and the type rating practical test. The draft Instrument Rating—Powered-Lift ACS requires the applicant to perform the precision approach procedure and to maintain a stabilized final approach from the final approach fix (FAF) to DA/DH allowing no more than ¾-scale deflection of either the vertical or lateral guidance indications and maintain the desired airspeed ± 10 knots. The draft ATP or Type Rating Powered-Lift Category ACS also requires the applicant to perform the precision approach procedure, but to a higher standard (*i.e.*, the applicant must maintain a stabilized final approach from the Final Approach Fix (FAF) to DA/DH allowing no more than ¼-scale deflection of either the vertical or lateral guidance indications and maintain the desired airspeed ± 5 knots).

³²² The areas of operation for a person seeking a powered-lift type rating are contained in § 61.157(e). A person who holds a type rating with a “VFR only” limitation is required to pass the portion of the type rating practical test that includes the instrument maneuvers and procedures (*e.g.*, the portion of the practical test that was not previously completed). Therefore, only certain areas of operation listed in § 61.157(e) are appropriate. The ATP and Type Rating for Powered-Lift Category ACS specifies which areas of operation and which tasks must be completed for the removal of a “VFR only” limitation.

³²³ See also § 61.157(b)(3).

³²⁴ GAMA formally resubmitted a letter sent to the FAA on July 21, 2022, where GAMA provided recommendations for the FAA to consider. In reference to existing § 61.3(e)(1) through (4), GAMA suggested that an appropriate instrument rating should include either an airplane or helicopter instrument rating plus type specific instrument training. Due to the wide variety of aircraft within the powered-lift category, GAMA recommended that type ratings should have a VFR only operating limitation unless the approved course of training is certified by the authority to include IFR operations and VFR On-top. A VFR only operating limitation should be attached to the applicable powered-lift type rating. Recent instrument flight experience must be maintained in the type. GAMA also recommended the exact same reasoning for allowing for a VFR type and noted §§ 61.57 and 61.58. See *FAA-2023-1275-0086 Attachment GAMA23-45A1-Recommendations-Powered-Lift-SFAR-220721*.

limitation in accordance with § 61.63(e). The FAA also contends that the proposed regulation aligns with the status quo for private pilots expected to receive a type rating and notes that § 194.209(c) allows for a private pilot to indefinitely hold a VFR only rating on his or her pilot certificate.

The FAA disagrees that allowing for a pilot seeking to operate a powered-lift during commercial revenue operations to indefinitely ³²⁵ hold a VFR only limitation would be in the interest of safety. Furthermore, as discussed in section V.J.5.ii. of this preamble, the FAA has determined that an instrument rating is necessary in VFR powered-lift operations to ensure that the pilot has the necessary knowledge and skills to safely navigate and exit an emergency involving an inadvertent instrument meteorological condition (IIMC). In general, many accidents result when pilots who lack the necessary skills or equipment to fly in marginal VMC or IMC attempt flight without outside references.

When considering the capabilities of a powered-lift, the FAA notes that, similar to a helicopter, a powered-lift has the ability to conduct off airport operations. Therefore, a pilot operating a powered-lift would encounter the similar situations leading to IIMC when operating a powered-lift in off-airport operations. As it has previously found with helicopter ambulance operations,³²⁶ the FAA has determined that a pilot operating a powered-lift who receives an instrument rating is better equipped to maintain situational awareness and maneuver a powered-lift into a safe environment when encountering IIMC. Moreover, as further discussed in section V.L. of this preamble, the FAA noted the cruise profile and its similarities in speed and operation to an airplane. Further, the FAA recognized that although helicopter operations are permitted with pilots who do not hold an instrument rating, helicopters that experience IIMC account for 15% of fatal accidents behind inflight loss of control and low

altitude operations object strikes.³²⁷ High profile accidents involving Hawaii Air Tour operations ³²⁸ have most recently resulted in many recommendations made by the NTSB to the FAA and the USHST, and the FAA is considering future rulemaking in this area.³²⁹ Notably, because the requirement to hold an instrument rating or concurrently obtain one applies to aircraft requiring type ratings, it does not apply to helicopters that do not require a type rating. However, all powered-lift will require a type rating and, as such, the pilot will be required to hold an instrument-powered-lift rating unless, as previously stated, the aircraft is not capable of instrument maneuvers and procedures.

The FAA disagrees with commenters that suggested that holding any instrument rating should be sufficient and that an instrument rating specific to powered-lift is unnecessary. For reasons similar to those discussed in section V.F.2. of this preamble regarding the necessity of a powered-lift category rating, the FAA finds that an instrument rating specific to powered-lift category is necessary to ensure the applicant is sufficiently qualified to perform instrument flight procedures in a powered-lift.

³²⁷ According to the U.S. Helicopter Safety Team (USHST) data, the count of U.S. fatal helicopter accidents by calendar year where due to IIMC was assigned as the single "priority" occurrence category in the event. For context, in the 10 years from 2009–2018, IIMC was the 3rd highest occurrence category, accounting for about 15% of the U.S. fatal helicopter accidents. Among all occurrence categories, it only trailed (1) Loss of Control—Inflight (22%) and (2) Low Altitude Operations Object Strikes (19%).

³²⁸ Kailua Neighborhood Board commented to the rule regarding concerns with tour helicopters and other small aircraft increasing operations over densely populated areas causing concern for public safety. The neighborhood board urged the FAA to consider NTSB recommendations for Air Tour Companies operating under 14 CFR part 135. While the FAA finds global changes to air tours out of scope of this rulemaking, the FAA does note that, as described in this section, pilots operating air tours in powered-lift will be required to hold an instrument rating as part of this SFAR.

³²⁹ The USHST is a volunteer group of US government and industry stakeholders formed in 2013 to improve the safety of civil helicopter operations. Its efforts include analyzing NTSB helicopter accident data, assigning a single occurrence category to best characterize each event, and using the results of its analysis to prioritize intervention strategies to reduce fatal accidents (USHST 2017). The USHST's most recent analysis included data from 198 fatal helicopter accidents between 2009 and 2018. Although this review ranked inadvertent flight into IMC (also referred to internationally as unintended flight into IMC) as the third-most common category, the USHST noted that inadvertent flight into IMC may be the precursor to accidents involving in-flight loss of control (which ranked first), low-altitude operations (which ranked second), or CFIT (which ranked fifth) (USHST 2021b). During a previous review (which included data between 2009 and 2013), inadvertent flight into IMC ranked second (USHST 2017).

³²⁵ For powered-lift that are not large aircraft or turbojet-powered, the FAA intended to seek comment on whether it should consider allowing a pilot after the 2 calendar months had elapsed to continue to exercise commercial pilot privileges. Although the FAA errantly referenced private privileges in this solicitation for comment, the commenters widely commented on what the FAA intended to seek comment on and thoroughly commented on whether the FAA should allow for the limitation to be removed, with emphasis on allowing for the holder of a commercial pilot certificate to indefinitely hold a VFR only rating during commercial operations.

³²⁶ 79 FR 9932, 9957 (Feb. 21, 2014), adding § 135.603 requiring an instrument rating for helicopter ambulance pilots.

Section 194.215(a) requires persons seeking to meet the alternate requirements for a powered-lift category rating to hold an instrument-airplane or -helicopter rating ensuring these persons have experience operating an airplane or helicopter under IFR and have demonstrated proficiency on the instrument rating practical test. These prerequisites for the alternate pathway ensure that the initial cadre of powered-lift pilots have a solid foundational skill set and extensive experience prior to adding powered-lift ratings to their commercial pilot certificate. While these prerequisites ensure the foundational skills and extensive experience, holding an instrument-airplane rating or an instrument-helicopter rating does not ensure that an applicant seeking to meet the alternate pathway requirements has the necessary skills to proficiently accomplish instrument procedures in a powered-lift specifically.

While there is some overlap in the practical tests for instrument-airplane ratings and instrument-helicopter ratings, there are also some significant differences that would result in a "gap" in the knowledge, skills and experience of pilot operating a powered-lift if a powered-lift pilot were permitted to hold "any" instrument rating. For example, an airplane pilot may be required to perform a circling approach to landing (*i.e.*, the pilot is not approaching the runway to which they were performing the instrument approach straight on). As a result, that pilot is required to fly the instrument procedures to higher minimums (visibility and cloud clearance) because the maneuver must be performed with reference to the airport environment and increases pilot workload. A helicopter pilot is not tested on this maneuver on the instrument rating test because they are not subject to the same situation of high-speed approaches, and helicopters do not need a runway as they are capable of landing on the ramp. If a powered-lift pilot held only an instrument-helicopter rating, this would result in a gap in experience and proficiency in instrument approaches for powered-lift which are capable of runway approaches.

As another example, unusual attitude recoveries are unique to each category of aircraft and are tested in each when an applicant seeks an instrument rating in a new category other than what is held on their pilot certificate. Nose-high attitudes present the pilot with a decreasing airspeed and nose-high attitude which if not corrected could result in adverse conditions or even loss of control in instrument conditions. This situation requires different

instrument procedures to be performed depending on the aircraft being operated. In an airplane, the pilot must apply forward elevator pressure to lower the nose and prevent a stall while simultaneously increasing power and leveling the wings. If this airplane recovery procedure were attempted in a helicopter experiencing nose-high attitude, it would place the helicopter in a potentially hazardous situation. Applying abrupt forward cyclic to correct the attitude without consideration could put the helicopter in a Low G condition which in certain helicopter rotor systems results in a catastrophic mast bumping situation that is often deadly.

In a helicopter, the recovery procedure for a nose high unusual attitude requires the pilot to correct the bank and pitch simultaneously while avoiding applying abrupt forward cyclic to correct the attitude. Since a powered-lift is a hybrid aircraft, an unusual attitude recovery might look like the recovery in an airplane; however, it might also look like an unusual attitude recovery in a helicopter. Alternatively, it may look completely different depending on the powered-lift's capabilities. Given this, the practical test for an instrument-powered-lift rating encompasses the necessary tasks specific to a powered-lifts operational capabilities and requires a pilot operating a powered-lift under IFR to demonstrate the proficiency in instrument procedures applicable to powered-lift. Moreover, the FAA recognizes that a person would encounter several overlapping tasks when taking the powered-lift type rating practical test and the instrument-powered-lift rating practical test concurrently. Given this, as discussed, the FAA permits in 194.211(d) an applicant person to perform overlapping tasks on the powered-lift type rating practical test and the instrument-powered-lift rating practical test a single time provided the task is performed to the highest standard required for the task. Therefore, when the tests are taken concurrently, there are minimal extra tasks that an applicant must perform.

Additionally, the FAA disagrees with commenters suggesting FAA had precedent in recognizing instrument ratings for another category because of the requirements of § 61.3(e)(3) (permitting a person to act as PIC of a glider under IFR or in weather conditions less than the minimums prescribed for VFR flight if the pilot holds, among other requirements, an instrument-airplane rating). The FAA proposed a “glider cloud-flying rating”

in 1969³³⁰ because advocate groups requested the FAA to more easily facilitate cloud flights by glider pilots. The FAA proffered that the operation of a glider within the clouds differs from instrument operations in powered aircraft and held that “glider cloud-flying” primarily only utilized the vertical components associated with a cloud formation to sustain flight within the clouds or to gain altitude for the continuance of a VFR gliding flight. The FAA noted that navigation by reference to instruments or radios aids would not normally be involved. The FAA further stipulated that, although it was trying to relieve a perceived burden by requiring a “full instrument rating,” instrument operations in powered aircraft were far more complex than what glider cloud flying would entail. The glider pilot would only be concerned with attitude and speed control, whereas the pilot of a powered aircraft is concerned with other matters such as navigation, position reporting, altitude control, power settings, holding procedures, instrument letdown, and instrument approaches. Although the FAA proposed these requirements, the FAA later withdrew the proposal.³³¹

The FAA disagrees that comparing credit of an instrument rating in the glider scenario is a basis for granting relief from a powered-lift instrument rating. A powered-lift is a powered aircraft and would not be utilizing this approach to gain altitude to continue on to VFR gliding flight. An instrument rating would be sufficient in the circumstances currently permitted around § 61.3(e)(3) but not those in which commenters were stipulating that were applicable to powered-lift.

Another commenter suggested that the requirement to remove the VFR only restriction within 2 calendar months is too restrictive. The FAA disagrees with this as normally an applicant would be required to meet all experience requirements and receive the instrument rating simultaneously with the type rating. The purpose of allowing the two months to acquire the instrument rating is to provide some relief for the pilot applicant so they do not have to take an initial category, instrument, and type rating practical test at the same time.

Eve suggested that the requirement to remove the VFR limitation should not be applicable to commercial pilots and that they should be able to operate powered-lift VFR only.

As noted in section V.H.2.i of this preamble, the FAA provided this relief to allow an applicant to accomplish the

powered-lift instrument rating at a later date. As discussed in section V.A. of this preamble, all powered-lift will require a type rating and therefore be subject to holding an instrument rating. In limited circumstances where the powered-lift is not capable of instrument maneuvers and procedures, the FAA notes that, as with other categories of aircraft, § 61.63(e) does not require an instrument rating when a type rating is sought in an aircraft that is not capable of instrument maneuvers and procedures. If an applicant uses a powered-lift that is not capable of instrument maneuvers and procedures for a practical test, then that applicant will receive a VFR only limitation that does not need to be removed as specified in § 61.63(e).³³²

Eve further suggested an amendment to § 61.63 that would only require those who are applying for a type rating in a turbojet powered or large aircraft to hold an instrument rating.³³³ The FAA disagrees with this suggested change; an aircraft that requires a type rating and is not turbojet powered or large but is complex and fully capable of operating under IFR should require a pilot who operates this aircraft to hold an instrument rating for that category of aircraft to ensure a standard level of competence and safety across all type-rated aircraft operating in the NAS.

Eve commented further that, because some aircraft will be limited in range and endurance, a powered-lift may be limited in such a way that it wouldn't be practically or operationally capable of instrument maneuvers or procedures required on the practical test even though it may be equipped to do so. Eve suggested a change to § 61.64(f)(1) to alter the requirements to complete an instrument approach only to those aircraft capable of instrument flight. The FAA finds that this concept is contradictory. Specifically, Eve details that the aircraft is equipped for instrument flight but limited to VFR only by the AFM. The aircraft's operational limitations in the AFM are

³³² The FAA notes that if a powered-lift is equipped according to § 91.205(d), it would be capable of performing instrument maneuvers and procedures required under the instrument practical test, even if the powered-lift is not certified for IFR or certain IFR-specific functions are disabled.

³³³ Although the FAA is taking a similar approach in § 142.47 to delineate changes similar to the commenter's suggestion, the FAA is not taking that same approach here in the interest of safety. If an applicant was receiving instruction in an aircraft, they would need to hold pilot certificates in accordance with part 61. Section 142.47 narrowly applies to personnel giving instruction in a simulator under different parameters. The FAA chose not to alter according to Eve's suggestion and continue with the current regulatory framework provided for in § 61.63(d)(1).

³³⁰ 34 FR 6484.

³³¹ 37 FR 14239.

not pertinent to the practical test. For example, a Robinson R-44 helicopter can be equipped with the necessary avionics to successfully complete an instrument rating practical test. However, this aircraft is not IFR-certified and may not be operated under IFR or in weather conditions less than the minimums prescribed for VFR (*i.e.*, IMC).

This situation is no different for a powered-lift which is equipped for instrument flight but operationally limited. The practical test could be completed, and an instrument rating issued in the aircraft even though it could never be operated under IFR. Additionally, the FAA notes that many powered-lift will seek to operate on expedited departures in which the frequency of departure dictates a “departure procedure” to ensure separation of aircraft. This skill is congruent with that required of a pilot who holds an instrument rating and is capable of conducting these maneuvers with proficiency.

Finally, Archer requested the FAA clarify what “not capable of instrument maneuvers and procedures means.” Section 61.45(d) states: “[a]n applicant for a practical test that involves maneuvering an aircraft solely by reference to instruments must furnish: (1) equipment on board the aircraft that permits the applicant to pass the areas of operation that apply to the rating sought; and (2) a device that prevents the applicant from having visual reference outside the aircraft, but does not prevent the examiner from having visual reference outside the aircraft, and is otherwise acceptable to the Administrator.” For further clarification an applicant would then review the required approaches and maneuvers required by the applicable ACS for the instrument rating sought. For example, the Instrument Rating Powered-Lift ACS requires the applicant to complete two different non-precision approaches and a precision approach. If the aircraft does not have the equipment installed to conduct those approaches, it would not meet the requirements. It would be impossible to codify in the regulation the exact equipment necessary to complete an instrument rating practical test due to the various avionics installations and broad number of approach types available.

ii. Obtaining Powered-Lift Type Ratings With “VFR Only” Limitations on a Private Pilot Certificate

In light of the current regulatory framework for private pilots with airplane and helicopter ratings, the limited privileges associated with the

private pilot certificate, and the underlying reasons for requiring type ratings for all powered-lift, the FAA proposed in § 194.211(b)(6) to except certain private pilots from the requirement to remove the “VFR only” limitation set forth in proposed § 194.211(b)(3). Specifically, a private pilot who obtains a “VFR only” type rating for a powered-lift that is less than (or equal to) 12,500 pounds maximum certificated takeoff weight and not turbojet-powered would not be required to remove the “VFR only” limitation within the 2-calendar month time period (or any specific time frame).³³⁴

In addition to proposing an exception in proposed § 194.211(b)(6) that would enable private pilots of certain powered-lift to retain the “VFR only” type rating indefinitely, the FAA proposed § 194.211(c)(1), which would allow for these private pilots to obtain additional “VFR only” type ratings on their private pilot certificates, provided the powered-lift are not large or turbojet-powered. Consistent with current § 61.63(d)(4) and (e) and proposed § 194.211(b)(2), the applicant would not be required to perform the VFR only type rating practical test in actual or simulated instrument conditions.

While the FAA did not propose to require private pilots to remove “VFR only” limitations when those limitations apply to powered-lift that are not large aircraft and not turbojet-powered, the FAA proposed rule language that would provide these private pilots with the option to do so. A private pilot would remove the “VFR only” limitation in the same manner as discussed in this section (*i.e.*, through proposed § 194.211(b)(4)).

Outside of comments pertaining to the VFR Only limitation as already addressed, the FAA did not receive comments on § 194.211, the FAA adopts the section as proposed.

iii. Clarification of Requirements for a Practical Test in an Aircraft That Requires a Type Rating

The FAA proposed to clarify certain regulations to clearly communicate that a person may not furnish an aircraft that

requires a type rating (or an FSTD representing an aircraft requiring a type rating) for the practical test without meeting the eligibility requirements for a type rating³³⁵ and applying for a type rating (unless the person already holds the type rating).³³⁶ These amendments prevent situations where applicants seek category or class ratings in an aircraft that requires a type rating (or corresponding FSTD) without fully demonstrating mastery of the aircraft furnished for the practical test. The proposal included amendments in part 61 to §§ 61.39(a)(3), 61.43(g), and 61.47(d).

First, the FAA proposed to revise paragraph § 61.39(a)(3), which requires a person applying for a practical test to meet the training and aeronautical experience for the certificate or rating sought through the creation of two subparagraphs: (i) and (ii). Section 61.39(a)(3)(i) will retain the language in paragraph (a)(3). New subparagraph (a)(3)(ii) would require an applicant seeking an initial category and class rating, if a class rating is required, on a private, commercial, or ATP certificate in an aircraft that requires a type rating (or an FSTD that represents an aircraft that requires a type rating) to either meet the eligibility requirements for a type rating in that aircraft or already hold that type rating on the person’s pilot certificate. In other words, regardless of whether an applicant tests in an aircraft or tests in an FSTD, if the applicant furnishes an aircraft (or FSTD representing an aircraft) that requires a type rating for the practical test, then the applicant must be eligible for the type rating and apply for the type rating practical test unless the applicant already holds the type rating.

Second, the FAA proposed new § 61.43(g) to clarify that a practical test for an ATP certificate with category and class ratings (if a class rating is required) in an aircraft that requires a type rating, or in a corresponding FSTD, includes the same tasks and maneuvers as a practical test for a type rating. This proposed change would foreclose the concept that a lesser test can be administered for category and class ratings at the ATP certificate level.

Third, the FAA proposed new § 61.47(d) to restrict an examiner from

³³⁴ A private pilot has limited privileges compared to a commercial pilot. Current § 61.113(a), which sets forth private pilot privileges and limitations, serves as a sufficient safeguard to ensure an appropriate level of safety. Specifically, a person who holds a private pilot certificate is generally prohibited from acting as PIC of an aircraft that is operating for compensation or hire, or that is carrying passengers or property for compensation or hire. Therefore, a private pilot with a “VFR only” type rating would not be permitted to operate the powered-lift for compensation or hire or carry persons or property for compensation or hire.

³³⁵ To be eligible for a type rating practical test, a pilot must receive training on the areas of operation listed in § 61.157(e) that apply to the aircraft type rating. §§ 61.63(d)(2) and 61.157(b). The detailed tasks associated with each area of operation are provided in the applicable ATP and Type Rating ACS.

³³⁶ The FAA inadvertently proposed regulatory language that would have revised § 61.64(a)(1). This proposed language is not adopted in the final rule as the proposal was erroneous.

conducting a practical test for the issuance of an initial category and class rating (if a class rating is required) in an aircraft that requires a type rating (or corresponding FSTD) to an applicant who does not already have the type rating unless, first, the applicant meets the eligibility requirements for a type rating³³⁷ and, second, the practical test contains the tasks for a type rating specified for the areas of operation at the ATP certificate level. The FAA also proposed to revise the heading of § 61.47 to more accurately describe the regulations set forth in the section.

The NPRM specifically noted that, in the case of an airplane or rotorcraft, an applicant retains the option of furnishing an aircraft that does not require a type rating if the applicant seeks only category and class ratings. For powered-lift, which as proposed would all require type ratings, an applicant would be foreclosed from seeking a powered-lift category rating without concurrently obtaining a type rating.

The FAA received one clarifying question pertaining to the trio of amendments. AIR VEV requested clarification regarding the language in § 61.39 as to how it would be possible to hold a type rating prior to issuance of an initial category. The FAA notes this is not currently permitted through part 194 or other regulations. If a person seeks a type rating, it must be obtained concurrently with the associated category for which the type rating is applied.³³⁸ Therefore, an applicant for a type rating in a powered-lift will need to concurrently obtain the powered-lift category. The FAA proposed the verbiage in § 61.39(a)(3)(ii) to address a situation where a person would hold, for example, a commercial pilot certificate with a powered-lift category rating and type rating. The person then seeks an ATP certificate with a powered-lift category rating. The person would already hold the type rating on their commercial pilot certificate, which would meet the latter half of the regulation in question.

I. Miscellaneous Amendments

1. Aeronautical Experience for Private Pilot Applicants (§ 61.109(e)(5))

Section 61.109 provides the aeronautical experience requirements an applicant must meet to be eligible for a private pilot certificate specific to the respective category and class, if

applicable, rating sought. For a powered-lift category rating, an applicant must meet the requirements in § 61.109(e), which includes 10 hours of solo flight time in an airplane or a powered-lift.³³⁹ However, in light of the different operating capabilities of airplanes compared to powered-lift, the FAA concluded that the skills acquired during solo flight time in an airplane are not interchangeable with the skills acquired during solo flight time in a powered-lift, which are necessary to obtain proficiency.³⁴⁰ Therefore, the FAA proposed to amend § 61.109(e)(5) to require an applicant for a private pilot certificate with a powered-lift category rating to obtain 10 hours of solo flight time specifically in a powered-lift. In addition to providing an adequate level of safety, requiring the applicant to obtain solo flight time in the category of aircraft for which the rating is sought would ensure consistency with the aeronautical experience requirements in § 61.109 that apply to persons seeking airplane and helicopter ratings. The FAA adopts the revision to § 61.109(e)(5) as proposed and responds to comments in the following sections.

First, HAI generally expressed that 10 hours of solo time in each model of powered-lift is problematic for practical reasons and time should be allowed to be logged in a helicopter. The FAA notes that each PIC of a powered-lift must, as adopted by this final rule, have a type rating on their certificate, which will require training in the specific type of powered-lift the PIC seeks to operate. However, § 61.109(e) sets forth the requirements for a private pilot certificate with a powered-lift category rating. Neither the current regulations nor the regulations as adopted by this final rule require 10 hours of solo time in each model of powered-lift. Rather, § 61.109(e) will simply require that an applicant for a private pilot certificate must have 10 hours of solo flight time in a powered-lift. This requirement broadly references powered-lift as a category of aircraft and does not narrowly scope the 10 hours to a specific type of powered-lift. The same concept applies to the requirements for airplanes and helicopters. The 10 hours of solo time for airplane single-engine and helicopter ratings by § 61.109(a) and (c) must be completed in the category

and class of aircraft for which the rating is sought, and, similarly, the 10 hours of solo flight time for an airplane multiengine rating by § 61.109(b) must be completed in any airplane; these flight time requirements are not specific to the model of aircraft the pilot seeks to operate.

Next, L3Harris stated that § 61.109(e)(5) should allow for a reduction in solo time for number of flights made, such as two flights equaling one hour. AIR VEV, similarly, generally suggested that the required aeronautical experience in § 61.109(e) combine flight hours and total flights, similar to aeronautical experience requirements in the glider category. Currently, the only provisions in part 61 that permit a certain number of flights to be substituted for hours exist in § 61.56 and § 61.159.³⁴¹ For the same reasons as discussed at length in section V.F. of this preamble, the FAA declines at this time to permit this kind of substitution for a commercial pilot certificate with a powered-lift category rating. Additionally, the substitution in § 61.56(b) and aeronautical experience requirements as it applies to gliders are also not applicable to remedy the powered-lift airman certification challenges.

First, the substitution of training flights as set forth in § 61.56(b) is only applicable in the case of a glider flight review, after a person has obtained the appropriate certificates and ratings. Additionally, glider flights cannot be predicted to be a certain length, as they are unpowered and dependent upon winds, convection, and other items that rely on certain extraneous factors (e.g., towed to altitude by a powered aircraft for flights to occur). Therefore, the rule allows the substitution of numbers of flights to equate for an hour of flight time due to the unpredictability of the length of glider flights. The required 10 hours is a minimal time crucial to ensure an applicant for private pilot certificate with powered-lift ratings is capable of operating the powered-lift, especially considering the private pilot certificate is traditionally the first and foundational building block certificate in the airman certification framework.

³⁴¹ Specifically, under § 61.56(b), glider pilots may substitute a minimum of three instructional flights in a glider flight review with certain conditions in lieu of the one hour of flight training required for a flight review under § 61.56(a). Additionally, under § 61.159(b), when seeking an ATP certificate with an airplane category rating, a person who has performed at least 20 night takeoffs and landings to a full stop by substituting each additional night takeoff and landing to a full stop for 1 hour of night flight time to meet the requirement of § 61.159(a)(2) (100 hours of night flight time).

³³⁷ The FAA notes that an examiner cannot conduct a practical test if the applicant does not meet the eligibility requirements for that certificate or rating.

³³⁸ § 61.63(d).

³³⁹ See § 61.109(e)(5).

³⁴⁰ For example, when flying an airplane, the applicant will not encounter the vertical take-off and landing characteristics fundamental to a powered-lift (e.g., aerodynamics events such as effective translational lift and transverse flow effect that are specific to a rotor system transitioning from hovering to forward flight).

Finally, one individual stated that the proposed rule did not mention “Settling with Power” or “Vortex Ring State.” The commenter stated these aerodynamic conditions should be stressed with powered-lift pilots, primarily non-helicopter pilots.

The FAA agrees that settling with power and vortex ring state are conditions essential to a pilot’s powered-lift training and did not intend to exclude their significance in the examples of vital powered-lift piloting conditions. However, § 61.109 does not prescribe specific aeronautical experience tasks or areas of operation. Instead, the powered-lift ACSs, which set forth the aeronautical knowledge, risk management, and flight proficiency standards for certification, include these conditions on the practical test.³⁴² Because an applicant for a certificate or rating must perform the tasks specified in the applicable ACS,³⁴³ it follows a pilot and instructor would ensure the receipt of training on these conditions (regardless of any previously held certificate). In fact, for most certificates and ratings, an applicant must obtain an endorsement from a flight instructor certifying that the applicant is prepared for the practical test.³⁴⁴ As such, the flight instructor must be confident that the applicant can successfully perform all the tasks and maneuvers on the practical test.

2. Removal of §§ 61.63(h) and 61.165(g)

The FAA proposed to remove certain paragraphs pertaining to category and class ratings for the operation of an aircraft with an experimental certificate. To ensure that pilots operating under regulations before a 2004 final rule change³⁴⁵ requiring appropriate category and class ratings complied with the revised provisions, the FAA

added §§ 61.63(k) and 61.165(f), which are currently situated as §§ 61.63(h) and 61.165(g).³⁴⁶ These provisions set forth the requirements to apply for a category and class rating limited to a specific make and model of experimental aircraft. Among other requirements, a person must have logged 5 hours of flight time while acting as PIC in the same category, class, make, and model of aircraft between September 1, 2004, and August 31, 2005. After more than 15 years since initial codification, the FAA anticipated that individuals who were operating under the pre-2004 requirements have already used §§ 61.63(h) and 61.165(g) to obtain a limited category and class rating. As a result, the FAA proposed to remove §§ 61.63(h) and 61.165(g).

The FAA received one comment on this proposed removal. FlightSafety International opposed removal of § 61.63(h), stating that removal would reduce flexibility for the FAA, pilots, and OEMs because it will not allow the new powered-lift pilot to obtain an experimental aircraft type rating. The FAA disagrees that retaining these requirements would provide flexibility in new powered-lift pilots obtaining an experimental aircraft type rating. The requirements listed in current §§ 61.63(h) and 61.165(f) are only applicable in very limited circumstances because the 5 hours of flight time required must have been logged between September 1, 2004, and August 31, 2005, to ensure that the pilots who were previously operating without a category and class rating under the pre-2004 regulations could continue operations safely (rather than requiring the full requirements for a category and class rating to those pilots).

Therefore, these provisions were intended to provide relief to a group of pilots operating two decades ago and would be largely inapplicable to powered-lift pilots today. Section V.A. of this preamble provides additional discussion about experimental certificates and the use of operating limitations to require pilots to hold category and class ratings for all experimental aircraft and additional authorizations for certain experimental aircraft even when no passengers are carried on board.

In the low likelihood that a powered-lift pilot did use these provisions and log time during the prescribed time period, the FAA provided notice in the

NPRM that these paragraphs would be removed upon the effective date of the final rule. Therefore, any certificate holders that have not yet obtained a limited category and class rating under §§ 61.63(h) and 61.165(g), but wish to do so, would have until January 21, 2025 to utilize the provisions. Therefore, the FAA adopts the removal of §§ 61.63(h) and 61.165(g) as proposed.

3. ATP Privileges and Limitations (§ 61.167)

Section 61.167 prescribes the privileges and limitations for an ATP certificate holder, including those scenarios when an ATP certificate holder may instruct other pilots. Currently, this privilege only applies to ATP certificate holders who have met, in pertinent part, the aeronautical experience requirements of § 61.159 (aeronautical experience requirements for an airplane category rating) and § 61.161 (aeronautical experience requirements for a rotorcraft category and helicopter class rating). The FAA proposed to amend § 61.167(a)(2) to broaden the privileges to include applicability to certificate holders who have met the aeronautical experience requirements in § 61.163 (*i.e.*, persons with an ATP certificate with a powered-lift category rating) to ensure that persons who obtain an ATP certificate with the appropriate powered-lift ratings may instruct other pilots in air transportation service in powered-lift, consistent with what is permitted for persons who hold an ATP certificate with either airplane or helicopter ratings. The FAA noted that, under proposed § 194.205, the proposed change to § 61.167(a)(2) would not permit an ATP with powered-lift ratings to conduct training in the part 135 operator’s airman certification curriculum proposed in § 194.243(a).

The FAA received comments specific to ATP certificates with a powered-lift category rating, however, these comments are addressed in other sections of this preamble. Comments suggesting relief to the aeronautical experience requirements for an ATP certificate with a powered-lift category rating are addressed in section V.I.3 of this preamble. Comments specific to the flight training privileges specific to an ATP certificate with a powered-lift category rating under proposed § 194.205 are discussed in section V.G.1.iv of this preamble. The FAA did not receive comments pertaining to the expansion of privileges to include persons with an ATP certificate with a powered-lift category rating in

³⁴² See Area of Operation XI, Emergency Operations, Task D. Additionally, these conditions are included in the risk management items in Area of Operation V (Takeoffs, Landings, and Go-Arounds), and VI (Performance Maneuvers).

³⁴³ See § 61.43(a).

³⁴⁴ Section 61.39(a)(6) requires that the applicant have an endorsement in the applicant’s logbook certifying that they have received and logged training time within 2 calendar months preceding the month of application in preparation of the practical test.

³⁴⁵ Before 2004, § 61.31 allowed a pilot to operate an experimental aircraft carrying passengers without a category and class rating when permitted by the aircraft’s operating limitations. In 2004, the FAA amended § 61.31 to require persons to hold the appropriate category and class rating when carrying a passenger regardless of the aircraft’s airworthiness certificate. Certification of Aircraft and Airmen for the Operation of Light-Sport Aircraft, final rule, 69 FR 44772, 44829 (Jul. 27, 2004). This amendment was adopted as § 61.31(k)(2)(iii)(B) but is currently codified as § 61.31(l)(2)(iii)(B). 74 FR 42499, 42548 (Aug. 21, 2009).

³⁴⁶ These paragraphs mirror each other, differentiated only by the applicability based on certificate level. Section 61.63 applies to those persons holding a recreational, private, or commercial pilot certificate; § 61.165(g) applies to those persons holding an ATP certificate.

§ 61.167(a)(2) and adopts the provision as proposed.

4. Second-in-Command Time in Part 135 Operations

Currently, §§ 61.159 and 61.161 allow a pilot to credit SIC time logged under an SIC professional development program (PDP) toward certain flight time requirements for an ATP certificate with an airplane category or a rotorcraft category and helicopter class rating.³⁴⁷ The FAA proposed to amend § 61.163 to add paragraph (c) to allow SIC time logged under an SIC PDP to be counted toward the total time as a pilot required by § 61.163(a) and the specific flight time requirements for ATP certification set forth in § 61.163(a)(1), (a)(2), and (a)(4) (e.g., cross-country time, night flight time, and instrument flight time). A person may not credit the SIC time logged under an SIC PDP toward the powered-lift-specific flight time requirements of § 61.163(a)(3) because the aircraft operated under an approved SIC PDP must be a multiengine airplane or a single-engine turbine-powered airplane. Rather, the proposal would align the logging of SIC flight time acquired under an SIC PDP toward an ATP certificate with powered-lift category rating with that as permitted for an ATP certificate with an airplane category rating or a rotorcraft category and helicopter class rating.

The FAA noted that ICAO currently has a standard for logging flight time to meet the standards for certificates and ratings in aircraft other than powered-lift. ICAO has recommended practices for logging time in powered-lift that are not yet standards but mirror the logging standards for other categories of aircraft.³⁴⁸ However, ICAO does not

recognize the crediting of flight time when a pilot is not required by the aircraft certification or the operation under which the flight is being conducted. As a result, SIC time accrued in accordance with an approved PDP program and credited toward the flight time requirements of a certificate or rating in accordance with part 61 as described results in an ICAO limitation being placed on the pilot's certificate until such time that the pilot can demonstrate flight time logged meets the ICAO standard and is reflected in their logbook in accordance with § 61.51.³⁴⁹ While these standards are only recommended practices at this time, the FAA presumes the ICAO recommendations for powered-lift will become standards in the future, given the mirroring standards for airplanes and helicopters. Therefore, the FAA proposed to add paragraphs (d) and (e)³⁵⁰ to § 61.163 to include the requirement for the ICAO limitation and the requirements for removing the limitation. The FAA did not receive comment on these paragraphs (§ 61.163(c), (d), and (e)) and adopts the provisions as proposed.

5. References to Category and Class

During the rulemaking process, the FAA identified several regulations in various parts containing references to the category and class of aircraft; however, the FAA did not propose or establish classes of powered-lift in this rulemaking. As a result, the requirements for the appropriate class of aircraft would present a problem for powered-lift pilots in part 61, subpart K of part 91, part 135, part 141, and part 142. The FAA, therefore, proposed to update the regulatory references to category and class to make clear that the reference to class is only appropriate if the regulations require classes for the category of aircraft. The FAA proposed two different approaches to remedy the discrepancy. First, to account for the lack of powered-lift classes in part 61, the FAA proposed to directly amend the following sections: §§ 61.3(e)(1)–(2), (f)(2)(i)–(ii) and (g)(2)(i)–(ii); 61.45(a)(1)(i) and (a)(2)(ii)³⁵¹;

in other categories, the Licensing Authority should determine whether such experience is acceptable and, if so, the extent to which the flight time requirements of 2.6.5.1.1 could be reduced accordingly.”

³⁴⁹ See §§ 61.159(e) and (f), 61.161(d) and (e).

³⁵⁰ As discussed in section V.I.4. of this preamble, this final rule adopts new paragraph (c) to allow a pilot to credit SIC time logged under an SIC PDP toward certain flight time requirements for an ATP certificate with a powered-lift category rating.

³⁵¹ The FAA notes that while the NPRM preamble discussed this revision to § 61.45(a)(1)(i) and (a)(2)(ii), the amendatory instructions in the NPRM

61.51(f)(2); 61.57(a)(1)(ii), (b)(1)(ii), and (g)(1) and (4); and 61.64(a)(1) and (g)(1).

To account for the lack of powered-lift classes in subpart K of part 91 and parts 135, 141, and 142, the FAA proposed regulations under the SFAR,³⁵² which would clarify when references to class are inapplicable when a powered-lift is used under those respective parts.

First, § 91.1055(b)(2) allows deviation from flight-time hour requirements for PICs and SICs operating program flights if an existing program manager adds a new category and class of aircraft to its fleet not used before in its operation. The FAA proposed § 194.245(b) to clarify that the reference to class in § 91.1055(b)(2) is inapplicable when a powered-lift is used for the operation under subpart K of part 91.

Next, as it pertains to part 141, §§ 141.35(a)(1), 141.36(a)(1), 141.37(a)(2)(ii), and 141.37(a)(3)(ii) set forth certain qualification requirements, including class ratings, for chief instructors, assistant chief instructors, and check instructors.³⁵³ Additionally, the appendices of part 141 reference classes of aircraft in the context of course content. To account for the inapplicability of classes as it pertains to powered-lift, the FAA proposed § 194.241, which would remove the qualification requirement to hold a class rating in §§ 141.35(a)(1), 141.36(a)(1), 141.37(a)(2)(ii), and 141.37(a)(3)(ii) when a powered-lift is used in the course. Proposed § 194.241(a) and (b) delineate the certificates and ratings a person must hold to be designated as a chief instructor, an assistant chief instructor, or a check instructor (for checks and tests that relate to flight training and ground training) when a powered-lift is used in the course. To note, in delineating the ratings that must be held on the pilot certificate for

erroneously did not include the revisions to § 61.45. Due to the general nonsubstantive nature of this revision and the discussion in the NPRM preamble, the FAA finds that the public received adequate notice of this revision.

³⁵² The FAA chose to propose SFAR provisions rather than permanent amendments to allow the agency time to assess which permanent changes would be needed in part 141 to accommodate the use of powered-lift in the certification and rating courses long-term.

³⁵³ Specifically, §§ 141.35(a)(1), 141.36(a)(1), and 141.37(a)(2)(ii) require chief flight instructors, assistant flight instructors, and check instructors to hold a commercial pilot certificate or ATP certificate and a current flight instructor certificate; for flight training, these certificates must contain the appropriate aircraft category, class, and instrument ratings (if required) for the aircraft category and class of aircraft to be used in the course. For checks and tests related to ground training, § 141.37(a)(3)(ii) requires the check instructor to hold a current flight instructor certificate or ground instructor certificate with the ratings appropriate to the category and class of the aircraft used in the course.

³⁴⁷ An SIC PDP allows the certificate holder's pilots to log SIC time in certain operations conducted under part 135 in an airplane or operation that does not otherwise require an SIC. See § 135.99(c)(2). The FAA did not propose any revisions to the aircraft requirements for an SIC PDP as set forth in § 135.99(c); therefore, this final rule does not enable a part 135 operator to seek approval of an SIC PDP in a powered-lift.

³⁴⁸ ICAO Annex 1, Sections 2.6.3.1.2 and 2.6.4.1.2 are standards relative to the credit of flight time in airplanes and helicopters, whereas § 2.6.5.1.3 is a recommendation pertaining to powered-lift and not a standard. Section 2.6.3.1.2 states for airplanes “When the applicant has flight time as a pilot of aircraft in other categories, the Licensing Authority shall determine whether such experience is acceptable and, if so, the extent to which the flight time requirements of 2.6.3.1.1 can be reduced accordingly. Section 2.6.4.1.2 states for helicopters, “When the applicant has flight time as a pilot of aircraft in other categories, the Licensing Authority shall determine whether such experience is acceptable and, if so, the extent to which the flight time requirements of 2.6.4.1.1 can be reduced accordingly.” Section 2.6.5.1.3 is currently a recommendation for powered-lift and states, “When the applicant has flight time as a pilot of aircraft

persons seeking designation as a chief instructor, an assistant chief instructor, or a check instructor (for checks and tests that relate to flight training), the FAA proposed to add the requirement that such person must hold a powered-lift type rating.³⁵⁴

Additionally, proposed § 194.249(b) would make the references to class contained in course content in the appendices to part 141 inapplicable when a powered-lift is used for a course of training. The FAA also identified a technical amendment change to part 141.37(a)(3)(ii) discovered during the pendency of this rulemaking that was not proposed in the NPRM. Currently, part 141.37(a)(3)(ii) states that “Except for a course of training for a lighter-than-air rating, hold a current flight instructor certificate or ground instructor certificate with ratings appropriate to the category and class of aircraft used in the course.” This language is incorrect in that there is no category or class of aircraft listed on a ground instructor certificate; rather, the language after ground instructor should be tied with the flight instructor certificate. The FAA is therefore adopting an amendment editorial in nature to correct the error.

The FAA proposed § 194.249 to resolve the inapplicability of class in parts 135 and 142. Specifically, §§ 135.4(b)(2), 135.247(a)(1) and (2), and 135.603 set forth, first, similar deviation to that in § 91.1055(b)(2) and, second, certain requirements for PICs³⁵⁵ in aircraft carrying passengers or in helicopter air ambulance operations. The FAA proposed § 194.249(a) to clarify that the references to class in these regulations are inapplicable when a powered-lift is used for the operation under part 135. Additionally, §§ 142.11(d)(2)(ii), 142.49(c)(3)(iii),

142.53(b)(1), and 142.65(b)(1) set forth certain requirements for issuance or amendment of training specifications, instructor and certificate holder privileges and limitations, and instructor training and testing.³⁵⁶ Similarly, the FAA proposed § 194.249(c) to clarify that references to class of aircraft in these sections do not apply when operating powered-lift or FSTDs representing powered-lift under part 142.

The FAA did not receive any comments on these amendments and adopts the amendments as proposed.

J. Part 135 Pilot Qualifications

1. Statement of the Issue and Introduction

As discussed in the NPRM, the current regulatory framework of part 135, particularly subparts A, E, G, and H, was initially codified without the contemplation of powered-lift operations. Specifically, unlike part 61 where the 1997 final rule introduced powered-lift into the CFR for airman certification, powered-lift could not operate in part 135 and, therefore, revisions were unnecessary at that time. Therefore, the NPRM proposed to introduce powered-lift into the regulatory training and qualification paradigm in part 135, rather than simply updating or modifying existing powered-lift requirements, through a twofold framework: permanent regulatory amendments and temporary SFAR requirements.

These requirements are intended to facilitate the training and qualification of the initial groups of part 135 pilots, flight instructors, and check pilots. In many instances, the training and qualification requirements applicable to airplane pilots in part 135 would also be applied to powered-lift pilots by virtue of the use of the term “aircraft.”³⁵⁷ Because the FAA anticipates that during operations powered-lift will quickly transition to horizontal flight using the wings like an airplane to afford powered-lift a much larger operational

range and faster speeds to optimize operational capabilities, powered-lift pilots must possess many of the same skills and experience as their airplane pilot counterparts in certain instances. Conversely, due to the operational differences in the capability of powered-lift and integration of powered-lift into the NAS for civilian use, there are instances where existing airplane or helicopter training and qualification rules do not readily apply, which requires new temporary or permanent requirements.

2. Relevant History and Background

Part 135 prescribes operating requirements for commuter and on-demand operations. Specifically, subpart A prescribes the operations and personnel that are affected by the part, and subpart E details flight crewmember qualification requirements. Subparts G & H set forth the testing and training requirements for crewmembers. The NPRM provided a comprehensive history of the part 135 training and checking regime,³⁵⁸ which continually seeks to provide the highest level of safety and risk-mitigation in commuter and on-demand operations. This SFAR and permanent amendments described herein are intended to provide an equivalent level of training, checking, and testing for powered-lift operations as those expected of airplane and helicopter operations.

3. Rules Applicable to Operations Subject to Part 135 (§ 135.3)

Section 135.3 prescribes the rules that apply to persons conducting operations under part 135. This section is generally applicable to all operations under part 135, regardless of aircraft category; however, paragraph (b) applies only to airplanes. Specifically, § 135.3(b) requires that those certificate holders conducting commuter operations under part 135 with airplanes in which two pilots are required by the type certificate of the airplane must comply with subparts N and O of part 121 (Training Program and Crewmember Qualifications, respectively) instead of the requirements of subparts E, G, and H of part 135.

As discussed in the NPRM, the FAA determined that the same safety standard imposed in § 135.3(b) for commuter operations involving airplanes for which two pilots are required by type certification should apply to powered-lift requiring two

³⁵⁴ A person who holds a flight instructor certificate is subject to the limitations contained in § 61.195. Specifically, § 61.195(e) prohibits a flight instructor from giving training in an aircraft that requires the PIC to hold a type rating unless the flight instructor holds a type rating for the aircraft on their pilot certificate for that aircraft. Because a PIC of a powered-lift would be required to hold a type rating, to provide flight training in a powered-lift, the flight instructor would be required to hold a type rating for the powered-lift as well.

³⁵⁵ Section 135.4(b)(2) allows deviation from certain crewmember experience requirements if the certificate holder adds to its fleet a new category and class of aircraft not used before in its operation. Section 135.247(a)(1) and (2) require certain takeoffs and landings as the sole manipulator of the flight controls in an aircraft of the same category, class, and type, if a type rating is required, in which that person is to serve. Finally, § 135.603 requires the PIC of a helicopter air ambulance operation to meet the requirements of § 135.243 and to hold either a helicopter instrument rating or an ATP certificate with a category and class rating for that aircraft, not limited to VFR.

³⁵⁶ Specifically, 142.11(d)(2)(ii) discusses entitlement to training specifications that contain the category, class and type of aircraft that may be used for training, testing, and checking; 142.49(c)(3)(iii) requires an instructor to hold the certificates and ratings specified by part 61 appropriate to the category, class, and type of aircraft in which instructing, 142.53(b)(1) requires certain flight hours and takeoffs and landings for simulator instructors in the same category, class, and type (if required) replicated by the simulator, and 142.65(b)(1) sets forth crewmember position requirements for flight testing, flight checking, or line operational simulation.

³⁵⁷ Pursuant to 14 CFR 1.1, “aircraft” means a device that is used or intended to be used for flight in the air, which would inherently include powered-lift.

³⁵⁸ 88 FR 38946 at 39009 (June 14, 2023).

pilots by type certification.³⁵⁹ However, the FAA noted that subparts N and O of part 121 are specific to multiengine airplanes, and the FAA did not amend part 121 to accommodate powered-lift operations under that part. Additionally, certain requirements in subparts N and O to part 121 require compliance with appendices E and F of part 121³⁶⁰ (Flight Training Requirements and Proficiency Check Requirements, respectively), which are applicable to airplanes, as well. In the absence of amending part 121 (specifically, subparts N and O and the referenced appendices) to accommodate powered-lift-specific training and checking, the powered-lift flightcrew member would be inherently precluded from performing some airplane-specific tasks that are incongruent with powered-lift operational capabilities, creating a safety risk of insufficient training and checking.

Therefore, to facilitate an appropriate level of training and checking for certificate holders conducting commuter operations under part 135 with powered-lift requiring two pilots by the type certificate, the FAA proposed § 194.247(b) to create an alternative means of compliance with § 135.3(b).³⁶¹ For these operations, the FAA proposed that certificate holders comply with subpart Y of part 121, which allows for an Advanced Qualification Program (AQP). This program provides for approval of an alternate method for qualifying, training, certifying, and otherwise ensuring the competency of persons required to be trained under parts 121 and 135.³⁶² This proposal facilitates a rigorous safety standard for training and checking without (1) imposing the inapt multiengine airplane requirements of subparts N and O (and the applicable appendices) on powered-lift commuter operators in part 135 or (2) overhauling the framework of part 121 to include powered-lift which are

not entering part 121 operations at this time.

ALPA supported the FAA's decision not to amend part 121 to accommodate powered-lift operations, stating that considerable data must be collected and analyzed before expanding into part 121 operations.

The FAA found that, in lieu of modifying subparts N and O of part 121 to accommodate the integration of certain powered-lift commuter operations, implementing the AQP would uphold a similarly rigorous safety standard for training and checking. The FAA proposed the use of AQP to align more closely with the training and under subparts N and O of part 121 as prescribed in § 135.3. Compliance with AQP, normally a voluntary program, shall be mandatory for powered-lift commuter operations, given the unsuitability of the current N and O language to powered-lift. AQP provides an alternative method for qualifying and training pilots to ensure competency while providing an equivalent level of safety to those required by a subpart N and O training program. Additionally, the flexible, performance-based standard of an AQP will best suit the SFAR's novel training paradigm for powered-lift through the integration of safety program data, scenario-based training and evaluations, crew resource management (CRM) training, customization to the certificate holder's unique demographic and flight operation, and innovative instructional methods and technology.

The FAA proposed § 194.247(b) to require certain elements within the AQP in recurrent ground training for PICs every 36 months. This is to ensure that the training received by powered-lift pilots under subpart Y of part 121 to that required for PICs in airplane commuter operations in which two pilots are required by type certification. Specifically, the FAA proposed § 194.247(b)(2)(i) to require that these PICs receive training, instruction, and facilitated discussion on leadership and command and mentoring as part of their initial, recurrent, and upgrade ground training. This requirement is similar to the initial, recurrent, and upgrade ground training requirements that govern airplane commuter operations.³⁶³ Proposed § 194.247(b)(2)(ii) requires that mentoring training include techniques for instilling and reinforcing the highest standards of technical performance, airmanship, and professionalism in newly hired pilots. Finally, proposed § 194.247(b)(4) includes requirements

for initial and upgrade flight training for PICs to contain sufficient scenario-based training incorporating crew resource management and leadership and command skills, to ensure the pilot's proficiency as PIC.

The FAA received one comment specifically pertaining to the amendments proposed in § 194.247. AWPC opposed the requirement to adhere to subpart Y of part 121. AWPC contended that requiring powered-lift operators to adhere to subpart Y is excessive and burdensome because the programs require more time, larger staffing, and higher costs than other training programs, which would be incongruent to apply only to powered-lift operators. Instead, AWPC suggested that powered-lift part 135 operators should adhere to the same regulations as helicopter part 135 operators.

The FAA recognizes that establishing an AQP may place a burden on operators.³⁶⁴ However, it is important to recognize that these burdens (e.g., detailed job task analysis, increased evaluator and trainer requirements, development of performance measurement tools and qualification standards) are offset by the significant benefits offered by an AQP. Unlike traditional training programs, which use maneuver-based training and evaluation and often segment simulation events in a manner that fails to realistically build up the accident error chain, AQP scenario-based training and evaluation more closely simulate the actual flight conditions known to cause most fatal carrier accidents. This approach aligns training and evaluation with known causes of human error, focusing on both crew and individual performance as well as integrating flight training with CRM skill training. Moreover, AQP offers greater efficiency to operators by allowing for proficiency based training, as opposed to prescriptive programmed hours.

Whether a training program falls under subparts N and O of part 121, subparts E, G, and H of part 135, or subpart Y of part 121, the financial burden of adding a new category of aircraft, such as powered-lift, to a certificate holder's operations is similar. All training programs require a front-end analysis of the certificate holder's operation, aircraft, line environment, and job functions for each duty position. Additionally, the regulations require the development of FAA-approved operational manuals and training and qualification of all instructors and

³⁵⁹ Specifically, the NPRM discusses the intention of reducing accidents and incidents related to human performance in commuter operations and ensuring a balanced mix of training and checking to enhance public and passenger safety. 88 FR 38946 at 39010 (June 14, 2023).

³⁶⁰ In accordance with § 121.424 of subpart N, flight training must include at least the maneuvers and procedures specified in appendix E to part 121. In accordance with § 121.441 of subpart O, proficiency checks must include at least the maneuvers and procedures specified in appendix F to part 121.

³⁶¹ The FAA notes that the proposal to use an AQP is temporary, as set forth in the SFAR rather than a permanent regulation. As intended with the SFAR in general, as additional information becomes available on the training and checking necessary to effectuate safety for certain part 135 commuter powered-lift operations, the FAA may revise this standard as appropriate.

³⁶² § 121.901.

³⁶³ 14 CFR part 121, subpart N.

³⁶⁴ The cost for the AQP information collection for AQP is included in the PRA section of this rulemaking.

evaluators in adding a new category of aircraft to a certificate. The process of adding a new aircraft category requires data collection and analysis processes for both the initial and final approval of training programs and the issuance of the appropriate operation specifications. The FAA notes that 24 certificate holders, which includes one part 135 operator, to date, have voluntarily chosen to implement the AQP over the standards in part 121 N&O. This voluntary adoption of AQP supports that certificate holders have determined the benefit of implementing an AQP exceeds its costs.³⁶⁵ As well, of the ten projects undergoing type-certification at the FAA, only one project requires two pilots by type certification (the AW-609), and thus subject to the subpart Y of part 121.

As previously discussed, § 135.3(b) sets forth certain training program and qualification requirements specifically for commuter operations that use airplanes in which two pilots are required by type certification; conversely, § 135.3(c) sets forth training program and qualification requirements for those aircraft to which paragraph (b) does not apply but who opt to use part 121 training standards.

The FAA maintains that allowing powered-lift to make use of the “opt in” provision in § 135.3(c) to utilize subparts N and O of part 121 is unworkable. As previously explained, subparts N and O of part 121 are multiengine airplane specific and, at this time, the FAA is not amending part 121 to accommodate powered-lift operations. For example, subparts N and O contain left and right seat requirements whereas some powered-lift may only have one seat, training hour requirements are tied to airplane types, and extended envelope training is tailored to airplane characteristics that may not be applicable to powered-lift. Additionally, powered-lift may present new requirements (such as tandem seating for pilots) or different flight envelopes not currently covered by subparts N and O. Having an N and O section that does not adequately address powered-lift issues in full would create a training gap among powered-lift pilots and not satisfy the intent of the training program.

As ALPA commented, the permanent integration of powered-lift into part 121 operations is premature; amending part 121 for powered-lift operations requires

extensive analysis of operational history based on lessons learned from the initial SFAR period and part 135 operations. The application of subparts N and O as written would mandate that a powered-lift flightcrew perform some airplane-specific tasks incongruent with powered-lift operational capabilities. These subparts do not include specific tasks that are imperative to powered-lift operations. This as-is application could result in PICs that are insufficiently trained and checked on some maneuvers that powered-lift possess the operational capability to conduct.

Likewise, the application of subparts E, G, and H under part 135 to powered-lift is insufficient due to the expectation of safety during commuter operations. As discussed in the NPRM, the FAA adopted a final rule in 1995, upon recommendation from the NTSB, to require airplanes that require two pilot crewmembers to comply with the training, checking, and qualification requirements of part 121 (*i.e.*, subparts N and O).³⁶⁶ Specifically, the FAA considered the number of passengers and types of operations that the part 135 commuter carriers conduct and determined that comprehensive training requirements set forth by part 121 achieved a stronger level of safety. Specifically, part 121 training, to include CRM, benefits these types of passenger-carrying operations because it provides more emphasis on training, whereas the part 135 rules (*i.e.*, subparts E, G, and H) rely more heavily on testing and checking requirements. Powered-lift that require two pilots by type certification will be similarly complex as airplanes in both operating characteristics and in types of operation and require a similarly high caliber of pilot training to ensure the public is as safe as they would be in a part 121 operation.³⁶⁷

Powered-lift operations are expected to be operating in densely populated areas, landing in complex airspace, and are significantly novel in that the true diversity and complexity of future operations are difficult to predict. Powered-lift operations will be able to operate similar to current helicopter operations in take-off and landing along with confined landing areas while also having a predominant amount of the flight similar to an airplane at higher altitudes and speeds. Helicopters are

excepted from the same requirements as airplanes because they generally do not take on the complex nature of airplane commuter operations, which may often be conducted under IFR, with numerous passengers in busy, complex airspace, and in aircraft with complex systems and/or crew resource management demands. If powered-lift are expected to take their place among or, alternatively, replace some airplane commuter operations, they must achieve the same level of safety expected by the public.

The unique nature of powered-lift as an entrant aircraft and significant differences between types necessitate specific training tailored to the operator's actual environment. Therefore, the FAA determined the AQP is the most appropriate mechanism to facilitate a customized, data-informed training program able to leverage technological and training innovation. The data driven component of an AQP will ensure that carriers are able to more precisely identify critical training requirements for their novel operations that may be unique to the type of powered-lift. In addition, AQP provides a trained-to-proficiency model that uses planned hours, that exceeds the training and checking paradigm imposed under subparts N and O of part 121.

In further reviewing the AQP requirements in subpart Y of part 121, the FAA found that §§ 121.903(c) and 121.921(a) contain the word “airplane” versus the term “aircraft,” which is used in the remainder of regulations in subpart Y. Notwithstanding the reference to aircraft in §§ 121.903(c) and 121.921(a), the intent of the NPRM remains the same—to conduct training under subpart Y rather than subparts N and O—and the regulatory impact cost analysis unchanged. In the final rule, the FAA is requiring commuter operators to use AQP in subpart Y of part 121 as proposed. However, the FAA modified § 194.247(b)(1) to apply requirements of §§ 121.903(c) and 121.921(a) to powered-lift.

After thorough analysis of all these factors, including any additional burden to the certificate holder, the FAA has determined to maintain the position that commuter operations under part 135 should be required to train under an AQP in accordance with subpart Y of part 121. As noted, the FAA's decision is based on the inapplicability of part subparts N and O in part 121 and the fact that subparts E, G, and H of part 135 are not sufficient in the level of training needed for powered-lift commuter operations. The use of AQP for powered-lift reflects a commitment to achieving a high standard of safety and operational efficiency.

³⁶⁵ Over 90% of part 121 pilots are trained under an AQP program, with 25 part 121 AQPs approved and 1 pending. There is currently 1 part 135 operator and 2 other part 135 operators in the approval process. All of the 121s and 135s are opting to comply with AQP.

³⁶⁶ Final rule: Air Carrier and Commercial Operator Training Programs, 60 FR 65940 (Dec. 20, 1995).

³⁶⁷ The FAA proposed to use the phrase “two pilots as required by the aircraft flight manual”. For the final rule, the FAA decided to use the term “as required by type certification” to appropriately mirror § 135.3.

4. Applicability of Rules for Eligible On-Demand Operations (§ 135.4)

Section 135.4 describes pairing and experience limitations as well as operational limitations for eligible-on demand operations. Section 135.4 applies to powered-lift; however, § 135.4(a)(3), when describing pilot operating limitations, applies only to fixed-wing aircraft. Section 135.4(a)(3) provides certain conditions when the pilot-in-command shall make all take-offs and landings while conducting an eligible-on demand operation. The FAA maintains that powered-lift may have more complex landing situations than fixed-wing when operating under conditions listed in (a)(3)(i) and (a)(3)(ii),³⁶⁸ and that the experience mandated by the regulation should be applied to powered-lift as well.

The FAA proposed in § 194.307 to apply the pilot operating limitations in § 135.4(a)(3) to powered-lift. The FAA did not receive any comments, and the section is adopted as proposed.

5. Pilot in Command Qualifications (§ 135.243)

Section 135.243 prescribes qualifications for pilots serving as PIC in certain passenger-carrying part 135 operations, passenger and cargo flights under VFR, and passenger and cargo flights under IFR. Such qualifications include minimum certificates, ratings, and hours of pilot time, cross-country time, night flight time, and, if applicable, actual or simulated instrument time. Certain PIC requirements in § 135.243 apply to all aircraft (*i.e.*, § 135.243(b)(1)–(2), (c)(1)(2)); therefore, these requirements that generally apply to PICs in any aircraft in part 135 operations apply to PICs of powered-lift. Other PIC requirements are specific to the category (*i.e.*, airplane) or class (*i.e.*, helicopter) of aircraft being flown (*e.g.*, § 135.243(b)(3) applies to airplanes; § 135.243(b)(4) applies to helicopters). For these sections that do not include a specific provision for powered-lift, the FAA proposed certain permanent changes to incorporate powered-lift specific requirements into § 135.243. This section discusses each proposed revision, relevant comments to the proposal, and resulting final amendments.

i. Section 135.243(a)

Section 135.243(a) prescribes the general requirements for a person to

serve as PIC in certain passenger-carrying operations. Specifically, under § 135.243(a), to serve as PIC in a passenger-carrying operation of (1) a turbojet airplane, (2) an airplane with a passenger-seat configuration of 10 seats or more, or (3) a multiengine airplane in a commuter operation, a person must hold an ATP certificate with appropriate category and class ratings and, if required, an appropriate type rating for that airplane. Similarly, § 135.243(a)(2) requires a person to hold an ATP certificate, appropriate type ratings, and an instrument rating to serve as PIC in passenger-carrying operations of a helicopter in scheduled interstate air transportation³⁶⁹ within the 48 contiguous states.

As previously noted, the FAA proposed to add specific requirements for powered-lift as permanent changes³⁷⁰ to align with the existing requirements specific to airplanes and helicopters. Without adding a provision for powered-lift to § 135.243(a), § 135.243(b) and (c) would dictate PIC qualifications for powered-lift in certain passenger-carrying operations based on whether the operation is conducted under VFR or IFR (*i.e.*, only a commercial pilot certificate with a powered-lift category rating and a type rating would be required). Leaving the regulation unchanged would result in less stringent PIC requirements for powered-lift PICs in complex passenger-carrying operations than those required to serve as PIC of an airplane or helicopter.

Therefore, the FAA proposed to permanently add paragraph (a)(3) to § 135.243 to require the PIC of a powered-lift to hold an ATP certificate with a powered-lift category rating and an appropriate type rating not limited to VFR for that powered-lift, when serving as PIC in: (1) on-demand passenger-carrying turbojet-powered powered-lift

³⁶⁹ Interstate air transportation is defined in 14 CFR 1.1: the carriage by aircraft of persons or property as a common carrier for compensation or hire, or the carriage of mail by aircraft in commerce: (1) Between a place in a State or the District of Columbia and another place in another State or the District of Columbia; (2) Between places in the same State through the airspace over any place outside that State; or (3) Between places in the same possession of the United States;

Whether that commerce moves wholly by aircraft of partly by aircraft and partly by other forms of transportation.

³⁷⁰ As discussed in the NPRM, a permanent revision aligns with the permanent revisions in part 61 requiring the PIC in powered-lift operations to hold a type rating (*i.e.*, § 61.31) and existing requirements within § 135.243 for airplanes and helicopters. The FAA may propose subsequent amendments to modify the certification standards for powered-lift PICs within § 135.243(a) as more operational information is collected during the life of the SFAR. See 88 FR 39013 (June 14, 2023).

operations; (2) on-demand operations in a powered-lift having a passenger seating configuration, excluding crewmember seats, of 10 or more; and (3) powered-lift commuter operations other than turbojet-powered powered-lift (hereinafter collectively referred to as “certain part 135 commuter and on-demand powered-lift operations”). Consequently, as proposed, if a powered-lift PIC could not satisfy the ATP certificate requirements, that operator would be limited to conducting part 135 on-demand operations with non-turbojet-powered powered-lift containing less than 10 passenger seats until the ATP certificate requirements are satisfied. As proposed, under § 135.243(a)(3), a PIC would not be permitted to serve as PIC with a powered-lift type rating with a “VFR only” limitation in the aforementioned part 135 operations.³⁷¹

ALPA disagreed with the FAA’s proposed requirement for powered-lift PICs to hold an ATP certificate and type rating only for on-demand operations involving 10 or more passenger seats. ALPA recommended that instead, if an ATP certificate is required for traditional helicopter operations, an ATP certificate should also be required for similar powered-lift operations regardless of seat capacity, to ensure the highest level of safety in this novel aircraft type and its operations.

Bristow stated that operators of powered-lift in commuter operations will be required to have an ATP certificate, but there is no relief provided in the proposed rules that allows pilots to obtain experience necessary for an ATP certificate. The commenter contended that the small pool of military pilots with powered-lift experience will hamper AAM commuter services. The commenter also noted that AAM operations will be different than the other operations requiring the PIC to hold an ATP certificate—functioning more like taxi/bus services than as an alternative to commercial aircraft service.

In response to ALPA’s comment on the scope of ATP certificate requirement, the FAA notes that the regulatory text as proposed and finalized in this rulemaking will apply to more operations than just those where the powered-lift passenger-seat configuration consists of 10 seats or more (excluding each crewmember

³⁷¹ The FAA proposed a permanent change to replace the outdated reference to commuter operations as defined in “part 119” with “part 110” in §§ 135.243(a)(1) and 135.244(a) in light of the transfer of definitions from § 119.3 to a new part 110. final rule: Operations Specifications, 75 FR 7482 (Feb. 10, 2011).

³⁶⁸ These conditions relate to prevailing visibility at the airport, visual range for the runway, runway conditions (*e.g.*, water, snow, ice), crosswinds, and windshear.

seat). The ATP certificate and type rating requirement also will be required for (1) turbojet-powered powered-lift, and (2) powered-lift in commuter operations as defined in part 110. Thus, a PIC will be required to hold an ATP certificate and type rating for a commuter operation as defined in part 110 even if the powered-lift itself had a passenger-seat configuration of only four. The FAA has determined that, similar to the airplane operations that require a pilot to hold an ATP certificate, the aforementioned powered-lift operations involve greater complexity and therefore require the highest level of pilot proficiency and experience. This requirement is commensurate with the public's expectations for safety in commercial operations involving routine scheduled flights.

The NPRM provided extensive discussion in support of the requirement to hold an ATP certificate with a powered-lift category rating and appropriate type rating not limited to VFR for certain part 135 commuter and on-demand powered-lift operations.³⁷² Primarily, the operations that are envisioned for powered-lift are virtually identical to those existing airplane and helicopter operations in part 135 that require ATP certification. As such, PIC qualifications must remain consistent across operations to address the similar level of risk in the complex operations (e.g., passenger carriage, duration of flight time, operating systems, high-traffic areas in the NAS, etc.). This complexity necessitates robust knowledge, training, and flight time to achieve the highest level of safety.

To the extent that ALPA suggests that the ATP certificate requirement should apply to the same operations applied to helicopter operations (*i.e.*, all interstate operations regardless of passenger capacity), the FAA does not agree. PICs in on-demand and non-common carriage operations in smaller powered-lift that are not turbojet-powered are not required to hold the ATP certificate when conducting interstate operations. If the FAA applied the same rule as helicopters, these interstate operations in smaller powered-lift would require the PIC to hold an ATP certificate. The FAA finds that an ATP certificate for these types of operations typically involve smaller and less complex aircraft, flying for a shorter duration of time with a lower passenger-carrying capacity.

Under the hypothetical application of § 135.243(a)(2) to powered-lift, virtually all passenger carrying operations that

crossed state lines would require an ATP certificate. In addition, a blanket requirement of an ATP certificate for powered-lift for all flights would be a higher requirement than any other existing aircraft in similar operations and create an undue burden for powered-lift operations. This paradigm most aptly balances the need for increased experience in complex operations and operating environments without overly burdening other operations where a greater amount of flight time, training, and qualification is not necessary.

Bristow's comments provide a perspective that AAM operations will be different than the most traditional commercial operations that require the PIC to hold an ATP certificate. However, the pilot requirements in § 135.243(a)(3) apply to all part 135 commuter operations, and the characteristics of AAM operations described by Bristow, such as shorter, more predictable routes within urban environments and lower altitudes, do not justify lessening these requirements. While some AAM operations may resemble taxi or bus services in their function of ferrying passengers over relatively short distances, the complexities and potential risks of commuter operations are significantly greater.

The argument that such operations could be equated to ground transportation overlooks the inherent complexities of aviation, where the consequences of failures or emergencies can be immediate and significantly different than the AAM operations described by Bristow. The FAA maintains that the safety requirements and pilot qualifications, including the requirement for an ATP certificate, must reflect the potential risks and complexities associated with all part 135 commuter operations in all powered-lift designs. The AAM operational characteristics described by Bristow, although distinct, do not inherently diminish the potential criticality or safety implications of emergencies that might occur during powered-lift operations.

To the extent that Bristow expressed concerns that the FAA proposed no relief from the ATP certificate requirements to accommodate ATP certificate requirement in § 135.243(a)(3), the FAA foresees numerous paths to obtain the experience needed to serve in a commuter operation. Initial cadre programs under the SFAR and part 135 operations not requiring an ATP certificate will allow pilots to begin amassing experience needed to serve in more demanding commuter operations.

Finally, the FAA may not base a proposed regulation solely on a perceived lack of appropriately qualified pilots, and it sees no compelling safety case for reducing the experience requirements for a new category of aircraft. Reducing the experience requirements for ATP certification, particularly for a novel and limited segment like AAM, would not align with the FAA's mandate to uphold appropriate standards of safety. Therefore, § 135.243(a) is being finalized as proposed.

ii. Section 135.243(b) and (c)

Except as specified in § 135.243(a), § 135.243(b) and (c) establish the minimum pilot certificate, ratings, and flight time that a PIC must have when conducting part 135 VFR operations and part 135 IFR operations, respectively. Specifically, under § 135.243(b)(1) and (c)(1), to serve as a PIC of an aircraft under VFR or IFR, the person must hold at least a commercial pilot certificate with the appropriate category, class, and type rating (if type rating is required) for that aircraft. Additionally, dependent on whether the PIC seeks to operate under VFR or IFR, the PIC must meet certain flight time requirements set forth by § 135.243(b)(2) and (c)(2). Because these requirements apply to PICs of all aircraft, they would equally apply to powered-lift PICs.

However, § 135.243(b)(3) and (4) and (c)(3) and (4) prescribe additional requirements specific to airplanes and helicopters regarding instrument ratings and flight time requirements. Notably, these paragraphs do not account for the requirements applicable to PICs operating powered-lift under VFR or IFR. Therefore, the FAA proposed to permanently amend § 135.243(b) and (c) to set forth parallel requirements for powered-lift operations under VFR and IFR.

Specifically, paragraphs (b)(5) and (c)(5) would require the PIC of a part 135 VFR operation and a part 135 IFR operation in a powered-lift to hold an instrument-powered-lift rating or an ATP certificate for the powered-lift category. These requirements largely mirror the existing requirements for PICs of part 135 airplane operations under VFR (or VFR over-the-top in the case of helicopters) and IFR in airplanes and helicopters (*i.e.*, for airplane, an instrument rating or an ATP certificate with an airplane category rating; for helicopters, an instrument-helicopter rating or an ATP certificate with a category and class rating for that aircraft, not limited to VFR).

Several commenters, including Archer, Eve, GAMA, and L3Harris,

³⁷² 88 FR 38946 at 39012 (June 14, 2023).

opposed proposed § 135.243(b)(5) requiring an instrument-powered-lift rating or an ATP certificate with a powered-lift category rating for operations under VFR. Archer disagreed with the FAA's assessment that the operational characteristics of powered-lift are sufficiently different from helicopters to justify requiring an instrument-powered-lift rating for part 135 VFR operations. Archer stated that the type certification process will demonstrate that their aircraft features the same key operating characteristics as helicopters and, further, that the requirement for initial commercial powered-lift pilots to hold an airplane or helicopter instrument rating would provide an additional layer of safety beyond that which is currently required for part 135 VFR helicopter pilots. Archer further contended their specific model will have similar configuration as a helicopter.

Eve also recommended having powered-lift treated as helicopters in this regard and to incorporate instrument "awareness training" in commercial training and checking. Additionally, L3 supported striking out powered-lift from the proposed § 135.243(c)(5) text. L3 recommended that any instrument rating, such as an airplane instrument rating, should be able to satisfy the instrument rating requirement in § 135.243(c)(5).

The FAA requires an instrument rating for part 135 VFR airplane operations because if an airplane encounters inadvertent instrument meteorological conditions (IMC), the pilot must have the necessary knowledge and skills to maintain safe control of the airplane, transition to instruments, coordinate with ATC, and maneuver the airplane to an emergency instrument approach and landing at an airport. The FAA currently does not require an instrument rating for part 135 VFR helicopter operations, recognizing their capabilities for slow flight and ability to land in a variety of conditions. While powered-lift shares many characteristics with helicopters, a primary consideration in requiring an instrument rating for VFR operations is the powered-lift cruise profile. The FAA anticipates that other than necessary for takeoff and landing, many powered-lift will be optimized to primarily utilize lift provided by the wing for as long as practical to maximize efficiencies in fuel consumption, speed, and range similar to an airplane. This means many will operate at increased altitudes and faster airspeeds and may require more time and distance to avoid IMC and complete an emergency approach and landing compared to a helicopter. While

some powered-lift may have the ability to fly at slower airspeeds when operating in the vertical-lift flight mode, this requires additional pre-flight planning to ensure the aircraft has sufficient fuel/energy reserves to complete the flight in the vertical-lift flight mode.³⁷³ However, IIMC events are not planned, therefore the fuel/energy reserves on the aircraft may be insufficient to transition from the wing-borne to the vertical-lift flight mode and complete the flight in VFR conditions. Because not all powered-lift types will have sufficient capability to avoid and recover from IMC as readily as their helicopter counterparts, the FAA has determined the instrument rating provides a core competency that will increase safe outcomes when unexpectedly transitioning from VMC to IMC conditions.

While the FAA recognizes that some manufacturers' aircraft may have the ability to transition rapidly into hovering flight modes or will operate at slower airspeeds, the rule must encompass the entirety of possible powered-lift designs. Some designs may not have the capability of entering slow flight, and if they do, it may be extremely time limited due to power consumption to complete a safe recovery at a suitable landing area. Others may not have the capability to transition into slower-flight modes in time to avoid an instrument encounter. In time, classes may emerge that will allow for a diversification of rules among the powered-lift fleet.

Due to their ability to have multiple configurations of flight, it is important that powered-lift specific instrument skills be applied. Configuration changes during approach, novel systems, and automation, as well as unique emergency procedures make having an instrument rating in category critical to the expected level of safety demanded of part 135 operations. The FAA has created instrument ratings that are category and sometimes class (in the case of helicopters) specific instead of being a universal rating on all categories for the very reason that these categories and individual classes are unique enough in operation that the training must be tailored as such.

Many proposed operating areas for powered-lift are in densely populated

urban areas, where an IIMC encounter may pose significant public risk if a loss of control occurs. Requiring powered-lift pilots to have an instrument rating during VFR operations on par with airplane requirements ensures that PICs of powered-lift possess the proper skills to safely conduct flight in the event of IIMC where pilot error can immediately become critical.

Eve suggested that requiring an IFR rating is an overreach, given some powered-lift may not even be capable of instrument flight. The rationale behind the requirement is not to allow the aircraft to be flown IMC when conditions deteriorate (as it is a VFR only operation), but instead to ensure the pilot has the skills, experience, and knowledge in the category to keep the aircraft under control both during and before IIMC. Eve further suggested that many models will likely be operating along planned routes, near forecast weather, and short distances. This cannot be predicted for all types across the category, however, and innovative uses of powered-lift may rapidly expand beyond this possible area of operations. Although a powered-lift may not be type-certified for IFR operations, pilots can still acquire an instrument rating using these aircraft. This is similar to the situation with many helicopters, which may not be type certified for IFR flight, yet pilots often obtain their instrument ratings in these helicopters by conducting simulated IMC training in VMC.

There may be future aircraft designs such that the skill, knowledge, and experience that the instrument rating for VFR operations otherwise brings will no longer be necessary. In addition, the environment where some powered-lift operations occur may be isolated, limited, or strictly controlled, proving that the instrument rating for VFR operations may be unnecessary to maintain safety. However, until further data is collected through operational use and experience of powered-lift, the FAA is maintaining the instrument rating or ATP requirement for powered-lift PICs operating under VFR, aligning the regulation with the requirements imposed for airplanes.

GAMA, as part of its argument that powered-lift are add-on ratings to the existing categories of rotorcraft or airplane, suggested that § 135.243 should be amended to allow for the instrument rating (when required under the above regulation) to be held in airplane or rotorcraft category (since there would be no powered-lift category in this case). Recency would be accomplished in the aircraft type. This

³⁷³ Powered-lift operators wishing to utilize helicopter weather minimums and helicopter VFR fuel reserves must demonstrate that their aircraft can meet certain performance and operational criteria to ensure the powered-lift can safely conduct a landing in vertical-lift flight mode at any point along the flight route. Absent this capability, the powered-lift is required to adhere to the airplane standards for weather minimums and fuel reserves.

is based on ICAO developed guidance as stated in GAMA's comment.

Due to the novelty of powered-lift, blended capabilities, their differing capabilities, use of advanced technology, and unique applications, the FAA has decided it is more prudent to develop powered-lift as their own independent category. It is not required that the FAA align all its regulations with ICAO recommendations regarding powered-lift. Having a separate category as airplane or rotorcraft would make holding a category specific instrument rating tailored closer to the powered-lift capabilities and type of operations. Therefore, the FAA adopts the provision as proposed.

6. Operating Experience (§ 135.244)

Section 135.244 specifies that before serving as PIC in a commuter operation in part 135, a pilot must accomplish operating experience on the make and basic model aircraft to be flown. This section, through use of the term "aircraft," applies to powered-lift. The hours of operating experience required are set forth in § 135.244(a)(1) through (4) and are tailored to specific aircraft types: single-engine aircraft, multiengine reciprocating engine-powered aircraft, multiengine turbine-engine powered aircraft, and turbojet-powered airplanes. These categories, established in the 1980s, did not foresee the use of powered-lift in part 135. Further § 135.244(b) prescribes the manner and timing through which the pilot must accomplish the operating experience and specifically requires the operating experience to be accomplished in the aircraft. Section 135.244(b) had no proposed changes in the NPRM due to the reference to aircraft and would include powered-lift.

To address this concern in § 135.244(a)(1) through (4) which do not include specific hours of operating experience for powered-lift, the FAA proposed in § 194.247(c) to require 20 hours of operating experience in make and basic model of powered-lift before serving as PIC in part 135. This 20-hour operating experience requirement parallels the requirement for multi-engine turbine airplanes, which share similar characteristics in terms of complexity. Additionally, § 194.247(c) would except powered-lift from the legacy operating experience requirements under § 135.244(a). By placing the powered-lift requirement in the SFAR, the FAA would retain the flexibility to adjust the 20-hour operating experience requirement as new data and insights become available to align the operating experience

requirements with powered-lift operations.

Eve submitted comments regarding the amendment of §§ 135.244(b) and 194.247. Similarly, L3Harris provided comments on the same amendments. Eve and L3Harris did not challenge the number of hours prescribed under § 194.247(c); however, they commented that scenario-based flight training or line-oriented flight training in an FSTD equivalent to a Level C or higher in category, class, and type, while under the direct observation of a qualified instructor, should replace 50 percent of the hours required in § 194.247(c). They further contended that each hour of operating experience be replaced with "one full operating cycle." As noted in section V.F. of this preamble, the FAA interprets the term "operating cycle" as it is defined in § 121.431 as a complete flight segment consisting of a takeoff, climb, enroute portion, descent, and a landing.

Section 135.244(a) arose from a series of accidents in commuter operations in which the PIC had little to no flight in the particular make and model of aircraft they were to fly in revenue operations.³⁷⁴ While line-oriented and scenario-based flight training are useful training experiences, time obtained in an FSTD may not adequately replicate the range of real-world operational scenarios that were the purpose of the original rule. The FAA emphasizes that, while FSTDs provide valuable training opportunities, they currently do not fully simulate the complexities of the NAS, including factors such as ATC communications, air traffic, ground operations, and other operational elements inherent in a part 135 commuter operation.

This recommended modification to allow operating experience to be accomplished in FSTD would be difficult to limit only to powered-lift as such allowance is not currently permitted in established categories of aircraft that part 135 pilot will have far more extensive experience flying in the NAS.³⁷⁵ Such a significant change for all categories of aircraft necessitates a thorough evaluation of potential safety implications across different operational contexts, which has yet to occur. This departure from "real-world" experience

would be beyond the scope of the current rulemaking effort. The FAA recognizes the advancements in simulation technology and its growing role in pilot training. The FAA is actively evaluating the use of FSTDs in training to this degree, and it is conceivable that advancements in FSTD technology and demonstrated equivalency in safety outcomes may warrant a reevaluation of the current stance in the future. However, the rationale for FSTDs to provide a level of training equivalent to real-world operations is a subject of ongoing assessment.

In addition, the evaluation of new and emerging simulation technology, such as the use of virtual reality (VR) devices on qualified FSTDs, and the ability to realistically simulate scenarios/situations is also currently being evaluated by the FAA. There are current pathways that would allow for operators to have that technology assessed under part 60 as discussed in section IV.C. of this preamble. At this time, the use of such immersive simulation technologies have not been fully evaluated for use on qualified FSTDs; nor are they currently utilized in training to this degree.

The requirement for operating experience in actual aircraft operations is rooted in ensuring the highest level of safety and public confidence in commercial aviation. Thus, the FAA maintains the importance of actual in-flight experience in the basic make and model of aircraft to be flown. This experience encompasses many "real-world" occurrences such as air traffic control, certain weather conditions, passengers, ground obstacles/hazards, or other factors that can play an important role in the development of a pilot's aeronautical decision-making skills and operational proficiency in the actual passenger-carrying part 135 commuter operations.

To the extent that commenters recommended replacing each hour of flight with an "operating cycle" when there is already a provision to reduce the flight hours by fifty percent for each takeoff and landing, this allowance would potentially reduce hours even further than currently allowed by § 135.244(b)(4). That section already permits the substitution of hours with takeoffs and landings. Replacing hours with operating cycles would further decrease hours and reduce the experience level of initial PICs in commuter operations to unacceptable levels.

While the FAA appreciates the suggestions put forth by the commenters, the current regulatory approach requiring actual aircraft

³⁷⁴ 45 FR 7540 (Feb. 4, 1980).

³⁷⁵ As commenters have noted, they anticipate difficulties meeting even the minimum flight time requirements in powered-lift necessary for certificates and ratings whereas airplane and helicopter pilots will have built the majority of their flight time in airplanes and helicopters. It would be difficult to support relief from an in-flight requirement by allowing FSTD time for operating experience especially given the other increases FSTD use permitted in this final rule.

operating experience as prescribed in § 135.244(b) will be maintained. The FAA will continue to monitor advancements in FSTD technology and their potential application in pilot training programs. Any future changes to the regulatory requirements will be considered through a comprehensive rulemaking process, ensuring stakeholder engagement and adherence to safety priorities.

Eve commented that § 61.64 requires pilots who completed their practical test in a flight simulator without meeting certain experience requirements to complete 25 hours of supervised flight with a qualified pilot-in-command before their PIC restriction is lifted. Eve argued that in the cases in which a pilot is completing the supervised operating experience mandated by § 61.64, the operating experience requirements of §§ 135.244 and 194.247 may be considered satisfied.

A pilot can concurrently comply with the requirements of supervised operating experience of § 61.64 if the operating experience requirements and provisions of §§ 135.244 and 194.247 are also complied with. The time requirements for the applicable regulations address differing objectives of the operating experience. Section 61.64 addresses experience not received in the actual aircraft, whereas § 135.244 provides passenger-carrying experience to a new pilot who is learning about the operation. The requirements under § 135.244(b) are more restrictive, as they require the observations to be conducted during part 135 commuter passenger-carrying operations. In the case of an aircraft not previously used by the certificate holder in part 135 operations, operating experience acquired in the aircraft during proving flights or ferry flights may be used. As a result, part 61 SOE cannot replace the part 135 operating experience requirements—it would not, on its own, satisfy the requirements of § 135.244(b). However, should the § 61.64 requirements be satisfied during § 135.244(b) operating experience, completing them concurrently (as opposed to one in lieu of another) is possible. In this case, the pilot satisfying the requirements of § 61.64 must meet all requirements to serve in a part 135 commuter operation.

HAI contended twenty hours of PIC in each make/model of powered-lift is impractical, and that training in the basic make/model of any other type of aircraft is considered sufficient without providing any additional safety argument.

The FAA chose twenty hours in the aircraft to mirror multi-engine turbine engine-powered requirements. The FAA

expects many powered-lift, due to their novel nature and complex systems, to be on par with the level of complexity as these multi-engine turbine engine jets. The powered-lift category presently includes aircraft as complex as the AW-609, which is neither small nor simple in systems or operation. The rule must be inclusive of and appropriate to all powered-lift that may exist within the category. In time, if classes emerge in powered-lift that are significantly more or less complex, higher or lower minimums may be implemented. With regard to the comment that 20 hours of PIC in each make and model is impractical, HAI did not provide any explanation for its statement. To the extent that HAI suggests that time in any make and model of powered-lift should count for all makes and models of powered-lift, this allowance would be inconsistent with the requirements imposed on other categories of aircraft in § 135.244. As HAI provided no safety justification for disparate requirements, the FAA is finalizing § 194.247 as proposed.

7. Second in Command Qualifications (§ 135.245)

In the NPRM, the FAA proposed revising § 135.245, which sets the certification requirements for SICs operating aircraft, to specifically include reference to powered-lift where appropriate. The FAA notes that a majority of the section did not require amendment as the existing language in § 135.245(a) and (d) already reference “aircraft,” a term that includes powered-lift.³⁷⁶ However, the FAA proposed amendment to § 135.245(c)(1) to add powered-lift, which will ensure the instrument currency requirements for airplane and helicopter SICs are likewise applicable to powered-lift. These proposed changes standardize the SIC instrument experience requirements across powered-lift, airplanes, and helicopters for SICs who serve in IFR operations.

In its comments, GAMA proposed amending § 135.245, recommending that the SIC instrument rating requirement for powered-lift be satisfied with either an airplane or helicopter instrument rating. This approach contemplates powered-lift as an add-on type rating to existing airplane or helicopter categories, per ICAO guidance, rather than a separate powered-lift category.

Furthermore, GAMA recommended that powered-lift type ratings should carry a VFR-only operating limitation,

³⁷⁶ The FAA notes that § 135.245(b) applies only to helicopters, and that provision is unchanged in this final rule.

unless the approved course of training is certified by the authority to include IFR operations and VFR On-top. Additionally, GAMA suggested modifications to § 135.245(c)(1), paragraphs (ii) and (iii), to align them with ICAO guidance. The totality of these comments reflect GAMA’s recommendation for integrating powered-lift into the existing regulatory framework by applying ICAO guidance applicable to airplanes or helicopters.

The FAA revised § 135.245(c) to align the SIC instrument experience requirements uniformly across powered-lift, airplanes, and helicopters. This alignment ensures that the instrument experience requirements are consistent across the categories of aircraft, addressing the core of GAMA’s recommendation for alignment. Further, having the SIC instrument experience requirements for powered-lift increases safety as explained in section V.J.5.ii. of this preamble.

Regarding GAMA’s proposal that the FAA align all its regulations with ICAO guidance regarding powered-lift, the FAA has decided on a different path. After thorough consideration, detailed in section V.J.7. of this preamble, the FAA has determined that the skill level and knowledge required for pilots of powered-lift necessitate a more conservative stance instead of applying ICAO recommendation to § 135.245.

The FAA adopts the provision as proposed in the NPRM.

8. Pilot Qualifications: Recent Experience (§ 135.247)

Section 135.247 specifies the recent takeoff and landing experience that a PIC must complete within the preceding 90 days to carry passengers in an aircraft. Under § 135.247(a)(3), the PIC of a turbine-powered airplane type certificated for more than one pilot must complete an alternative to the night takeoff and landing requirements. To complete an alternate path, a PIC must serve as PIC of a turbine-powered airplane that is type-certificated for more than one pilot crewmember and comply with the requirements listed in the regulation.

Based on the active certification projects for powered-lift, the FAA expected that a majority of powered-lift will not be type-certificated for more than one pilot crewmember. For the reasons stated in the NPRM, the FAA did not propose extending the alternative experience requirements in § 135.247(a)(3) to powered-lift and, therefore, proposed no amendments to § 135.247.³⁷⁷

³⁷⁷ 88 FR 38946 at 39016 (June 14, 2023).

The FAA did not receive any comments on excluding powered-lift from the alternate provisions set forth by § 135.247(a)(3). Therefore, no regulatory changes are adopted in this final rule.

9. Initial and Recurrent Pilot Testing Requirements (§ 135.293)

In the NPRM, the FAA proposed amendments to § 135.293, which pertain to initial and recurrent pilot testing requirements, to incorporate powered-lift where appropriate. While § 135.293 remains largely unchanged, modifications have been made to the following sections to accommodate powered-lift.

Section 135.293(a)(9) specifies rotorcraft pilot testing requirements on recognizing and avoiding of hazardous visibility conditions like flat-light, whiteout, and brownout. The FAA proposed extending these requirements to powered-lift pilots, ensuring they are trained to recognize and avoid hazardous visibility conditions applicable to powered-lift.

In § 135.293(b), which specifies the requirement for pilots to complete a practical skills and techniques competency check in the aircraft every 12 months, the FAA proposed that powered-lift pilots also complete these checks for each type of powered-lift they operate. This proposal ensures that powered-lift pilots maintain the same level of competency and proficiency as required for other aircraft types.

Section 135.293(c) mandates competency checks for rotorcraft include demonstrations of maneuvering solely by reference to instruments and transitioning into VMC following an inadvertent encounter with IMC. Section 135.293(c) also requires that for non-IFR-certified rotorcraft, the pilot must perform maneuvers that are appropriate to the rotorcraft's installed equipment, the certificate holders' operations specifications, and the operating environment. Recognizing the critical importance of these skills, the FAA proposed applying these same evaluation and maneuver requirements to powered-lift pilots to ensure they possess the necessary capabilities to handle similar conditions.

Finally, regarding § 135.293(h), the FAA proposed a permanent change to remove the compliance date memorialized in this paragraph and reserve it, as the compliance date has already passed.

GAMA's comments recommend applying ICAO guidance to read the terms "helicopter" or "rotorcraft" to apply to "powered-lift." Specifically, GAMA proposes that § 135.293(a)(9),

(b), (c), and (h), as addressed above, should be applicable to powered-lift.

In response to GAMA's comments to apply ICAO guidance, the FAA notes that the proposed language for § 135.293(a)(9) already aligns with this perspective by requiring powered-lift pilots to undergo testing for hazardous weather condition recognition and avoidance. Regarding § 135.293(b), the FAA adopts language similar to multi-engine airplanes due to the complexity and unique nature of each powered-lift type, achieving similar outcomes to what helicopter-specific language would have necessitated. For § 135.293(c), the FAA's proposal incorporates the more restrictive helicopter requirement for powered-lift, in line with GAMA's suggestions. Finally, for § 135.293(h), the FAA's proposal included the application of these sections to powered-lift.

The FAA adopts the amendments to § 135.293 as proposed.

10. Pilot in Command: Instrument Proficiency Check Requirements (§ 135.297)

i. Pilot in Command: Instrument Proficiency Check Requirements (§ 135.297(a) and (b))

Section 135.297 prescribes the instrument proficiency check (IPC) requirements for the PIC of a part 135 IFR operation. The requirements in § 135.297(a) and (b) would apply to powered-lift PICs in part 135 operations as written.

The FAA did not receive any comments suggesting these provisions should not be applicable to powered-lift; therefore, no amendments are adopted in this final rule and § 135.297(a) and (b) will apply to pilots in command of powered-lift.

ii. Pilot in Command: Instrument Proficiency Check (IPC) Requirements (§ 135.297(c))

The FAA proposed amendments to § 135.297(c) to include powered-lift in the IPC requirements for PICs. The regulation defines instrument checking maneuvers for PICs flying an airplane under § 135.243(a) (turbojet of 10 or more seats or a multi-engine commuter) or PICs of airplanes and helicopters conducting IFR operations under § 135.243(c). In addition to not addressing powered-lift IPC maneuver requirements, this regulation contains a regulatory gap in that it does not include a standard for helicopter operations conducted under § 135.243(a). The FAA proposed to amend § 135.297(c)(1)(i) to broadly refer to "aircraft" to ensure consistency in the

instrument proficiency check requirements across categories of aircraft.

GAMA, as part of its broader argument that powered-lift should be considered add-on ratings to the existing categories of rotorcraft or airplane, proposed that the instrument proficiency check requirements for powered-lift in § 135.297(c)(1) match requirements with those of helicopters. GAMA's recommendation would have powered-lift adhere to the instrument proficiency check requirements of a helicopter, which prior to this final rule would have applied instrument procedures and maneuvers at the commercial pilot certificate level to all § 135.297 checks for powered-lift even those operations that require the PIC to hold an ATP certificate (*i.e.*, § 135.243(a)). The FAA maintains that every aircraft category should be evaluated on ATP instrument procedures and maneuvers when the operation requires the PIC to hold an ATP certificate. Limiting this evaluation requirement to airplanes while allowing helicopter and powered-lift operations to conduct checks at the commercial-instrument level would undercut the same rationale for holding the ATP certificate in the first place.

Therefore, the FAA adopts § 135.297(c).

iii. Pilot in Command: Instrument Proficiency Check Requirements (§ 135.297(g))

Section 135.297(g) specifies the checking requirements for PICs authorized to use an autopilot system in place of an SIC. The FAA proposed permanently amending paragraph (g)(3), which currently only references airplanes, to require that if the PIC is authorized to use an autopilot system in place of an SIC in any aircraft, the PIC must demonstrate proficiency in its use. This amendment will ensure all PICs are checked on autopilot systems to the same standard. Additionally, to provide sufficient time for existing rotorcraft operators to update their checking programs, if necessary, the FAA proposed a compliance date of six months after the effective date of the final rule for this paragraph.

The FAA did not receive any comments on the alternate provision set forth by § 135.297(g). The provision is adopted as proposed.

11. Initial and Transition Training and Checking: Flight Instructors (Aircraft), Flight Instructors (Simulator) (§ 135.340)

The FAA did not propose any changes in the NPRM to §§ 135.339 and 135.340

and, therefore, did not receive any comments on these provisions but finds amendments necessary due to related changes in this final rule. Section 135.340, which prescribes initial and transition training for instructors in aircraft and simulators, as currently written, applies to powered-lift flight instructors. To ensure the ATP certificate privileges contained in § 61.167(a) are not expanded as a result of the SFAR's airman certification training curriculum, the FAA proposed a temporary limitation to prohibit ATP certificate holders with powered-lift ratings from instructing other pilots for the purpose of obtaining a commercial pilot certificate with a powered-lift category rating or an instrument-powered-lift rating.

Regulatory language in §§ 135.339 and 135.340 currently stipulates requirements that prevent flight instructors or check airmen from qualifying in aircraft without two pilot seats, which creates a conflict with the proposed SFAR single set of flight controls pathways. Specifically, § 135.339(e)(3) requires training and practice in conducting flight checks from both the left and right pilot seats for normal, abnormal, and emergency procedures to ensure competence in conducting the required pilot flight checks. Similarly, § 135.339(e)(4) requires safety measures likely to develop during checking to be taken from either pilot seat for emergency situations. Section 135.340 contains similar requirements necessitating dual controls in paragraphs (e)(3) and (e)(4) for flight instruction.

In the case of single-pilot-seat powered-lift, the requirements under §§ 135.339 and 135.340 are not applicable due to there being no distinction between left and right pilot seats. Consequently, the FAA introduced regulatory flexibility within these sections to accommodate training in single-seat powered-lift. The amendments allow the collection of relevant data and other pertinent information during the SFAR period, which may inform future updates to the regulations as needed.

Therefore, the FAA is revising §§ 135.339 and 135.340 to reflect training required from both the pilot seat and the observer seat (when applicable) to ensure instructors and check pilots are properly trained on techniques and procedures to observe all required maneuvers when using the single controls pathway.

12. Pilots: Initial, Transition, and Upgrade Ground Training (§ 135.345)

Section 135.345 establishes the requirements for initial, transition, and upgrade ground training for pilots and includes the requirements for what training must be completed. Powered-lift will be included under the proposed expanded scope of § 135.227(b) (as discussed in section VI.D.4. of this preamble), which will require training under § 135.354(b)(6)(iv) in certain icing-related requirements. Currently, § 135.354(b)(6)(iv), is limited to airplane operators seeking authorization to take off during ground icing conditions. To address this issue, the FAA proposed extending § 135.345(b)(6)(iv) to include powered-lift through § 194.247(d), which will require the icing-related training when applicable.

The FAA did not receive any comments objecting to or suggesting modifications to § 194.247(d). Therefore, the FAA adopts the provision as proposed.

K. Part 142 Training Centers

To accommodate powered-lift in part 142 training centers, and harmonize requirements for airplanes, powered-lift, and rotorcraft, the FAA proposed to amend certain part 142 requirements. Specifically, the FAA proposed to amend §§ 142.11(d)(2)(iii), 142.47(c)(2), 142.53(b)(2) and (b)(3), and 142.57(c) to permit the use of FSTDs for powered-lift training, testing, and checking. These amendments will also harmonize the eligibility and testing requirements for instructors providing inflight training in powered-lift and training in an FSTD for all aircraft categories.

1. Subpart A—General Requirements (§ 142.11(d)(2)(iii))

Subpart A of part 142 prescribes the requirements governing the certification and operation of training centers and provides an alternative means to accomplish the training required by part 61, 63, 65, 91, 121, 125, 135, or 137. Section 142.11 sets forth the application requirements for issuance of a new or amended training center certificate and training specifications. Because the FAA expects training centers to use powered-lift FSTDs for training, testing, and checking, the FAA proposed an amendment to § 142.11(d)(2)(iii) to remove the terms “airplane” and “rotorcraft” and use the term “aircraft” to include powered-lift. With this amendment, training centers will be able to apply for training specifications and receive authorization for the use of FAA qualified powered-lift FSTDs, in addition to existing airplane and

rotorcraft requirements. The FAA did not receive comments on this amendment and adopts the amendment, as proposed.

2. Subpart C—Personnel and Flight Training Equipment Requirements (§§ 142.47(c)(2) and 142.53(b)(2) and (b)(3))

Subpart C prescribes the personnel and flight training equipment requirements for a certificate holder that is providing training to meet the requirements of part 61. First, § 142.47 prescribes the eligibility requirements for instructors in an approved flight training course and, as relevant to this rulemaking, requires each instructor to satisfactorily complete a written test accepted by the Administrator as being of equivalent difficulty, complexity, and scope as the tests provided by the Administrator for the flight instructor airplane and instrument flight instructor knowledge tests. The FAA proposed to amend § 142.47(c)(2)(ii) to apply to the successful completion of the written test for the specific category of aircraft in which the instructor will instruct. The FAA did not receive comments on this amendment and adopts the amendment as proposed. Section V.G.3. of this preamble discusses additional amendments adopted within § 142.47.

Next, § 142.53 prescribes further training center instructor training and testing requirements. Among other requirements, each instructor who instructs in a flight simulator for an ATP certificate test, type rating test (or both) must meet one of three requirements set forth in § 142.53(b)(1) through (3). Two of these options include participation in an approved line-observation program under part 121 or part 135, with certain parameters,³⁷⁸ or participation in an approved in-flight observation training course, with certain parameters.³⁷⁹ However, each of these options are airplane specific,³⁸⁰ leaving an instructor in another category of aircraft only the first compliance option in § 142.53(b)(1) (*i.e.*, in flight operations).

The FAA found, and maintains, a line-observation program as described in § 142.53(b)(2), or an inflight observation program as specified in § 142.53(b)(3), provide equivalent training and experience for FFS instructing in a rotorcraft or powered-lift as these options do in airplanes. Additionally, expanding the options to rotorcraft and powered-lift provides flexibility to select the best option for the instructor and training center.

³⁷⁸ § 142.53(b)(2).

³⁷⁹ § 142.53(b)(3).

³⁸⁰ §§ 142.53(b)(2)(i) and (b)(3)(i).

Therefore, the FAA proposed to amend paragraphs (b)(2) and (b)(3) to change the word “airplane” to “aircraft” to encompass all aircraft categories. The FAA did not receive comments on these option expansions and adopts the amendment as proposed.

Finally, § 142.57 prescribes the requirements for training center certificate holders and applicants that use aircraft for flight instruction. Specifically, § 142.57(b), as currently written, requires aircraft used for flight instruction to be at least a two-place aircraft with engine power controls and flight controls easily reached from both pilot stations. However, § 142.57(c) provides an exception to this requirement and allows a part 142 training center to use an airplane for flight instruction with certain controls³⁸¹ that are not easily reached and operated in a conventional manner by both pilots if the certificate holder has determined the instruction can be given in a safe manner considering the location of controls and their operation. Because the FAA’s original intention in implementing this regulation was to apply the exception to all aircraft, rather than only airplanes, the FAA proposed revising the exception in § 142.57(c) to apply to all aircraft. The FAA did not receive comments on the expanded flexibility and adopts the amendment as proposed. This preamble further discusses § 142.57 in the context of dual controls in section V.K.2.

Adding Inceptors to the List of Controls in § 142.57(c)

While the FAA did not receive comments on the proposed amendment to § 142.57(c) adopted herein, Eve recommended that inceptors be added to the types of controls referred to in § 142.57(c) as excepted from § 142.57(b). In other words, Eve’s proposed amendment would permit and expand the exception to controls that are required to be easily reached and operated in a conventional manner by both pilots during flight instruction. Eve did not provide supporting arguments for the exclusion of inceptors as compared to other controls; however, the FAA maintains that these controls in particular are critical to maintaining safety in in-flight instruction and, therefore, declines to expand the exception to inceptors.

Section 142.57(c) identifies several controls excepted from meeting the standard in § 142.57(b) in recognition that certain uniquely configured aircraft

could be safely operated in the context of flight instruction: nose-wheel steering, switches, fuel selectors, and engine air flow controls. In a broad context, inceptors are flight-critical controls on fly-by-wire aircraft used to adjust the flight path of an aircraft that are not excepted from the requirements of § 142.57(b). As previously defined in footnote 35 of this preamble, the term “inceptor” refers to a wide variety of non-traditional pilot controls through which pilot inputs are managed for the purpose of operating the powered-lift.

Due to the breadth of piloting tasks and systems that inceptors govern, systems that are critical must be accessible by both pilots during flight training. Given these considerations, as well as the wide variety of powered-lift designs and control features expected, the FAA does not find it appropriate to extend relief in § 142.57(c) to inceptors at this time. The FAA considered the challenges imposed by some new-entry powered-lift which may have only one set of controls (e.g., inceptors) or one pilot station, which is discussed in section V.D. of this preamble.

3. Temporary Alternate Means To Satisfy Minimum Curriculum Content in Training Courses Under Part 142 (§ 194.251)

Finally, the FAA proposed to relieve an applicant from the requirement to receive flight training on a task (or perform the task on a practical test) in accordance with an examiner’s waiver authority because the powered-lift is incapable of performing the task. In turn, the FAA proposed that a training course for which approval is requested is not required to include training on a task specified in an area of operation if the powered-lift is not capable of performing the task, provided the FAA has issued waiver authority for that task in accordance with § 194.207(b). The FAA proposed this relief in § 194.251 and did not receive any comments on this provision. As discussed in section V.H.1. of this preamble, the FAA adopted the described training and testing relief as proposed; therefore, this final rule adopts § 194.251 as proposed.

L. Subpart K of Part 91 Pilot Qualifications

Subpart K of part 91 allows for fractional owners and their respective management company to share operational control of an aircraft. This subpart details certain operational considerations pertaining to fractional ownership programs to include safety standards for pilot training and qualifications. In the NPRM, the FAA discussed how the current regulatory

framework as well as proposed amendments would be applicable to fractional ownership programs using powered-lift.

Section 91.1053 prescribes the FAA certification and ratings required to serve as a pilot in aircraft under a fractional ownership program and is applicable to powered-lift as written. Section 91.1053(a)(2)(i) requires the PIC of a powered-lift to hold an ATP certificate and applicable type ratings to conduct operations under subpart K of part 91. The FAA proposed a permanent amendment to § 91.1053(a)(2)(i) to clarify that the type rating required to operate under subpart K of part 91 cannot be limited to VFR-only operations.

The FAA received one comment in response to this proposal from Eve who proposed that the FAA apply the same requirements of pilot qualifications as already specified in § 135.243(b)³⁸² to fractional operators under subpart K of part 91. Eve suggested their proposal will allow future operators to foster the market from a less complex start, which the FAA interprets to mean an entrance into the market that is on par with similarly situated airplane operators, as well as address the current shortage of professional pilots available in the U.S. market. Eve also proposed revising the pilot qualification minima in § 135.243(b) to allow an airplane or helicopter instrument rating in place of a powered-lift instrument rating. Eve suggested this revised version of § 135.243(b) could also be incorporated into § 91.1053 to apply to subpart K of part 91 operators. The FAA determined that there is a significant safety advantage to being instrument rated in the category of aircraft flown and that instrument experience in other categories does not automatically provide the knowledge or skills to safely pilot the aircraft in an inadvertent instrument conditions encounter.³⁸³ The FAA, accordingly, adopts § 91.1053 as proposed.

Section 91.1055 prescribes pilot operating limitations and pairing requirements for fixed-wing program

³⁸² Section 135.243(b) outlines who may serve as PIC of an aircraft under VFR, and it includes a person who (1) holds at least a commercial pilot certificate with certain ratings, (2) has had at least 500 hours time as a pilot, including cross-country flight time and at night, (3) for an airplane, holds an instrument rating or an ATP certificate with an airplane category rating, or (4) for helicopter operations conducted VFR over-the-top, holds a helicopter instrument rating or an ATP certificate with a category and class rating for that aircraft, not limited to VFR.

³⁸³ As discussed, § 135.243(b) contains the PIC qualification requirements for aircraft operated under VFR.

³⁸¹ Section 142.57(c) specifically delineates controls such as nose-wheel steering, switches, fuel selectors, and engine air flow controls.

aircraft. The regulation requires the PIC to execute takeoffs and landings under certain operational conditions when the SIC has less than 100 hours of flight time as SIC in the aircraft make and model and type, if a type rating is required, and the PIC is not an appropriately qualified check pilot. The FAA proposed that this rule apply to powered-lift in § 194.245. The FAA received no comments and therefore adopts § 194.245 as proposed.

Section 91.1065 prescribes the initial and recurrent pilot testing requirements. Section 91.1065(b) specifies “multiengine aircraft;” therefore, the parts of this section that reference aircraft are applicable to powered-lift. As described in the NPRM, all powered-lift coming to market are multiengine aircraft, and the FAA does not anticipate civil single-engine powered-lift to be developed during the term of this SFAR. The FAA did not receive any comments related to § 91.1065. As such, in accordance with existing § 91.1065(b), PICs and SICs of powered-lift fractional ownership program operations must complete a competency check in each type of powered-lift in which the pilot will serve every 12 calendar months.

VI. Operational Rules for Powered-Lift

A. Introduction

As noted in the Executive Summary, the FAA received comments requesting that the FAA apply a more performance-based approach to the SFAR operational rules rather than largely apply the airplane provisions to powered-lift operations. As discussed in this section, the FAA determined that applying performance-based criteria to allow some powered-lift to use the rotorcraft/helicopter provisions for some of the operational rules is appropriate. As a result, and as discussed below in more detail, the FAA has created operational flexibility by establishing some performance-based standards for powered-lift operations.

The FAA notes there were four different regulatory tables in the proposed SFAR. The FAA addressed the parts 91 and 135 airplane provisions in the tables to §§ 194.302 and 194.307. It addressed the parts 91 and 135 helicopter and rotorcraft provisions in the tables to §§ 194.303 and 194.308. For the final rule, the FAA has combined the part 91 airplane and rotorcraft tables, now found at § 194.302, and the part 135 airplane and rotorcraft tables, now found at § 194.306.

Finally, the FAA notes that it made a technical amendment to § 194.301 to

provide further clarity. There are some existing regulatory sections that reference a specific category of aircraft such as airplanes or rotorcraft. If any of those references are not clarified in the SFAR regulatory text, then the FAA intended for them not to apply to powered-lift. Consequently, the FAA amended § 194.301 to state, “In addition, any sections or paragraphs within sections under parts 91 and 135 that refer to specific categories of aircraft and that are not referenced in the SFAR tables to § 194.302 or § 194.306, do not apply to powered-lift.”

B. Part 91 Rules for Powered-Lift

Section 91.9(a) and (b) specify the requirements for complying with the operating limitations in an approved Airplane or Rotorcraft Flight Manual, and requirements for maintaining the Airplane or Rotorcraft Flight Manual in the aircraft, as appropriate to the aircraft. The FAA proposed in § 194.302(a) to apply the requirement to comply with the operating limitations of the aircraft’s approved flight manual to powered-lift and to maintain the flight manual in the powered-lift. The FAA also proposed a permanent amendment to § 91.1(d) to change the term “airplane” to “aircraft” because these provisions apply to all aircraft. The FAA did not receive any comments related to these proposals and is therefore adopting § 194.302(a) and the amendment to § 91.1(d) as final.

The FAA received a general comment about the proposed rules for powered-lift and part 91.

AOPA argued the proposed SFAR did not sufficiently address requirements for private powered-lift operations to be conducted under part 91. AOPA indicated they expect an increase in private operations within a few years and requested clarification on private operating requirements.

The FAA disagrees with AOPA that the SFAR does not address requirements for “private” operations. The FAA asserts that operations that are not commercial operations are regulated by part 91. During this rulemaking, the FAA evaluated the part 91 regulations to determine how they apply to powered-lift. As discussed in the NPRM, the part 91 rules pertaining to “aircraft” already apply to powered-lift.³⁸⁴ The FAA then evaluated every part 91 rule pertaining to “airplanes,” “helicopters,” and “rotorcraft” and determined if and how each of those would apply to powered-lift. Those regulations are outlined in the SFAR under § 194.302. As a result,

the regulations outlined in § 194.302 address non-commercial operations (what the commenter is referring to as “private” operations).

1. Flight Rules

Section 91.103 requires a PIC to be familiar with all available information concerning that flight. Section 91.103(b)(1) states that this information must include takeoff and landing distance data as specified in an approved Airplane or Rotorcraft Flight Manual. The FAA proposed in § 194.302(b) that powered-lift with an AFM approved through the aircraft certification process in part 21 comply with the provisions in § 91.103(b)(1). The FAA did not receive any comments related to this proposal and is therefore adopting § 194.302(b) as final.

Section 91.107 prescribes rules related to the use of safety belts, shoulder harnesses, and child restraint systems. Specifically, § 91.107(a)(3)(i) through (iii) requires that each person onboard an aircraft operated under part 91 occupy an approved seat or berth with a separate safety belt and, if installed, shoulder harness properly secured about the person during movement on the surface, takeoff, and landing. The FAA proposed in § 194.302(c) to apply § 91.107(a)(3)(i) through (iii) to powered-lift. For seaplane and float-equipped rotorcraft operations during movement on the surface, § 91.107(a)(3) excepts the person pushing off the seaplane or rotorcraft from a dock and the person mooring the seaplane or rotorcraft at a dock from the preceding seating and safety belt requirements. The FAA proposed in § 194.302(c) to apply the same exception to powered-lift when the powered-lift is operating like a seaplane or float-equipped rotorcraft. The FAA did not receive any comments related to § 194.302(c) and is therefore adopting § 194.302(c) as final.

Section 91.113 prescribes the rules for converging aircraft based on category and type of operation (e.g., towing). Under § 91.113(d), when aircraft of the same category are converging at approximately the same altitude (except head-on, or nearly so), the aircraft to the other’s right has the right-of-way. When the aircraft are of different categories, § 91.113(d)(1) through (3) establishes a hierarchy giving priority to balloons, then gliders, followed by airships, and then to airplanes and rotorcraft. An aircraft that is towing or refueling other aircraft has right-of-way over all other engine-driven aircraft. The FAA emphasized aircraft maneuverability when establishing the right-of-way hierarchy for converging aircraft in

³⁸⁴ See 88 FR 38946 at 39024–39025 (June 14, 2023).

§ 91.113(d)(1) through (3). The preamble for the original right-of-way rule states “an aircraft will give way to another of a different class which is less maneuverable and is unable to take as effective action to avoid collision.” The FAA proposed in § 194.302(d) that powered-lift comply with the airplane provisions in this paragraph and yield right-of-way as prescribed in this section.

The FAA received three comments related to § 91.113 and the proposed § 194.302(d). ALPA expressed support for including powered-lift in the same right-of-way category as airplanes and rotorcraft. An anonymous commenter stated they believe it is important that all pilots have the same understanding of which aircraft have the right-of-way, and therefore recommended the FAA make a permanent change to § 91.113(d)(2) and (3) instead of publishing this change in the SFAR. An individual commenter asked the FAA to elaborate on why powered-lift is proposed to be grouped with these other aircraft types and how this categorization ensures safe and efficient traffic flow.

Right-of-way rules maintain the privilege of less maneuverable aircraft to safely proceed with priority over more maneuverable aircraft in the NAS. The proposed § 91.113(d)(2) continues to give gliders right-of-way over powered aircraft such as airplanes, powered-lift, and rotorcraft. Additionally, the proposed § 91.113(d)(3) continues to give airships right-of-way over all other powered aircraft, except for those aircraft that are towing or refueling another aircraft. Balloons will continue to have the right-of-way over any other aircraft category.

The FAA agrees with the commenter that § 91.113 should outline the powered-lift right-of-way rule instead of the SFAR so that all pilots understand how powered-lift should be treated in the NAS under the right-of-way rules. The FAA recognizes that a separate rulemaking, the *Modernization of Special Airworthiness Certification* NPRM (“MOSAIC”),³⁸⁵ has proposed language under § 91.113 that would apply to “powered aircraft.” The FAA is promulgating this powered-lift final rule before the MOSAIC final rule. As a result, any changes included in the final MOSAIC regulatory text for § 91.113 will supersede the powered-lift § 91.113 language once MOSAIC is finalized and effective. Nevertheless, the language in this rule allows powered-lift to operate under the § 91.113 right-of-way rules.

Therefore, the FAA adopts the proposal under § 194.302(d) as a permanent amendment. The FAA recognizes the importance of all pilots understanding the right-of-way rules set forth in § 91.113. Consequently, instead of placing the final language within the SFAR, it is now a permanent change within § 91.113. Under § 91.113(d)(2), a glider has the right-of-way over an airship, powered parachute, weight-shift-control aircraft, airplane, powered-lift, or rotorcraft. Under § 91.113(d)(3), an airship has the right-of-way over a powered parachute, weight-shift-control aircraft, airplane, powered-lift, or rotorcraft.

Section 91.119 prescribes the minimum safe altitude (MSA) for aircraft operations. This section establishes less restrictive minima for helicopters, which in certain circumstances as described in § 91.119(d), are allowed to operate below the minimum altitudes prescribed for airplanes in § 91.119 (b) and (c). The justification for allowing helicopters to operate below minimum altitudes was based on helicopter performance capability. Accordingly, the FAA did not propose to apply the helicopter minimum altitude requirements of § 91.119 to powered-lift. The rationale for this was based on the understanding that powered-lift will likely operate like airplanes in cruise flight, requiring more time and distance to correct their flightpath to avoid other aircraft and obstacles. The FAA proposed powered-lift operators comply with the minimum altitude requirements prescribed § 91.119 (b) and (c).

The FAA received eight comments related to § 91.119 and minimum safe altitudes. ALPA supported the proposed exclusion of powered-lift from § 91.119(d).

Eve recommended that powered-lift, based on anticipated operational performance such as speed and maneuverability, utilize the same MSA requirements as those applied to helicopters.

In a group comment, Archer, CAE, GAMA, Joby, AWPC, Lilium and NBAA suggested that the FAA consider the operational capabilities of powered-lift (e.g., vertical capabilities) when applying the minimum safe altitude requirements.

The FAA has reevaluated its proposal and has determined that certain powered-lift, similar to helicopters, have operating characteristics that enable them to land in a relatively small space, such as their ability to autorotate (or perform an equivalent maneuver) with precision during power-out

emergencies. Therefore, the FAA agrees with the group commenters that those powered-lift that have demonstrated the capability to autorotate or conduct an approved equivalent maneuver should also be allowed the same minimum safe altitudes as those afforded to helicopters in § 91.119(d). The FAA has determined there would be no adverse effect on safety to allow certain powered-lift to utilize helicopter minimum safe altitudes. As such, the FAA adopts a performance-based rule allowing powered-lift operating in the vertical-lift flight mode to use an altitude lower than that specified for airplanes in certain circumstances. This rule is being adopted as § 194.302(d). Importantly, the FAA notes that some helicopter routes may be lower than the minimum altitude published in the AFM for a given powered-lift configuration (e.g., an altitude which enables a transition from wing-borne flight to vertical-lift flight mode at an altitude sufficient to conduct a safe autorotation, or an approved equivalent maneuver, to a landing). Regardless of any clearance or helicopter route prescribed altitude, no powered-lift may operate lower than any AFM limitation (or any other limitation, e.g., MEL, etc.). The FAA reiterates that a clearance by air traffic does not grant exemption from any other rule. Section 91.9 requires compliance with all AFM-prescribed operating limitations, subject to limited exception provided in § 91.9(d).

Section 91.126(b) describes directions of turns when approaching to land at an airport without an operating control tower in Class G airspace. The FAA proposed in § 194.302(e) to apply the airplane provisions detailed in § 91.126(b)(1) when the operator of the powered-lift intends to land in wing-borne flight mode, similar to airplanes. The FAA proposed in § 194.303(b)(1) to apply the helicopter provisions detailed in § 91.126(b)(2) to powered-lift when the powered-lift intends to land in vertical-lift flight mode. The FAA did not receive any comments related to the proposed § 194.302(e) or § 194.303(b)(1). The FAA is adopting both proposed changes as final in § 194.302(e) and § 194.302(f).

Section 91.126(c) outlines the final flap settings required for turbojet-powered airplanes as outlined in the Airplane Flight Manual. Specifically, § 91.126(c) requires the PIC of a civil turbojet-powered aircraft to use, as a final flap setting, the minimum certificated landing flap setting set forth in the approved performance information in the Airplane Flight Manual for the applicable conditions. The FAA is not aware of any turbojet-

³⁸⁵ See 88 FR 47650 at 47704 (July 24, 2023).

powered powered-lift currently in the certification process, nor are any anticipated during the term of this SFAR. To ensure that powered-lift can land safely at airports in Class G airspace, the FAA did not propose to apply this paragraph to powered-lift. The FAA received no comments on this and, as proposed, will not apply § 91.126(c) to powered-lift.

Section 91.129 provides various requirements for operations in Class D airspace, which will each be discussed, in turn. Comments and FAA responses related to this rule have been consolidated at the conclusion of this section.

The provisions of §§ 91.129(a) through (d), (g)(1), and (i) refer to aircraft, and accordingly are already applicable to powered-lift. However, § 91.129(e)(1) and (e)(2) require minimum altitudes when operating at an airport in Class D airspace in large or turbine-powered airplanes. To remain consistent with this established agency policy for aircraft operations that are likely to result in similar noise due to size and powerplant, the FAA proposed in § 194.302(f) that large or turbine-powered powered-lift comply with § 91.129(e)(1) and (e)(2). The FAA anticipates that, for large and turbine-powered powered-lift, compliance with these requirements will be necessary for adequate noise abatement within Class D airspace.

Section 91.129(g)(2) requires that, unless otherwise required by the prescribed departure procedure for that airport or the applicable distance from clouds criteria, each pilot of a turbine-powered airplane and each pilot of a large airplane must climb to an altitude of 1,500 feet above the surface as rapidly as practicable. The FAA proposed in § 194.302(f) that large or turbine-powered powered-lift also need to comply with this requirement to ensure that powered-lift will be operated at an equivalent level of safety to existing large or turbine-powered airplanes.

Section 91.129(h) states that, where a formal runway use program has been established by the FAA, each pilot of a large or turbine-powered airplane assigned a noise abatement runway by ATC must use that runway. However, consistent with the final authority of the PIC concerning the safe operation of the aircraft as prescribed in § 91.3(a), ATC may assign a different runway if requested by the pilot in the interest of safety. This requirement is consistent with previously established FAA policy regarding noise abatement and operational safety, and the FAA considers this requirement to be appropriate for powered-lift operations

to ensure adequate noise abatement. The FAA proposed in § 194.302(f) that large or turbine-powered powered-lift comply with § 91.129(h).

Airbus Helicopters provided a comment related to § 91.129(e)(1), (e)(2), (g)(2), and (h). In this comment, Airbus Helicopters stated that powered-lift design will have a significantly reduced noise footprint compared to large airplanes, and therefore, the FAA should consider lower altitude minima in Class D airspace. Airbus Helicopters proposed the following regulatory amendment: “Section 91.129(e)(1) and (2), (g)(2), and (h) or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.”

The FAA finds that there is insufficient data to support Airbus Helicopters’ claim that powered-lift designs will have a significantly reduced noise footprint compared to large airplanes. Furthermore, the FAA notes that operators may seek relief from this rule by applying for a waiver in accordance with § 91.903. The FAA is adopting the requirements for applying § 91.129(e)(1) and (2), (g)(2) and (h) to powered-lift, as proposed, in § 194.302(g).

Section 91.129(e)(3) states a pilot operating an airplane approaching to land on a runway served by a visual approach slope indicator (VASI) must operate that airplane at an altitude at or above the glide path until a lower altitude is necessary for a safe landing. The requirement for all airplanes to remain at or above the glide path provides an additional measure of safety such as obstacle clearance to airplanes during their approach. The FAA proposed in § 194.302(g) that powered-lift intending to land in wing-borne flight mode must comply with this provision of paragraph (e)(3) to ensure adequate obstacle clearance is maintained during the approach. Compliance with this provision would not be required for those powered-lift intending to land in vertical flight mode as they will be flying slower than when in forward flight (wing-borne flight mode) similar to a helicopter. The FAA received no comments on the proposed § 194.302(g) and therefore, as a result of renumbering, adopts this provision in § 194.302(h) as final.

Section 91.129(f) imposes requirements for approaches in Class D airspace, except when conducting circling approaches under part 97 for airplanes and helicopters. The FAA anticipates that powered-lift will often transition from forward flight (wing-borne flight mode) to vertical flight (vertical-lift flight mode) upon entering

the traffic pattern in order to land like a helicopter. The FAA proposed in § 194.302(h) that powered-lift must comply with § 91.129(f)(1) when the operator intends to land the powered-lift in wing-borne flight mode. When the operator of the powered-lift intends to land in vertical-lift flight mode, however, the operator must comply with the helicopter provisions detailed in § 91.129(f)(2), as proposed in § 194.303(b). This application of the rule gives flexibility to the novel capabilities of powered-lift while maintaining operational safety by using the standard traffic pattern flow at airports. The requirements of §§ 91.129(f)(1) and (2) do not apply to powered-lift conducting a circling approach under part 97 because a circling approach may have specific procedures established or turns may be requested by ATC to ensure safety in the traffic pattern. The FAA did not receive any comments and therefore, as a result of renumbering, adopts these requirements in §§ 194.302(i) and 194.302(j) as final.

Section 91.131 contains rules governing operations in Class B airspace. Paragraph (a)(2) of this section requires that each person operating a large turbine-engine powered airplane to or from a primary airport for which Class B airspace area is designated must operate at or above the designated floor of the Class B airspace while within the lateral limits of that area. The FAA proposed in § 194.302(i) that § 91.131(a)(2) should apply to large powered-lift regardless of powerplant type. The FAA received no comments on § 194.302(i) and therefore, as a result of renumbering, adopts this proposal in § 194.302(k) as final.

Section 91.151 requires airplanes to carry a 30-minute fuel reserve for daytime operations and a 45-minute fuel reserve for nighttime operations. In contrast, rotorcraft only require a 20-minute fuel reserve regardless of whether the operation occurs during the day or night. For powered-lift, the FAA proposed in § 194.302(j) that powered-lift must comply with the airplane reserve requirements in § 91.151(a) due to the lack of powered-lift operational data to support use of the less restrictive rotorcraft fuel reserve.

The FAA received 21 comments related to the proposed § 194.302(j). Two commenters supported the proposed fuel reserve requirements, while 19 proposed an alternative to the FAA’s original proposal.

ALPA said these requirements would enable normalized integration of aircraft with novel power sources and are necessary to achieve equivalent levels of safety to current aircraft operational

requirements, even if they result in limiting flight times for some powered-lift. Electra.aero posited that electric energy storage technologies still have significant uncertainties that warrant a more conservative approach until sufficient operational experience is achieved. Other commenters suggested the proposed fuel requirements could be detrimental to enabling powered-lift operations. Bristow argued that the proposed requirements would limit the scope of missions that powered-lift can accomplish, which would negatively impact the economic benefits and travel efficiencies that these vehicles would otherwise provide. Bristow, Airbus Helicopters, and Joby all contended that electric powered-lift may be unable to meet the energy reserve requirements necessary to operate. BETA said that, for short-duration flights, the proposed requirements could mean requiring more than double (for VFR) or triple (for IFR) the required energy, which it said is a heavy burden compared to the impact of the same reserve on traditional aircraft. AgustaWestland Philadelphia Corporation (AWPC) stated that the proposed requirements would reduce their vehicle's range and payload by 10–15 percent.

Several commenters recommended applying current helicopter fuel minimum requirements in § 91.151(b) to powered-lift. These commenters, including CAE, the Vertical Flight Society, Bristow, GAMA, and Joby noted similarities between helicopters and powered-lift, including their maneuverability at low speeds and the flexibility to land safely at varied locations due to their vertical landing capabilities. AWPC suggested that VTOL-capable powered-lift should be allowed to use helicopter VFR fuel reserves, while powered-lift authorized to utilize copter procedures should be allowed to use helicopter IFR fuel reserves.

Archer added that many powered-lift, unlike helicopters, have no single-point-of-failure vulnerabilities. Additionally, Archer said that, because § 91.151(b) applies to the entire rotorcraft category, other aircraft that are typically incapable of vertical operations like gyrocopters are still regulated by the 20-minute fuel reserve requirement due to their ability to land in confined areas. Archer stated that electric powered-lift can land vertically in zones smaller than typically needed for gyrocopters and often require less surface area to conduct a landing than many helicopters.

Several commenters recommended the FAA consider applying performance-based reserve requirements

that consider each powered-lift's characteristics and intended operations. Bristow said there is precedent for this type of approach in §§ 121.645 and 121.646 where the FAA applies different fuel reserve criteria for domestic, flag, and ETOPS commercial airline operations. Supernal suggested revising the existing fuel reserve requirement to a performance-based standard for powered-lift to maintain an equivalent level of safety. Eve and L3Harris recommended adding language to part 194 that would allow for reduced energy requirements (subject to approval of the Administrator) based on a specific risk mitigation assessment, including energy consumption data, energy planning and in-flight energy management, and selection of alternate landing sites. GAMA and Joby added other factors to consider in an assessment, including environmental factors, performance capabilities, weather patterns, and air traffic. These commenters referenced a white paper³⁸⁶ from GAMA that they said provided more information on this issue. ANAC suggested fuel reserve requirements could be defined case-by-case based on the ConOps presented for the project.

The FAA stated in the NPRM that it did not have sufficient operational data to reduce fuel requirements. In response, AWPC said the Bell-Boeing V–22 Osprey shares performance characteristics with one of the company's powered-lift designs and has more than 20 years of flight experience with hundreds of thousands of flight hours accumulated that could provide relevant data. An individual pilot suggested the FAA seek input from the pilots currently flying powered-lift to better understand their operational experience.

The FAA has reconsidered its position regarding § 91.151. In vertical-lift flight mode, a powered-lift can operate in a manner similar to a helicopter. As such, powered-lift require less surface area for a landing, thereby increasing the number of available landing sites, both planned and unplanned. Risk is further mitigated when operations are conducted under VFR. The FAA has concluded that, provided the powered-lift is continuously capable of conducting a landing in the vertical-lift mode along the entire route of flight, there is no adverse effect on safety to allow powered-lift to utilize rotorcraft VFR

³⁸⁶ General Aviation Manufacturers Association, *Managing Range and Endurance of Battery-Electric Aircraft* (2023), gama.aero/wp-content/uploads/Managing-Range-and-Endurance-of-Battery-Electric-Aircraft_v1-1.pdf.

fuel requirements in accordance with § 91.151(b). However, if the powered-lift cannot be assured of a safe landing in the vertical-lift flight mode along the entire route of flight, then compliance with § 91.151(a) would be required. Indications that a powered-lift may not be assured of a safe landing in vertical-lift flight mode along the entire route of flight may include a limitation or requirement in the AFM which would preclude such a landing. Likewise, the powered-lift may not be capable of transitioning from wing-borne to vertical-lift flight mode quickly enough to comply. This provision will not prevent a powered-lift from operating in wing-borne flight mode. Rather, it will require the powered-lift to have the performance capability, as detailed in the AFM, to conduct a landing in vertical-lift flight mode along the entire route of flight in order to take advantage of the rotorcraft VFR fuel requirements. Therefore, as a result of renumbering, the FAA adopts this proposal, as amended, in § 194.302(l).

Sections 91.155 and 91.157 permit helicopters to operate under lower visibility and cloud clearance minima than airplanes. The FAA determined that powered-lift possess a wider range of characteristics, with some operating more akin to airplanes during cruise flight. The FAA proposed in § 194.302(k) that powered-lift comply with the more restrictive airplane weather minima in §§ 91.155 and 91.157.

The rationale for the proposed § 194.302(k) was that powered-lift will likely operate similar to an airplane in cruise flight, thus requiring more time and distance to correct their flightpath to avoid other aircraft and obstacles. As such, a higher visibility minimum is needed to ensure safety. The FAA received 13 comments in response to this proposal. Two commenters expressed support. Eleven commenters proposed an alternative to the FAA's original proposal.

Electra.aero and ALPA expressed support for the proposed weather minima for powered-lift. Electra.aero stated that the ability for eVTOL aircraft to hover at lower, helicopter-like speeds is often limited by the battery thermal capability that only provides a few minutes of hover time.

Archer suggested replacing category-based operational rules regarding visibility minimums with type-specific rules informed by the type certification and FSB process, similar to that proposed in the NPRM for airworthiness evaluation and eligibility for Copter Procedures.

GAMA stated powered-lift possess helicopter-like maneuverability, safe operation at low airspeeds and altitudes, and the capability of vertical takeoff and landing. Given these characteristics, the helicopter provisions of this rule should apply. The ability of helicopters to operate at lower speeds and with increased maneuverability while maintaining safety under less restrictive minima should be considered for powered-lift. Therefore, the exception incorporated in § 91.155 should allow powered-lift pilots to take advantage of their aircraft's capabilities while ensuring an equivalent level of safety.

Several commenters recommended applying helicopter weather minima requirements of § 91.155(b)(1) instead of the airplane requirements of § 91.155(b)(2). Commenters such as GAMA argued that, when determining appropriate weather minima requirements, powered-lift are more comparable to helicopters than airplanes in their ability to land immediately if conditions deteriorate, and fly at slow speeds with high maneuverability. Joby asserted that grouping powered-lift with helicopters would benefit all air traffic due to the two categories' similarities in performance and maneuverability. AWPC stated that restricting powered-lift from utilizing helicopter minima contradicts the FAA's intent (in §§ 91.126 and 91.129) for powered-lift in vertical-lift flight mode to adhere to helicopter directions of turn when operating in a traffic pattern. Lilium said that powered-lift are designed to operate in low-altitude environments for short routes, and therefore using helicopter VFR minimum weather requirements could improve airspace congestion by providing the ability to operate at lower enroute altitudes. Eve suggested that Multi Electric Propulsion Systems (MEPS) are capable of assuring maneuverability comparable to helicopters even when deviating from clouds, traffic, and obstacles. Some commenters contended that applying helicopter weather minima requirements to powered-lift would provide a higher level of operational safety.

CAE, Joby, and NBAA contended that many powered-lift will cruise at speeds lower than the fastest helicopters, which are subject to less restrictive minima than those proposed in the NPRM. These commenters also justified imposing less restrictive weather minima requirements for powered-lift due to similar qualities as helicopters by referencing excerpts from the NPRM.

AIR VEV disagreed with the FAA's assertion that powered-lift in cruise

operations, "perform similar to an airplane, operating at high speeds and possibly without the ability to maneuver as quickly as a helicopter." AIR VEV said this statement is not true for the powered-lift it is manufacturing.

AWPC suggested the Bell-Boeing V-22 Osprey provides a precedent for applying lower weather minima requirements to turbine-powered tiltrotor aircraft.

Commenters also highlighted certain enhanced safety features of powered-lift as justification for reducing the proposed weather minima requirements. Joby said that most powered-lift will use advanced flight control systems with advanced means of flight stabilization, flight augmentation, and envelope protection to allow for much safer flight in situations with reduced visibility by minimizing loss of control during unintentional flight into IMC.

Lilium, Joby, and AIR VEV suggested that the FAA could establish special allowances for VFR weather minima based on characteristics of each individual powered-lift and the type of operation being conducted. Lilium said this approach would be consistent with ICAO Doc. 10103.³⁸⁷

The FAA has reconsidered its position regarding § 91.155 and § 91.157. The FAA agrees with the commenters that weather minima are based on aircraft speed and maneuverability. Helicopters operate at lower speeds and are capable of greater maneuverability than other aircraft. This allows pilots to see and avoid other air traffic or obstructions in time to prevent a collision. Powered-lift have equivalent maneuvering capabilities to helicopters when operating in vertical-lift flight mode. For this reason, the FAA agrees there should be no adverse effect on safety for powered-lift operating in the vertical-lift flight mode to utilize the same VFR weather minima as helicopters.

Therefore, the FAA will incorporate a change from the visibility minimums in proposed § 91.157(k) by allowing powered-lift operating in the vertical-lift flight mode to comply with the helicopter visibility minimums prescribed in § 91.155(a) and (b)(1). In addition, the helicopter exceptions of § 91.157(b)(3), (b)(4), and (c) will also be applicable to powered-lift when operating in the vertical-lift flight mode. Powered-lift seeking to use the helicopter visibility minimums must be operated at a speed that allows the pilot

enough time to see and avoid any other air traffic or any obstructions in time to avoid a collision. A powered-lift which cannot be operated at a speed that allows the pilot enough time to see and avoid any other air traffic or any obstructions to avoid a collision, regardless of the mode of flight, must comply with the airplane visibility minimums prescribed in § 91.155(a) and (b)(2) and are not authorized to use the helicopter exceptions of § 91.157(b)(3), (b)(4), and (c). Therefore, the new SFAR provision related to § 91.155(a) is adopted at § 194.302(m), and the new SFAR provision related to § 91.155(b)(1) is adopted at § 194.302(n). The proposed § 194.302(k), pertaining to § 91.155(b)(2), is being adopted as amended at § 194.302(o). Finally, the new SFAR provision related to § 91.157(b)(3), (b)(4), and (c) is adopted at § 194.302(p).

Sections 91.167 and 91.169 prescribe certain operational requirements for IFR flight. The FAA received numerous comments related to performance-based changes proposed for both rules. Because both sections relate to IFR operations, the FAA proposes changes that are similar in nature, whereby a powered-lift may be operated using helicopter minimums, provided the powered-lift is authorized to conduct Copter Procedures, defined in part 97, and is continuously capable of conducting a landing in the vertical-lift flight mode along the entire route of flight, as outlined in the response to § 91.169(b) and (c) of this section. These changes are described in greater detail in the following paragraphs.

Section 91.167 prescribes the fuel requirements for flight in IFR conditions. Under § 91.167, helicopter operations are permitted with lower fuel minima. Section 91.167(a)(3) requires aircraft, other than helicopters, to carry a 45-minute fuel reserve and helicopters to carry a 30-minute fuel reserve. The FAA proposed that powered-lift should initially have a 45-minute fuel reserve, consistent with other aircraft requirements.

Under § 91.167, for operations in weather conditions that require an alternate airport to be identified, no person may operate in IFR flight unless the aircraft has adequate fuel to fly to the first airport of intended landing and to the alternate airport and still have a 45-minute fuel reserve. In accordance with § 91.167(b)(2)(i) for aircraft other than helicopters, when the appropriate weather reports indicate that at least 1 hour before and for 1 hour after the estimated time of arrival, the ceiling will be at least 2,000 feet above the airport elevation and the visibility will

³⁸⁷ Guidance on the Implementation of ICAO Standards and Recommended Practices for Tiltrotors (10103), International Civil Aviation Organization (2019), is available for purchase in the ICAO Store.

be at least 3 statute miles, the fuel reserve necessary to fly to the alternate airport is not required. The FAA did not propose changes to the current applicability of § 91.167(b)(2)(i), which would require powered-lift to comply with the requirements imposed on aircraft other than helicopters, to ensure an appropriate level of risk mitigation for these new-entrant aircraft. An anonymous commenter agreed with the FAA proposal to retain the IFR fuel requirements for aircraft other than helicopters, as prescribed in § 91.167(a) and (b) as proposed in the NPRM.³⁸⁸

Several commenters proposed that the FAA should revise the SFAR to allow powered-lift to comply with the helicopter fuel requirements. Joby stated the FAA should amend the part 194 requirements that specify fuel reserves for powered-lift to align with today's requirements for helicopters. Bristow believed imposing fixed wing aircraft fuel minimums is overly restrictive, offering no additional safety benefits over the helicopter fuel minimums. Bristow argued that the FAA should apply the minimum fuel reserve requirements associated with helicopters to operations by powered-lift. However, Bristow also believed that a more nuanced approach to fuel reserve minimums, based on mission-type and duration, is both possible and desirable.

In a group comment, AOPA, GAMA, HAI, NATA, NBAA, and Vertical Flight Society (VFS) collectively stated that the FAA failed to consider powered-lift characteristics and operating environment by unilaterally applying airplane fuel reserves to all powered-lift. The group comment argued that the FAA should consider the capabilities of powered-lift and apply ICAO Document 10103 to its assessment of operational rules. In the alternative, the group comment suggested that the FAA should provide a pathway for an operator or manufacturer to seek approval or authorization to adopt the alternate rule.

Ten commenters proposed that the FAA should revise § 91.167 to be a performance-based standard for powered-lift.

Archer urged the FAA to provide a path to performance-based fuel reserves and reconsider the proposal that it believes arbitrarily assigns airplane fuel reserve regulations to an aircraft capable of vertical operations. Archer also argued that the FAA should follow the safe, long-standing precedent of part 121 Performance Based Contingency Fuel (PBCF) Operations Specifications and enable a data-driven approach to

recognizing aircraft-specific capabilities and actual operational performance to assure safety and avoid unnecessary and arbitrary limitations on vehicles with restricted range.

CAE stated the FAA failed to consider powered-lift characteristics and operating environment in unilaterally applying airplane fuel reserves to all powered-lift. CAE argued that the FAA should consider the performance-based capabilities of these powered-lift when determining fuel reserves.

Eve recommended that fuel/energy reserves should be built on performance-based capabilities of the powered-lift and allow the reduction of fuel/energy reserves based on a risk assessment by considering proper and safety dispatch criteria (flight planning) and other operational aspects.

AWPC disagreed with the FAA's decision to apply airplane fuel reserves for powered-lift, arguing that the proposed VFR and IFR fuel reserve requirements are prohibitive and fail to account for specific powered-lift performance capabilities. AWPC argued that powered-lift capable of VTOL and powered-lift authorized to utilize copter procedures should be allowed to use helicopter VFR fuel reserves. AWPC argued that this recommendation aligns with ICAO Document 10103.

Lilium recommended that the FAA should adopt a flexible approach for establishing energy requirements for powered-lift. Lilium argued that adding language such as "as determined by the Administrator" would permit future operators to use performance-based reserve solutions. Alternatively, Lilium suggested that the FAA adopt a 20-minute helicopter prescriptive reserve, considering the enhanced safety features of powered-lift.

BETA recommended the FAA add an option for use of a performance-based reserve that can be determined based on the capability of the aircraft and the intended flight plan.

Supernal argued that the FAA should revise the existing fuel reserve requirement to a performance-based standard for powered-lift to maintain an equivalent level of safety.

The Vertical Flight Society/American Helicopter Society International, Inc. urged the FAA set performance-based reserves requirements for powered-lift that reflect their operational intent and capabilities, arguing that such an approach would be consistent with ICAO Document 10103.

In a group comment, NBAA, AUVSI, National Air Transportation Association, AIA, Vertical Flight Society, and Helicopter Association International collectively encouraged

the FAA to consider the language in the Advanced Aviation Act when developing the final rule for this SFAR, including performance-based requirements for energy reserves and other range- and endurance-related requirements that reflect the capabilities and intended operations of the aircraft.

L3Harris Commercial Aviation Solutions and L3Harris Commercial Training Solutions stated that there should be performance-based limitations based on a risk mitigation assessment considering energy consumption data, energy planning, alternate landing sites, and inflight energy management.

After reviewing the comments, the FAA has reconsidered its position regarding § 91.167. In the final rule, the FAA will allow powered-lift to utilize the IFR fuel requirements established for helicopters. As the commenters suggest, when a powered-lift is operating similarly to a helicopter, powered-lift should be required to only carry the fuel reserves of a helicopter. The FAA agrees that powered-lift authorized to conduct copter procedures and that have the performance capability, as provided in the AFM, for the entire flight to conduct a landing in the vertical-lift flight mode may comply with the IFR fuel requirements established for helicopters.

Furthermore, during aircraft certification, the FAA will assess the aircraft's stability, system, and equipment for IFR operations. A powered-lift that does not possess these capabilities may still be certificated for IFR but will be prohibited from performing copter procedures and have a limitation in the AFM to that effect. Powered-lift with such a limitation would not be authorized to use the IFR fuel requirements for helicopters and would be required to use the IFR alternate airport minimums specified for airplanes.

This provision will not prevent a powered-lift from operating in wing-borne flight mode but will require the powered-lift to have the performance capability, as detailed in the AFM, to conduct a landing in vertical-lift flight mode along the entire route of flight. Therefore, the FAA agrees with the commenters that, provided the powered-lift is continuously capable of conducting a landing in the vertical-lift flight mode along the entire route of flight, there is no adverse effect on safety to allow powered-lift to utilize helicopter IFR fuel requirements in accordance with § 91.167(a)(3) and (b)(2)(ii).

Therefore, a person operating a powered-lift will have the option to use

³⁸⁸ See 88 FR 38946 at 39029–39030 (June 14, 2023).

the helicopter fuel requirements under § 91.167(a)(3) and (b)(2)(ii) when the aircraft is authorized to conduct copter procedures and has the performance capability, as provided in the AFM, to always conduct a landing in the vertical-lift flight mode along the entire flight. When taking into consideration the performance capability, a person operating a powered-lift must consider the energy required to successfully complete a descent from the altitude they plan to use, any required instrument or visual procedure, and any landing performance data contained in the AFM that enables a landing in the vertical-lift flight mode. There may be performance requirements or limitations contained in the AFM, or in any approved Minimum Equipment List (MEL), that would prevent a powered-lift from conducting a landing in the vertical-lift flight mode, such as a landing weight limitation or a deferred maintenance item, thereby requiring a person to use the 45 minutes of reserve fuel. This requirement is adopted as § 91.169(q).

Section 91.169 prescribes the information required for filing an IFR flight plan. Under § 91.169, helicopter operations are permitted to use lower weather minima before an alternate must be filed because helicopters operate at lower altitudes and slower airspeeds. The FAA reasoned that, while powered-lift have a range of performance characteristics, the majority of powered-lift flight time will be during cruise operations and therefore proposed that powered-lift comply with the provisions of § 91.169(b)(2)(i) and (c)(1)(i) as written for aircraft other than helicopters.

Four operators provided comments related to § 91.169. Archer asserted that the FAA should evaluate the operational capabilities of each powered-lift through the type certification process before deciding which operational rules are appropriate. Archer pointed out that powered-lift that share the key operating capabilities that enable helicopters to safely operate at lower altitudes and reduced weather minima should be subject to the same operating rules. Archer recommended the FAA replace category-based operational rules regarding visibility minimums in favor of type-specific rules informed by the type certification and FSB process, similar to that proposed in the NPRM for airworthiness evaluation and eligibility for Copter Procedures.

AWPC argued that certain powered-lift, such as their AW609 Tiltrotor, are capable of VTOL, like helicopters, during takeoff and landing. AWPC contended that IFR weather reporting

requirements/IFR alternate airport weather minima should be performance-based due to the VTOL capability.

Lilium asserted that the safe use of helicopter flight rules for powered-lift can be evaluated during aircraft certification and/or the type rating evaluation process and urged the FAA to adopt a similar comprehensive and risk-based approach as suggested for altitude requirements to evaluate the capabilities and performance of each individual powered-lift to safely operate under helicopter IFR. Lilium also asserted that the FAA's proposal is inconsistent with the way other countries regulate powered-lift.

GAMA generally stated that the FAA should adopt performance-based regulations for powered-lift that take into consideration the diverse capabilities of such aircraft. GAMA also suggested that the FAA follow the approach recommended in ICAO Document 10103.

After reviewing the comments, the FAA has reconsidered its position regarding the proposal to apply § 91.169(b)(2)(i) and (c)(1)(i) to powered-lift. Similar to § 91.167, the FAA will now allow powered-lift that are authorized to conduct copter procedures and that have the performance capability to land in the vertical-lift flight mode, as provided in the AFM, to use the helicopter provisions specified in § 91.169(b)(2)(ii) and (c)(1)(ii) for helicopters. This provision can be found in § 91.169(r).

The FAA agrees with Archer, Lilium, and GAMA that some degree of a performance-based rule is appropriate. As discussed above in the § 91.167 section, during aircraft certification, the FAA will assess the aircraft's capabilities and characteristics for IFR operations. A powered-lift that does not possess the appropriate characteristics may still be certificated for IFR but will be prohibited from performing copter procedures and have a limitation inserted into the AFM to that effect.

As recommended by AWPC, and as discussed in the § 91.167 section, when taking into consideration the performance capability, a person operating a powered-lift must consider any landing performance data contained in the AFM that enables a landing in the vertical-lift flight mode. Requirements or limitations outlined in the AFM may require a person to use the IFR alternate airport minimums specified for airplanes. For the foregoing reasons, the FAA is adopting a performance-based rule for § 91.169, as outlined in § 91.169(r).

Section 91.175 governs takeoff and landing under IFR. Sections

91.175(f)(2)(i) and (ii) apply to powered-lift as-written because those paragraphs are applicable to all aircraft. Therefore, these provisions are not included in § 91.175, as they already apply to powered-lift.

Section 91.175(f)(2)(iii) governs takeoff and landing under IFR for helicopters. In the NPRM, the FAA did not address § 91.175(f)(2)(iii) because it is helicopter specific, and the FAA asserted § 91.175(f)(2)(i) and (ii) were sufficient because they apply to aircraft, including powered-lift. However, in response to comments received and discussed below, the FAA will permit some powered-lift to use the ½ statute mile visibility stipulated for helicopters in § 91.175(f)(2)(iii).

Section 91.175(f)(4)(i) requires airplanes operating under parts 121 or 135 to comply with the takeoff obstacle clearance or avoidance procedures contained in subpart I of part 121 or subpart I of part 135, as applicable, for IFR takeoffs. Accordingly, the FAA proposed in § 91.175(f)(4)(i) that any powered-lift that would be required to comply with the provisions of subpart I of part 135 (Airplane Performance Operating Limitations) must also comply with § 91.175(f)(4)(i). The takeoff limitations of subpart I of part 135, and therefore the provisions of § 91.175(f)(4)(i), are only applicable to certain powered-lift that are required to comply with subpart I. As discussed in section VI.D.6. of this preamble, subpart I of part 135 will only apply to those powered-lift that are designated as "large or transport category" during type certification. The FAA did not receive any comments specific to § 91.175(f)(4), which was proposed as § 91.175(f)(4). However, the FAA received three comments specific to the takeoff visibility requirements of § 91.175(f)(2).

AWPC did not agree with the FAA's proposal in the SFAR to apply blanket airplane requirements to powered-lift without any performance-based relief. AWPC urged the FAA to take a tailored approach for this rule utilizing performance-based requirements instead of applying airplane rules to all powered-lift.

Lilium noted that the safe use of helicopter flight rules for powered-lift can be evaluated during aircraft certification and/or the type rating evaluation process. Lilium urged the FAA to adopt a similar comprehensive and risk-based approach as suggested for altitude requirements, to evaluate the capabilities and performance of each individual powered-lift to safely operate under helicopter IFR.

GAMA recommended the FAA follow ICAO Document 10103 and apply the

helicopter requirements for this rule to powered-lift.

AWPC expressed their understanding that the lower takeoff visibility minimums for helicopters are based on lower speeds, maneuvering characteristics, and the ability to comply with copter procedures under part 97.

In response to the comments received, the FAA evaluated the feasibility of allowing a powered-lift to use the helicopter visibility takeoff minimums stipulated in § 91.175(f)(2)(iii). When § 91.175(f) was drafted in 1985, the rationale used for a lower takeoff minimum for helicopters was that they are highly maneuverable and capable of sustaining flight at lower airspeeds. The NPRM also mentioned that, due to the unique flight capabilities of helicopters, they can safely maneuver in lower takeoff visibility conditions.³⁸⁹

The FAA agrees with AWPC's statement that powered-lift benefit from being highly maneuverable and capable of sustaining flight at lower airspeeds and will make a change in the final rule for those powered-lift conducting a vertical take-off. However, the FAA does not believe providing all powered-lift broad authorization to use helicopter take-off minimums would be in the best interest of aviation safety. Therefore, the FAA will prohibit those powered-lift having two engines or less that do not have the capability to use copter procedures from conducting an IFR takeoff using the ½ mile visibility minimum. The capability to use copter procedures will be identified in the limitations section of the AFM.

In response to the comments received from AWPC and GAMA, the FAA is adopting a change in the final rule for IFR takeoff minimums for powered-lift. In this final rule, the FAA will allow powered-lift that have two engines or less to use the helicopter minimums of ½ mile providing the powered-lift conducts their takeoff vertically and are authorized to use copter procedures. This provision is adopted in § 194.302(s). In addition, the FAA is adopting § 194.302(l) as proposed, though due to renumbering, it is now § 194.302(t).

2. Equipment, Instrument, and Certificate Requirements

Section 91.205 states that no person may operate a powered civil aircraft with a standard category U.S. airworthiness certificate in VFR day or night, IFR, at or above 24,000 feet, in Category II or III operations, or in night

vision goggle operations, unless the aircraft contains instruments and equipment in § 91.205 or FAA-approved equivalents. For powered-lift that meet the definition of small aircraft in § 1.1, the FAA proposed in § 194.302(m) that the position and anti-collision lights meet the requirement set forth in § 23.2530(b). The FAA proposed that this requirement should apply to small powered-lift to provide an equivalent level of safety to that of small airplanes and to ensure that those powered-lift have an adequate anticollision lighting system that provides sufficient time for another aircraft to avoid a collision.

The FAA also proposed in § 194.302(m) that small powered-lift should meet the § 91.205(b)(14) requirement for installing an approved shoulder harness or restraint system for all seats to provide an equivalent level of safety to small airplanes.

The FAA did not receive any comments on the proposals for small powered-lift in § 194.302(m). The FAA is therefore adopting § 194.302(m) as proposed, though due to renumbering, it is being adopted as § 194.302(u).

Section 91.205(d) prescribes instruments and equipment requirements for IFR flight. Under § 91.205(d)(3), an aircraft must have a gyroscopic rate-of-turn indicator installed, unless the aircraft is equipped with a third attitude instrument system installed as provided in § 121.305(j). For airplanes, the third attitude instrument system installed must be usable through flight attitudes of 360 degrees of pitch and roll. For rotorcraft, the third attitude instrument system installed must be usable through flight attitudes of +/- 80 degrees of pitch and +/- 120 degrees of roll. The FAA anticipates that some powered-lift may be capable of exceeding 80 degrees of pitch and/or 120 degrees of roll. Therefore, the FAA proposed in § 194.302(n) that all powered-lift approved for IFR during type certification would be required to comply with the airplane provisions in § 91.205(d)(3)(i) for IFR flight, which requires the installation of either a gyroscopic rate-of-turn indicator or a third attitude instrument system usable through flight attitudes of 360 degrees of pitch and roll. The FAA received three comments on § 194.302(n).

Airbus, GAMA, and Joby requested that the FAA provide relief to the requirement that powered-lift have either a gyroscopic rate-of-turn indicator or a third attitude instrument system usable through flight attitudes of 360 degrees of pitch and roll installed in accordance with § 91.205(d)(3)(i). The commenters asserted that this regulation may not be compatible with aircraft

designed with advanced flight control systems.

The FAA considered the comments from Airbus, GAMA, and Joby and their requests for relief from the proposed requirement. Section 91.205 already includes flexibility for operators, as it allows for FAA-approved equivalents to the instruments and equipment specified in § 91.205. Section 91.205(a) contains the phrase "or FAA-approved equivalents." This phrase provides the flexibility necessary to consider other types of aircraft systems not specifically included in § 91.205 paragraphs (b) through (f); therefore, the FAA determined no additional regulatory revisions are required. The FAA is therefore adopting § 194.302(n) as proposed, though due to renumbering, it is being adopted as § 194.302(v).

Section 91.207 requires an emergency locator transmitter (ELT) for airplane operations to facilitate search and rescue efforts in locating downed aircraft. The FAA proposed applying § 91.207 to powered-lift in § 194.302(o). The FAA received two comments related to the proposed § 194.302(o).

ALPA expressed support of § 194.302(o), which requires all powered-lift to comply with § 91.207 and be equipped with an ELT.

Joby, however, argued that mandating ELTs would increase cost and decrease payload capacity without providing an increase in operational safety. Joby suggested there are suitable alternatives to ELTs such as ADS-B, personal locator beacons, personal satellite trackers, and mobile phones.

The ability to locate powered-lift in the event of a crash is essential for reaching survivors as quickly as possible and potentially saving lives. The FAA considers this to be a necessary requirement for powered-lift, particularly as a new entrant aircraft with little civil operational history. The FAA noted in the ADS-B final rule that the ADS-B system cannot replace the ELT function since the ADS-B system is not required to be crashworthy nor is the ADS-B system integrated with the satellite-based search and rescue system (SARSAT) and, thus, may not be operable or able to transmit following an aircraft accident. Similarly, the FAA does not consider personal locator beacons, personal satellite trackers, and mobile phones as a suitable replacement for an ELT as these devices do not meet the requirements for new installation specified in § 91.207, nor the minimum operational performance standards (MOPS) for ELTs. Accordingly, the FAA is adopting § 194.302(o) as proposed, though due to renumbering it is being adopted as § 194.302(w).

³⁸⁹ Rotorcraft Regulatory Review Program Notice No. 5, NPRM, 50 FR 10144, 10157 (Mar. 13, 1985).

Section 91.213 provides limitations on operations with inoperative instruments and equipment, as well as relief for operations with inoperative instruments and equipment for aircraft with and without an approved Minimum Equipment List (MEL). Section 91.213(a) requires that no person may takeoff an aircraft with inoperative instruments or equipment installed. This applies to powered-lift. Section 91.213(d) provides specific relief for an aircraft without an approved MEL; however, powered-lift is not included in the aircraft eligible for the exception in § 91.213(d)(1). The FAA did not propose to include powered-lift in the exceptions set forth in § 91.213(d). The FAA did not receive any comments on this and will therefore not apply § 91.213(d) to powered-lift.

Section 91.215(b) states that no person may operate an aircraft in the airspace described in § 91.215(b)(1) through (5) unless that aircraft is equipped with an operable coded radar beacon transponder. The FAA anticipates that, while all new entrant powered-lift will have a substantial electrical system, some powered-lift may be powered by batteries, rather than an engine. Sections 91.215(b)(3) and (5) allow aircraft to operate without a transponder if the aircraft was certificated without an engine-driven electrical system. The FAA proposed in § 91.215(b)(3) and (5) for “aircraft” not apply to powered-lift. The effect of the proposal is that all powered-lift must be equipped with an operable coded radar beacon transponder as required in § 91.215(b)(1), (2), and (4). The FAA did not receive any comments related to the proposed § 91.215(b)(3). The FAA determined that adding “Notwithstanding § 91.301,” to the beginning of § 91.304 helps to clarify that the aircraft provisions under § 91.215(b)(3) and (5) do not apply to powered-lift even though, generally, any aircraft provisions in part 91 already apply to powered-lift. As such, as a result of renumbering, the FAA adopts § 91.304 as proposed.

Section 91.219 prohibits the operation of a turbojet-powered U.S.-registered civil airplane unless that airplane is equipped with an approved altitude alerting system or device. The FAA proposed in § 91.302(p) that all powered-lift comply with the altitude alerting requirements under § 91.219. The FAA received one comment on the proposed § 91.302(p) from EASA, requesting more details as to how the FAA decided that all new powered-lift entrants would be considered “high performant.”

Within the operational rules of this SFAR, the FAA generally does not impose requirements based on the powerplant of the powered-lift. For example, where a regulation refers to an aircraft powered by turbines, the FAA takes the approach that such regulations should apply to all powered-lift, rather than just those powered-lift that are powered by turbines. The FAA anticipates that certain powerplants, such as electric motors, may have equal or better performance in comparison to internal combustion engines, which could lead to higher performance capabilities. As such, the FAA is generally taking the more conservative approach and requiring that certain operating regulations apply to all powered-lift, regardless of powerplant. There are, however, some instances where the FAA proposed to apply certain regulations based on the type of powerplant. Such regulations are tailored based on the type of powerplant because those regulations contain factors other than performance to trigger the applicability of that particular regulation (e.g., the regulation is powerplant specific to maintain the intent for noise abatement in certain classes of airspace). In those instances, the FAA explains in this preamble why it decided to retain the powerplant reference.

EASA requested more details as to how the FAA decided that all new powered-lift entrants would be considered “high performant.” In formulating the discussion surrounding use of altitude alerting equipment, the FAA identified that some powered-lift may have high performance capabilities which warrant the use of such equipment. Because powered-lift capabilities are not yet fully known, the most conservative approach is to require this equipment. The FAA received no negative comments and will adopt the proposed § 91.302(p) as final, though due to renumbering it is being adopted as § 91.302(x).

Section 91.223 prohibits the operation of a turbine-powered U.S.-registered airplane configured with six or more passenger seats, excluding any pilot seat, unless that airplane is equipped with an approved terrain awareness and warning system (TAWS). The FAA proposed in § 91.302(q) that all powered-lift, regardless of powerplant type, with 6 or more seats must be equipped with an HTAWS system that meets the Technical Standard Order (TSO) C194 or an FAA-approved TAWS A/HTAWS hybrid system. In addition, the FAA proposed in § 91.302(q) that powered-lift must comply with § 91.223(c), which imposes a

requirement for a manual containing appropriate procedures on the use of terrain awareness equipment and the proper flightcrew reactions in response to a TAWS activation.

The FAA received one comment from ALPA related to the proposed § 91.302(q). ALPA stated that all powered-lift (regardless of seating capacity) must be equipped with TAWS or HTAWS as applicable, an Aircraft Collision Avoidance System (ACAS), and a CVR and FDR. ALPA recommended that when HTAWS is required for traditional helicopter operations, it should also be required for similar powered-lift operations regardless of seat capacity, to ensure the highest level of safety in this novel aircraft type and its operations.

The FAA has considered ALPA’s recommendation for TAWS/HTAWS to be required for all powered-lift regardless of seating capacity. The FAA is adopting the rule as proposed in the NPRM. The FAA has previously determined that a TAWS requirement is appropriate for only those turbine-powered airplanes with 6 or more passenger seats, excluding any pilot seat. For consistency with previous rulemaking, the FAA is requiring all powered-lift, regardless of powerplant, with six or more passenger seats, excluding any pilot seat, to meet a similar terrain awareness equipment requirement. Because powered-lift are capable of flight in vertical mode and have been granted some of the same operating privileges as rotorcraft, the terrain awareness equipment must meet either HTAWS or hybrid A/HTAWS specifications, to comply with § 91.223(a). The costs imposed on operators and individuals required to comply with this rule would be no more burdensome than the costs incurred by entities and individuals complying with corresponding airplane and rotorcraft regulations that are already in effect. Moreover, the FAA has determined that requiring this equipment for all powered-lift regardless of the seating capacity is not warranted at this time because the FAA does not have the data to support requiring TAWS/HTAWS to be installed on powered-lift with less than six passenger seats. As such, requiring powered-lift to comply with TAWS/HTAWS regardless of seating capacity is not consistent with current regulations. The FAA is therefore adopting § 91.302(q) as proposed, though due to renumbering it is being adopted as § 91.302(y).

3. Incorporation by Reference

Incorporation by reference (IBR) is a mechanism that allows Federal agencies

to comply with the requirements of the Administrative Procedure Act to publish rules in the **Federal Register** and the CFR by referring to material published elsewhere.³⁹⁰ Material that is incorporated by reference has the same legal status as if it were published in full in the **Federal Register** and the CFR. The standards referenced in this rule include technical information and specifications for equipment and capabilities required to meet terrain awareness and warning systems and helicopter terrain awareness and warning systems.

The standards referenced in §§ 194.109, 194.302, and 194.306 of this rule are incorporated by reference with the approval of the Director of the Office of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. In accordance with 5 U.S.C. 552(a) and 1 CFR part 51,³⁹¹ all approved materials are available for inspection at the FAA's Office of Rulemaking, 800 Independence Avenue SW, Washington, DC 20591 (telephone (202) 267-9677). This material is also available from the sources indicated in paragraphs (a) and (b) of § 194.109 and as follows:

1. Copies of Technical Standard Order (TSO)-C194, Helicopter Terrain Awareness and Warning System (Dec. 17, 2008) may be obtained from the U.S. Department of Transportation, Subsequent Distribution Office, DOT Warehouse M30, Ardmore East Business Center, 3341 Q 75th Avenue, Landover, MD 20785; telephone (301) 322-5377. It is also available on the FAA's website at www.faa.gov/aircraft/air_cert/design_approvals/tso/. Select the link "Search Technical Standard Orders." This TSO contains the minimum performance standards the helicopter terrain awareness and warning system must meet for approval and identification with the TSO marking.

2. Copies of section 2, Equipment Performance Requirements and Test Procedures, of RTCA DO-309, Minimum Operational Performance Standards (MOPS) for Helicopter Terrain Awareness and Warning System (HTAWS) Airborne Equipment (Mar. 13, 2008) may be obtained from RTCA, Inc., 1150 18th St NW, Suite 910, Washington, DC 20036; telephone (202) 833-9339; website: www.rtca.org/

products. Section 2 of RTCA DO-309 contains the equipment performance requirements and test procedures for Helicopter Terrain Awareness and Warning Systems.

4. Special Flight Operations

Section 91.313 prescribes operating limitations for restricted category civil aircraft. Section 91.313(a) through (e) apply to all restricted category aircraft, including powered-lift. Section 91.313(f) relates to operations under part 133, which powered-lift are not currently authorized to conduct. Section 91.313(g) requires small, restricted-category airplanes to be equipped with a shoulder harness or restraint system for each front seat. For the same reasons as discussed regarding applicability of § 91.205(b)(14), the FAA proposed in § 194.302(r) that restricted category small powered-lift must have an approved shoulder harness or restraint system for all seats installed to provide an adequate level of safety for powered-lift operations. The FAA did not receive any comments on this proposal and therefore adopts § 194.302(r) as proposed, though due to renumbering it is being adopted as § 194.302(z).

5. Maintenance, Preventive Maintenance, and Alterations

Section 91.409 prescribes inspection programs to ensure that the aircraft is airworthy. Sections 91.409(a) and (b) require annual and 100-hour inspections, or optionally a progressive inspection program under paragraph (d) for aircraft that do not fall under the exceptions provided in paragraph (c).³⁹² Section 91.409(e) through (h) set forth inspection program options and requirements for larger aircraft and aircraft with more complex aircraft systems which are more stringent than those provided under § 91.409(a), (b), and (d). Because paragraphs (e) through (h) apply to more complex aircraft, the FAA proposed in § 194.302(s) that these paragraphs should apply to technically advanced powered-lift (TAPL), which is a powered-lift that is equipped with an electronically advanced system in which the pilot interfaces with a multi-computer system with increasing levels of automation in order to aviate, navigate, or communicate. The FAA proposed requiring certain minimum display elements for both a PFD and MFD, clarifying what will be considered a PFD or MFD. Powered-lift that are not considered technically advanced under

the definition used for compliance with § 91.409 within this SFAR and are not maintained under a CAMP under § 135.411(a)(2) must continue to comply with § 91.409(a), (b), and (d) because those provisions apply to "aircraft."

The FAA received four comments related to § 91.409 and proposed § 194.302(s).

AUVSI expressed concern with the FAA's approach to TAPL. AUVSI also argued that the proposal is inconsistent with the flightcrew interface requirements that have been proposed as airworthiness standards/criteria for both the Joby JAS4-1 and the Archer Model M001 powered-lift. AUVSI noted that § 194.302(s) imposes a design requirement and that such requirements should not be implemented through operational rules.

CAE recommended the determination of TAPL be delegated to the Aircraft Certification Offices (ACO), Aircraft Evaluation Division (AED), or Flight Standardization Board (FSB) assigned to a specific aircraft certification project, rather than to individual FSDOs. CAE emphasized that the TAPL determination should be made based on the aircraft and equipment combination, not individual operator policies or procedures.

In a group comment, AOPA, GAMA, HAI, NATA, NBAA, and VFS collectively stated that the determination of TAPL should be delegated to the ACO, AED, or FSB assigned to a specific aircraft certification project, not to individual FSDOs.

An individual commented that the FAA should provide more guidance on maintenance and inspection requirements in the final rule, including specific maintenance standards or procedures and the frequency of inspections for powered-lift. This individual commenter asked for clarification on how maintenance, inspection, and minimum equipment requirements would differ from existing requirements for airplanes and helicopters.

The FAA agrees with the commenters who recommended that the determination of a TAPL should not rest with individual field offices. The rule determines whether a powered-lift constitutes a TAPL because it outlines the required criteria.

However, the FAA disagrees with AUVSI about the proposed § 194.302(s). The definition of TAPL is intended to allow the FAA to distinguish between complex and less complex powered-lift and thereby determine which inspection program applies. The TAPL definition is

³⁹⁰ 5 U.S.C. 552(a).

³⁹¹ 5 U.S.C. 552(a) requires that matter incorporated by reference be "reasonably available" as a condition of its eligibility. Further, 1 CFR 51.5(b)(2) requires that agencies seeking to incorporate material by reference discuss in the preamble of the final rule the ways that the material it is incorporating by reference is reasonably available to interested parties and how interested parties can obtain the material.

³⁹² Section 91.409 does not apply to an aircraft that is maintained under a Continuous Airworthiness Maintenance Program (CAMP), such as under § 135.411(a)(2).

not an indirect imposition of design requirements via operational rules.

Finally, in response to the commenter who requested more details on maintenance and inspection requirements, the FAA notes that, unless otherwise specified by part 194, powered-lift must continue to comply with rules applicable to all aircraft in part 43 of this chapter as well as any applicable maintenance and inspection requirements under parts 91 and 135 of this chapter.

The FAA adopts § 194.302(s) as proposed, though due to renumbering, it is being adopted as § 194.302(aa).

Section 91.411 prescribes the requirements for altimeter system and altitude reporting equipment tests and inspections. The FAA proposed in § 194.302(t) to apply § 91.411 to powered-lift, as it currently applies to both airplanes and helicopters, without differentiation. The FAA did not receive any comments on the proposed § 194.302(t) and therefore adopts the proposed § 194.302(t) as final, though due to renumbering, it is being adopted as § 194.302(bb).

6. Large and Turbine-Powered Multiengine Airplanes and Fractional Ownership Program Aircraft

Section 91.501 prescribes operating rules governing the operation of large airplanes of U.S. registry, turbojet-powered multiengine civil airplanes of U.S. registry, and fractional ownership program aircraft of U.S. registry that are operating under subpart K of part 91 in operations not involving common carriage.

The FAA anticipates that U.S.-registered large powered-lift will operate like large airplanes with respect to altitude, speed, passenger carrying capacity, passenger safety, composition of flightcrew, operating environment (e.g., over water), and required safety and rescue equipment. The FAA proposed in § 194.302(u) to capture large powered-lift in the applicability section of § 91.501, regardless of powerplant type, system of aircraft ownership, or ownership interest. The FAA received no comments on the proposed § 194.302(u). Though the proposal will not substantively change, the FAA determined that further clarification is necessary in the subpart F applicability section under § 194.302(cc). First, the FAA is clarifying under § 194.302(cc) that part 91, subpart F applies to powered-lift operating under subpart K of part 91 (“Fractional Ownership

Operations”).³⁹³ The current § 91.501 already states that subpart F applies to fractional ownership program aircraft, but the FAA determined that expressly stating this in the SFAR regulatory text will help clarify the applicability of subpart F. Second, the FAA has clarified that any sections or paragraphs within sections that refer to a specific category of aircraft, such as airplanes or helicopters, and that are not outlined in the SFAR tables to § 194.302 or § 194.306, do not apply to powered-lift. Any regulatory reference to a category of aircraft that is intended to apply to powered-lift will be included in the SFAR tables. As such, the FAA adopts § 194.302(u) as final, though due to renumbering, it is being adopted as § 194.302(cc).

Section 91.503 describes required flying equipment and operating information for airplanes under subpart F of part 91. The FAA proposed in § 194.302(v) that this section apply to large powered-lift because the FAA anticipates that powered-lift will be used in passenger-carrying operations highly similar to airplanes. The FAA received no comments on the proposed § 194.302(v) and therefore adopts § 194.302(v) as final, though due to renumbering, it is being adopted as § 194.302(dd).

Section 91.505 imposes requirements to be familiar with the emergency equipment installed on the airplane to which a crewmember is assigned and with the procedures to be followed for the use of that equipment in an emergency. The crewmember must also be familiar with the Airplane Flight Manual for that airplane, if one is required, and with any placards, listings, instrument markings, or any combination thereof, containing each operating limitation prescribed for that airplane by the Administrator, including those specified in § 91.9(b). The FAA proposed in § 194.302(w) that § 91.505 apply to large powered-lift because, as stated previously, the FAA expects powered-lift to be used in passenger-carrying operations similar to airplanes. The FAA received no comments and therefore adopts § 194.302(w) as proposed, though due to renumbering it is being adopted as § 194.302(ee).

³⁹³ As discussed in the NPRM, subpart K of part 91 allows for fractional owners and their respective management company to share operational control of an aircraft. This subpart details certain operational considerations pertaining to fractional ownership programs to include safety standards for pilot training and qualifications. In the NPRM, the FAA discussed how the current regulatory framework as well as proposed amendments would be applicable to fractional ownership programs utilizing powered-lift. See 88 FR 39020, 39038.

Section 91.507 states that no person may operate an airplane over-the-top or at night under VFR unless that airplane is equipped with the instruments and equipment required for IFR operations under § 91.205(d) and one electric landing light for night operations. The FAA proposed in § 194.302(x) that large powered-lift must comply with the equipment requirements in this section. The FAA received no comments on the proposed § 194.302(x) and therefore adopts it as final, though due to renumbering, it is being adopted as § 194.302(ff).

Section 91.509(a) requires a life preserver or an approved flotation means for each occupant of an airplane. The FAA proposed in § 194.302(y) that powered-lift meet the requirements of § 91.509(a). The FAA received no comments on this proposal.

Section 91.509(b) states that no person may take off an airplane for flight over water more than 30 minutes flying time or 100 nautical miles from the nearest shore, whichever is less, unless it has onboard specified survival equipment. The FAA determined that the vertical landing capability of powered-lift should be considered in evaluating the applicability of this rule. Therefore, the FAA proposed in § 194.302(y)(1) to also apply the definition of extended over-water operations for helicopters to powered-lift. The FAA received no comments to this proposal.

Section 91.509(b)(5) specifically requires a lifeline to be stowed in accordance with § 25.1411(g). The FAA anticipates that powered-lift may be developed in the future that are capable and certified for ditching and with a wing or comparable structure suitable for evacuation. Accordingly, the FAA proposed in § 194.302(y)(2) that powered-lift subject to the requirements of subpart F will be required to comply with § 25.1411(g) or other airworthiness requirements established in accordance with § 21.17(b) that provide an equivalent level of safety for powered-lift, as reflected in the proposed regulatory text. The FAA received no comments to § 194.302(y)(2). As a result of the foregoing, the FAA adopts § 194.302(y) as final, but as a result of renumbering, it is now § 194.302(gg).

Section 91.511 describes requirements for communication and navigation equipment for overwater operations. Paragraph (a) states that no person may take off an airplane for a flight over water more than 30 minutes flying time or 100 nautical miles from the nearest shore unless it has at least the operable radio communication and electronic navigation equipment described in

§ 91.511. The FAA proposed in § 194.302(z) to require large powered-lift to comply with § 91.511 for overwater operations that are more than 30 minutes or 100 nautical miles from the nearest shore or off-shore heliport structure, whichever is less. The FAA received no comments on proposed § 194.302(z) and therefore adopts § 194.302(z) as final, though due to renumbering it is being adopted as § 194.302(hh).

Section 91.513 describes requirements for emergency equipment for airplanes, such as fire extinguishers, first aid kits, and megaphones. The FAA proposed in § 194.302(aa) to apply the safety standards required in this section to large powered-lift. The FAA received no comments on the proposed § 194.302(aa) and therefore adopts § 194.302(aa) as final, though due to renumbering it is being adopted as § 194.302(ii).

Section 91.515 prescribes flight altitudes for airplanes operating under VFR. The flight altitudes are designed to ensure adequate terrain clearance from any mountain, hill, or other obstruction to flight for day and night operations. The FAA proposed in § 194.302(bb) to apply the minimum flight altitudes in § 91.515 to large powered-lift. The FAA received no comments on the proposed § 194.302(bb). Therefore, the FAA adopts the proposed § 194.302(bb) as final, though due to renumbering it is being adopted as § 194.302(jj).

Section 91.517 describes passenger information and signage displaying the use of seatbelts and non-smoking requirements. The FAA proposed in § 194.302(cc) that large powered-lift comply with the information and signage display requirements in § 91.517. The FAA received no comments and is adopting § 194.302(cc) as final, though due to renumbering it is being adopted as § 194.302(kk).

Section 91.519 describes passenger briefings for the use of seatbelts and non-smoking requirements. The FAA proposed in § 194.302(dd) that § 91.519 should also apply to large powered-lift because passenger briefings for seatbelt use and smoking are equally important for airplane and powered-lift passenger-carrying operations. The FAA received no comments on § 194.302(dd) and therefore adopts the proposed § 194.302(dd) as final, though due to renumbering it is being adopted as § 194.302(ll).

Section 91.521 prescribes the requirements for equipping transport category airplanes with shoulder harnesses and safety belts. The FAA proposed in § 194.302(ee) that large powered-lift comply with the safety

equipment requirements for airplanes in this section. The FAA did not receive any comments on the proposed § 194.302(ee). As such, the FAA adopts § 194.302(ee) as final, though due to renumbering, it is being adopted as § 194.302(mm).

Section 91.523 imposes requirements regarding how carry-on baggage is stored on airplanes with a seating capacity of more than 19 passengers. The FAA proposed in § 194.302(ff) that, should powered-lift with more than 19 seats be developed, they would be required to comply with § 91.523, including the safety equipment requirements specified in § 25.561(b)(3) or airworthiness criteria that the FAA may find provide an equivalent level of safety in accordance with § 21.17(b). The FAA did not receive any comments on the proposed § 194.302(ff) and therefore adopts § 194.302(ff) as final, though due to renumbering, it is being adopted as § 194.302(nn).

Section 91.525 describes the requirements for the carriage of cargo. The FAA proposed in § 194.302(gg) that this section should apply to powered-lift. The FAA received no comments on the proposed § 194.302(gg) and therefore adopts § 194.302(gg) as final, though due to renumbering, it is being adopted as § 194.302(oo).

Section 91.527 describes the requirements for operations in icing conditions. To ensure safe operation of powered-lift, all the items listed in § 91.527(a), as well as other critical surfaces as determined by the manufacturer, must be clear from any contamination adhering to their surfaces, including the vertical-lift flight mode lifting devices. The FAA proposed in § 194.302(hh) that the requirements of § 91.527(a) should apply to all large powered-lift, including the vertical-lift flight mode lifting devices. The FAA received no comments on the proposed § 194.302(hh) and therefore adopts § 194.302(hh) as final, though due to renumbering, it is being adopted as § 194.302(pp).

Section 91.527(b) prescribes rules for IFR flight into known or forecast light or moderate icing conditions, or under VFR into known light or moderate icing conditions unless certain conditions are met as described below. The FAA proposed in § 194.302(ii) that no pilot may fly a powered-lift under IFR into known or forecast light or moderate icing conditions or under VFR into known light or moderate icing conditions unless it has been type certificated and appropriately equipped for operations in icing conditions, as set forth in § 194.308(i). Section 194.308(i), pertaining to § 135.227(d), requires

powered-lift seeking certification to operate in known or forecast light or moderate icing conditions to have procedures for the use of the ice protection equipment set forth in the AFM. The FAA received no comments on either the proposed § 194.302(ii) or § 194.308(i). As such, the FAA adopts both §§ 194.302(ii) and 194.308(i) as final. However, due to renumbering, § 194.302(ii) is being adopted as § 194.302(qq) and § 194.308(i) is being adopted as § 194.306(xx).

Section 91.527(c) prohibits airplane operations into known or forecast severe icing conditions, except for an airplane that has ice protection provisions that meet the requirements in section 34 of Special Federal Aviation Regulation No. 23, or those for transport category airplane type certification. The FAA did not propose to apply this regulation to powered-lift operations, explaining that powered-lift would be prohibited from operating into known or forecast severe icing conditions. However, upon further review, the FAA determined the SFAR regulatory text should explicitly address this prohibition. As a result, the FAA is adding paragraph (rr) within § 194.302, applying paragraph (c) of § 91.527 to powered-lift that are subject to the requirements of subpart F of part 91. Section 194.302(rr) states that no pilot may fly a powered-lift into known or forecast severe icing conditions. The exceptions outlined in § 91.527(c) (*i.e.*, for airplanes and transport category airplanes with ice protection provisions) do not apply to powered-lift. The FAA therefore adopts § 194.302(rr) as amended, which prohibits powered-lift from flying into known or forecast icing conditions.

Section 91.529 addresses flight engineer requirements for airplane operations. The FAA did not propose application of this section to powered-lift because modern aircraft are not designed to require a flight engineer.

Section 91.531 describes second-in-command SIC requirements for airplanes in subpart F. Section 91.531(a) provides that, subject to an exception in § 91.531(b), no person may operate any airplane that is type certificated for more than one required pilot, any large airplane, or any commuter category airplane without a pilot designated as SIC. The FAA proposed in § 194.302(jj) that paragraphs (a)(1) and (2) apply to powered-lift. However, the FAA proposed not to apply paragraph (a)(3) to powered-lift because there are currently no commuter category powered-lift, and no new aircraft can be certificated for that category as there are no longer any certification standards for commuter category aircraft in the

Federal Aviation Regulations. Section 91.531(b)(1) states that an airplane certificated for operation with one pilot may be operated without a pilot designated as SIC. Section 91.531(b)(2) states that a person may operate a large or turbojet-powered multiengine airplane, holding a special airworthiness certificate, without an SIC if (1) the airplane was originally designed with only one pilot station, or (2) the airplane was originally designed with more than one pilot station, but single pilot operations were permitted by the AFM or were otherwise permitted by the U.S. Armed Forces or the armed forces of a Chicago Convention contracting State. The FAA proposed in § 194.302(jj) that § 91.531(b)(1) apply to a powered-lift certificated for operation with one pilot and that (b)(2) apply to all large powered-lift that hold a special airworthiness certificate and meet the requirements of § 91.531(b)(2)(i) and (ii), regardless of powerplant type. The FAA determined that further clarification is necessary for § 91.531(b)(2) because the current regulation applies to large and turbojet-powered multiengine airplanes. Though the FAA explains in the NPRM it will not reference “multiengine” or “turbojet-powered” for powered-lift in the operational rules,³⁹⁴ the SFAR regulatory text should clarify that § 91.531(b)(2) applies to “large” powered-lift. As a result, the FAA is clarifying under § 194.302(ss) that § 91.531(b)(2) applies to large powered-lift that meet the additional requirements outlined in § 91.531(b)(2), which includes subparagraphs (i) and (ii).

Section 91.531(c) states no person may designate a pilot to serve as SIC, nor may any pilot serve as SIC, of an airplane required under this section to have two pilots unless that pilot meets the qualifications for SIC prescribed in § 61.55. The FAA proposed in § 194.302(jj) that paragraph (c) apply to large powered-lift. The FAA received no comments on the proposed § 194.302(jj) and therefore adopts § 194.302(jj) as final, though due to renumbering, it is being adopted as § 194.302(ss).

Section 91.533 describes flight attendant requirements for airplanes with more than 19 passengers. The FAA proposed in § 194.302(kk) that this section apply to powered-lift with more than 19 passengers onboard if the powered-lift are certificated for civil operations during the duration of the SFAR. The FAA received no comments on the proposed § 194.302(kk) and therefore adopts § 194.302(kk) as final,

though due to renumbering, it is being adopted as § 194.302(tt).

7. Additional Equipment and Operating Requirements for Large and Transport Category Aircraft

Section 91.603 requires that a transport category airplane be equipped with an aural speed warning device that complies with § 25.1303(c)(1). The FAA proposed in § 194.302(ll) that this regulation apply to large powered-lift. As noted in the NPRM, the FAA also proposed that instead of § 25.1303, the FAA may apply other airworthiness criteria it finds provide an equivalent level of safety in accordance with § 21.17(b). The FAA did not receive any comments on the proposed § 194.302(ll) and therefore adopts § 194.302(ll) as final, though due to renumbering, it is being adopted as § 194.302(uu).

Section 91.605 prescribes transport category civil airplane weight limitations. Section 91.605(a) prescribes takeoff requirements for transport category airplanes (other than a turbine-engine-powered airplane certificated after September 30, 1958). This regulation applies only to non-turbine powered airplanes that were type certificated without an Airplane Flight Manual. All new entrant powered-lift type certificated under § 21.17(b) will be required to have an AFM; accordingly, the FAA did not propose to apply § 91.605(a) to powered-lift for this SFAR.

Section 91.605(b) contains references to an Airplane Flight Manual and prohibits operations contrary to the flight manual. Section 91.605(b)(1) states that no person operating a turbine-engine-powered transport category airplane may takeoff that airplane at a weight greater than that listed in the Airplane Flight Manual. The FAA proposed in § 194.302(mm) to apply § 91.605(b)(1) to large powered-lift—regardless of whether they will takeoff vertically or using wing-borne lift similar to an airplane—and that have the takeoff performance information in the AFM.

Section 91.605(b)(2) stipulates no person operating a turbine-engine-powered transport category airplane may takeoff at a weight (allowing for normal consumption of fuel and oil in flight) to the destination or alternate airport) if the weight of the airplane on arrival would exceed the landing weight as contained in the Airplane Flight Manual taking in consideration the elevation of the destination or alternate airport and the ambient temperature anticipated at the time of landing. The FAA proposed in § 194.302(nn) that paragraph (b)(2) apply to large powered-

lift—regardless of whether they will land vertically or using wing-borne lift similar to an airplane—that have the landing performance information in the AFM.

Section 91.605(b)(3) and (b)(4)(ii) also contain additional takeoff criteria for turbine-engine-powered transport category airplanes, such as wet runway and clearway distances. The FAA proposed in § 194.302(oo) to apply these requirements to certain large powered-lift. Section 91.605(c) sets specific requirements for takeoff distances and runway lengths for turbine-engine-powered transport category airplanes certificated after August 29, 1959. The FAA proposed in § 194.302(oo) that this paragraph apply to large powered-lift executing takeoff operations that utilize wing-borne lift and have takeoff performance information in the AFM.

The FAA did not receive any comments on proposed § 194.302(mm), (nn), or (oo). The FAA therefore adopts § 194.302(mm), (nn), and (oo) as final, though due to renumbering, these sections are being adopted as § 194.302(vv), (ww), and (xx).

Section 91.609 prescribes the requirements for flight data recorders (FDR) and cockpit voice recorders (CVR) in large and transport-category U.S.-registered civil aircraft.³⁹⁵ The requirements are based, in part, on the passenger-seating configuration of each aircraft. The FAA proposed in § 194.302(pp) that a powered-lift, based on seating configuration but regardless of the type of powerplant, must comply with the certification provisions listed in § 91.609(c)(3), (e)(1), and (i), or with such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b). Furthermore, the FAA proposed that operators of powered-lift must comply with §§ 194.312 or 194.313 in lieu of the appendices referenced in § 91.609(c)(1).

The FAA received four comments on the proposed §§ 194.302(pp), 194.312, and 194.313.

ALPA argued that FDR and CVR should be required for powered-lift, regardless of seating capacity. ALPA further recommended that, in addition to requiring CVR and FDR recorders for all powered-lift, powered-lift operators should be required to install Flight Data Monitoring Systems (FDMS) to identify adverse trends and prevent accidents.

The FAA has previously determined that the FDR requirement is appropriate

³⁹⁵ The FAA notes that it published a Notice of Proposed Rulemaking pertaining to CVRs, but the proposal does not impact this final rule. See *25-hour Cockpit Voice Recorder (CVR) Requirement, New Aircraft Production*, NPRM, 88 FR 84090 (Dec. 4, 2023).

³⁹⁴ See 88 FR 39025 (June 14, 2023).

for only those multiengine, turbine-powered airplanes or rotorcraft that have a passenger seating configuration, excluding any pilot seats, of 10 or more. Due to the capability of powered-lift to operate in wing-borne flight mode and vertical-lift flight mode, the FAA will also require multiengine, turbine-powered powered-lift to comply with § 91.609(c)(1).

In addition, the FAA has previously determined that the cockpit voice recorder (CVR) requirement is appropriate for only those multiengine, turbine-powered airplanes or rotorcraft that have a passenger seating configuration of six passengers or more and for which two pilots are required by type certification. Due to the capability of powered-lift to operate in the wing-borne flight mode and vertical-lift flight mode, the FAA will also require multiengine, turbine-powered powered-lift to comply with § 91.609(e).

Lastly, as stated in the NPRM, the costs imposed on operators and individuals complying with this rule would be no more burdensome than the costs incurred by entities and individuals complying with corresponding airplane and rotorcraft regulations that are already in effect. Requiring powered-lift to comply with FDR and CVR regardless of seating capacity is not consistent with current regulations. Moreover, the FAA determined that requiring equipment such as CVRs and FDRs for all powered-lift regardless of the seating capacity is not warranted at this time because the FAA does not have the data to support requiring that equipment to be installed on powered-lift with less than six passenger seats.

An individual commenter stated that, although the NPRM mentions that powered-lift can operate using features of both helicopters or airplanes, the proposed rule only addresses two flight modes: wing-borne and vertical-lift flight. The commenter argued that the most critical operating modes, as evidenced by historical accident, incident, and anomalous event data for the V-22 Osprey tilt-rotor, are during transition (VTOL-airplane) and conversion (airplane-VTOL), when the lift is being shared by engine-driven lift devices/engine thrust and the wing. The commenter argued that the rule should address powered-lift transition and conversion modes of flight.

Although there is no table specific to “transition” and “conversion” modes, the existing parameters listed in the published FDR tables include these flight modes (e.g., § 194.310 contains a section that specifies “Pilot inputted—Primary controls (*i.e.*, Ascent, descent,

acceleration and deceleration, heading and directional control for all axes”). The FAA proposed requiring the FDR to record all data during the manipulation of all primary flight controls for all axes, which includes recording the full range during any transitions in and out of the vertical-lift flight mode.³⁹⁶ These parameters were included in Table 1 to § 194.312 and Table 1 to § 194.314 in the proposed SFAR. Therefore, the transition and conversion modes are incorporated into the SFAR FDR tables.

ANAC asked the FAA to consider adopting the following requirement: “No person may operate a U.S. civil registered multiengine aircraft having a passenger seating configuration of six passengers or more unless it is equipped with an approved cockpit voice recorder.” Lastly, ANAC suggested exploring the integration of lightweight flight recorders for voice and data recording.

ANAC suggested that the required amount of recorded information be reduced from 25 hours to 10 hours due to the perceived limited endurance of powered-lift. However, the FAA notes that subpart G of part 91 applies to the operation of large and transport category U.S.-registered civil aircraft. The FAA expects large and transport-category powered-lift to have endurances similar to transport-category airplanes and helicopters. Therefore, the FAA has determined that existing FDR requirements are appropriate for large and transport category U.S.-registered civil powered-lift and will provide a level of safety equivalent to airplanes and rotorcraft. The FAA has previously determined that the CVR requirement is appropriate only for those U.S. civil registered multiengine, turbine-powered airplane or rotorcraft having a passenger seating configuration of six passengers or more and for which two pilots are required by type certification or operating rule. The FAA does not intend to expand this requirement to include aircraft for which only one pilot is required. Furthermore, as stated in the NPRM the costs imposed on operators and individuals complying with this rule would be no more burdensome than the costs incurred by entities and individuals complying with corresponding airplane and rotorcraft regulations that are already in effect. As such, requiring powered-lift to comply with the CVR requirements for aircraft requiring only one pilot is not consistent with current regulations and

would create a financial burden on the operator.

An anonymous commenter stated they are concerned that the proposed flight recorder parameters do not adequately address the unique design and operation of vertical lift vehicles. Furthermore, battery propulsion systems are not included in the proposed parameter list in this NPRM. The commenter asserted that, considering that the intent of battery technology is to replace legacy turbine-powered systems, powered-lift should be mandated to carry flight recording technology regardless of weight or passenger capacity. The FAA disagrees. The parameters specified in the proposed tables of § 194.312 through § 194.315 in the SFAR adequately encompass current powered-lift designs. The FAA proposed the requirement of the FDR to record all the pilots’ inputs of the primary controls (*i.e.*, ascent, descent, acceleration, and deceleration, heading and directional control for all axes). Thus, regardless of propulsion system or weight, the FDR would record the primary controls inputs.

In summary, the FAA notes that subpart G of part 91 applies to the operation of large and transport-category U.S.-registered civil aircraft. The FAA expects large and transport-category powered-lift to have endurances similar to transport-category airplanes and helicopters. Therefore, the FAA has determined that existing CVR and FDR requirements are appropriate to large and transport category U.S. registered civil powered-lift and will provide a level of safety equivalent to airplanes and rotorcraft. The FAA does not intend to expand the current rule to include all powered-lift, regardless of powerplant, seating capacity, or number of pilots required. Requiring equipment such as CVRs and FDRs for all powered-lift is not warranted at this time because the FAA does not have the data to support requiring this equipment to be installed all powered-lift regardless of seating capacity. Furthermore, as stated in the NPRM, the costs imposed on operators and individuals complying with this rule would be no more burdensome than the costs incurred by entities and individuals complying with corresponding airplane and rotorcraft regulations that are already in effect. As a result of the foregoing, the FAA adopts § 194.302(pp)(1) and (2) as final, though due to renumbering, those provisions are adopted as § 194.302(yy)(1) and (2).

Section 91.609(d) requires that, whenever a flight recorder required by § 91.609 is installed, it must be operated continuously from the instant the airplane begins the takeoff roll or the

³⁹⁶ See Section XIII (“Definitions”) for more information on how the FAA defines these flight modes in the final rule.

rotorcraft begins lift-off to when the airplane has completed the landing roll or the rotorcraft has landed at its destination. The FAA proposed in § 194.302(pp)(3) to require powered-lift to comply with this section by requiring that the flight recorder be operated continuously from the earlier point at which the powered-lift begins the takeoff roll or begins lift-off until the latter point when the powered-lift has completed the landing roll or has landed at its destination. The FAA did not receive any comments on this proposal and therefore adopts § 194.302(pp)(3) as final, though due to renumbering, it is being adopted as § 194.302(yy)(3).

Section 91.609(i) describes the CVR requirements for airplanes or rotorcraft manufactured on or after April 7, 2010. Section 91.609(j) describes the requirements for recording datalink messages in airplanes or rotorcraft when the datalink communication equipment was installed on or after April 6, 2012. The FAA considers CVRs and FDRs to be necessary safety equipment on airplanes and rotorcraft and proposed in § 194.302(pp) that these requirements also be applicable to powered-lift. The FAA did not receive any comments related to § 91.609(i) and (j). The FAA therefore adopts § 194.302(pp) as final, though due to renumbering, it is being adopted as § 194.302(yy).

Section 91.611 authorizes ferry flights with one engine inoperative for airplanes with three or four engines. The rule was written specifically for airplanes and is based on airplane performance characteristics. The FAA acknowledged that some powered-lift may operate as an airplane during takeoff but determined this section should not be applicable to large powered-lift under the SFAR due to the lack of data to support safe powered-lift operations with an inoperative engine.

The FAA received one comment related to § 91.611 from BETA, who recommended that the FAA make § 91.611 applicable to all powered-lift for which the AFM contains procedures for normal flight operations without all engines operating. BETA stated the FAA's decision to exclude § 91.611 from the SFAR unnecessarily restricts operations of powered-lift that during the type certification process establish that the aircraft can safely perform normal flight operations without all engines operating.

The FAA notes that § 91.611 was written specifically for airplanes and is based on airplane performance characteristics. The FAA acknowledges that some powered-lift may operate as an airplane during takeoff but

determined this section should not be applicable to large powered-lift under the SFAR due to the lack of data to support safe powered-lift operations with an inoperative engine. The FAA expects to obtain more data during the term of this SFAR to determine if powered-lift can safely operate with an inoperative engine. The FAA further notes that the applicability section subpart G of part 91 applies to the operation of large and transport category U.S.-registered civil aircraft. The A250, a powered-lift mentioned in BETA's comment, is not a large nor a transport category U.S.-registered civil aircraft and therefore is not subject to the requirements of subpart G of part 91.

Section 91.613 requires airplane compartment interiors to meet the flame propagation requirements set forth in §§ 25.853 or 25.856. For large powered-lift, the FAA proposed in § 194.302(qq) that the thermal/acoustic installation materials required by § 91.613(b)(2) meet the requirements of § 25.856 or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b). Section 91.613(a) does not apply to powered-lift because SFAR 41 terminated in September 1983 and is limited to type design changes for airplanes issued prior to October 1979. The FAA did not receive any comments related to § 194.302(qq) and therefore adopts § 194.302(qq) as final, though due to renumbering, it is being adopted as § 194.302(zz).

8. Waivers

Section 91.903 permits the Administrator to issue a certificate of waiver authorizing the operation of aircraft in deviation from any rule listed under § 91.905 if the Administrator finds that the proposed operation can be safely conducted under the terms of that certificate of waiver. In the NPRM, the FAA proposed a permanent change to § 91.903 that would allow the FAA to issue certificates of waiver for any of the part 91 operating rules as modified by part 194. In other words, each corresponding part 194 operating rule addressing a waivable part 91 rule will also be waivable. For example, § 91.107 is a waivable regulation under § 91.905. Similarly, § 194.302(c), which applies § 91.107 to powered-lift, will also be waivable under the § 91.903 amended language. For any rules that are not waivable, a powered-lift operator may still petition for an exemption. The FAA did not receive comments regarding proposed § 91.903(a) and finalizes the amendment as proposed.

9. Fractional Ownership Operations

Section 91.1037 addresses the requirements for operating large transport category airplanes at destination and alternate airports. The FAA perceives that large powered-lift will operate similar to large transport-category airplanes when considering altitude, distance, speed, passenger carrying capacity, passenger safety, composition of flight crew, operating environment (e.g., over water), and required safety and rescue equipment. Therefore, the FAA proposed that large transport category powered-lift comply with § 91.1037 as set forth in § 194.302(rr). Furthermore, the FAA proposed that if a specific powered-lift meets the requirements of § 91.1037, then all of the requirements of § 91.1025(o), including § 91.1025(o)(7) which currently only applies to airplanes, will be applicable, as set forth in § 194.302(rr)(i). The FAA did not receive any comments related to § 194.302(rr) and therefore adopts § 194.302(rr) as final, though due to renumbering, it is being adopted as § 194.302(aaa).

Section 91.1041 addresses aircraft proving and validation tests. Section 91.1041 sets out the parameters and the requirements for when proving and validation tests must be accomplished by a fractional ownership program.

Section 91.1041(b) requires a fractional ownership program manager to conduct proving tests in a turbojet airplane if they have not previously proved a turbojet airplane. The FAA proposed in § 194.302(ss) that a fractional ownership program manager that has not previously proven a powered-lift in operations under subpart K, be required to conduct at least 25 hours of proving tests acceptable to the Administrator as detailed in § 91.1041(b)(1) through (3).

Under § 91.1041(d), the FAA requires validation testing for certain authorizations, for operations outside U.S. airspace, and for the addition of certain aircraft that were previously proved or validated but are not of the same make or model, or of similar design. These tests are required for aircraft that require two pilots for flight in VFR conditions, or turbojet airplanes. Under § 194.302(ss), the FAA proposed applying § 91.1041(d) to powered-lift that are subject to the requirements of subpart K of part 91. The FAA did not receive comments regarding § 91.1041(d).

The FAA received one comment from Lilium regarding the 25-hour proving test requirement under § 91.1041(b). Lilium urged the FAA to consider

adopting a tailored approach to this requirement. Specifically, Lilium stated the FAA could require program managers to conduct a series of proving tests, each focusing on a specific aspect of the aircraft's operation, and that the proving test period should be tailored to the expected geographical routes and flight times of the program.

Powered-lift, regardless of the powerplant, have additional complexity due to their design and operation. These features have not been available and experienced by the civilian market to date. Although Lilium proposed a specific strategy for tailoring the proving test requirements, § 91.1041(g) already allows the Administrator to authorize deviations from the proving and validation testing requirements if the Administrator finds that special circumstances make full compliance with this section unnecessary. As a result of this deviation authority, no additional regulatory revisions are required. The FAA accepts § 194.302(ss) as final, though due to renumbering, it is being adopted as § 194.302(bbb).

Section 91.1045 contains additional safety equipment requirements for program aircraft. The FAA proposed that this rule apply to certain powered-lift in proposed § 194.302(tt) and (uu).

For powered-lift with more than 30 seats or a payload capacity of more than 7,500 pounds, the FAA proposed that § 91.1045(a) applies; and for powered-lift with 30 seats or fewer and a payload capacity of 7,500 pounds or less, § 91.1045(b) applies. Furthermore, the FAA proposed that § 91.1045(a)(3) and (b)(3) apply to powered-lift, and that instead of TAWS, a powered-lift must be equipped with an HTAWS that meets the requirements of TSO-C194 and Section 2 of RTCA DO-309 or a FAA-approved TAWS A/HTAWS hybrid system.

Section 91.1045(b)(5) refers to airborne thunderstorm detection equipment required by § 135.173 and airborne weather radar required by § 135.175. This section is applicable to airplanes having a passenger-seat configuration of 30 seats or fewer, excluding each crewmember, and a payload capacity of 7,500 pounds or less, and any rotorcraft (as applicable). The FAA proposed in § 194.302(uu) that § 91.1045(b)(5) apply to powered-lift. As an additional note, the requirements of §§ 135.173 and 135.175 apply as-written to powered-lift because they apply to aircraft and the FAA is not proposing to apply the helicopter provisions of those sections to powered-lift.

EASA asked if the FAA expects to issue a waiver from the requirement for powered-lift to be equipped with

thunderstorm detection equipment. Although not explicitly stated, it appears EASA is referencing § 91.1045. The FAA does not issue waivers to this rule. However, an individual or entity may seek relief from this rule, in the form of an exemption, by following the criteria set forth in 14 CFR part 11. The FAA will consider any exemption request that is submitted in accordance with 14 CFR part 11.

The FAA is adopting § 194.302(tt) and (uu) as proposed, though due to renumbering, these sections are being adopted as § 194.302(ccc) and (ddd).

The FAA notes applicability of pilot qualifications and training requirements in Subpart K of part 91 are discussed in section V.L. of this preamble.

With the exception of § 91.1109(b)(4), § 91.1109 applies to powered-lift because it is generally applicable to aircraft. Section 91.1109(b) requires each person desiring to establish or change an approved inspection program under this section to submit the inspection program for approval to the Flight Standards office that issued the program manager's management specifications. Under § 91.1109(b)(4), the inspection program may be derived from an airplane inspection program approved under § 125.247 and currently in use under part 125. The FAA recently proposed to amend the applicability of part 119 and allow powered-lift operations in part 125 in the Update to Air Carrier Definitions NPRM. However, the FAA did not include part 125 in this SFAR. Although § 91.1109(b)(4) is not applicable to powered-lift, the remaining provisions in § 91.1109 apply to powered-lift because they apply to all aircraft.

Additionally, the FAA notes that § 91.1115(b)(1) uses the word "airplane" and the rest of paragraph (b) uses the word aircraft. The FAA proposed a technical amendment to § 91.1115(b)(1) to change the word "airplane" to "aircraft." Changing this reference will not adversely affect any other category of aircraft. As changed, this section would then apply to powered-lift. The Continuous Airworthiness Maintenance Program (CAMP) program manager is primarily responsible for maintaining the airworthiness of the program aircraft, including airframes, aircraft engines, propellers, rotors, appliances, and parts, including for powered-lift. The CAMP manager is also responsible for maintaining the operations manual and maintaining the records required by § 91.1427 for the specified amount of time. The FAA did not receive any comments on the proposed § 91.1115(b)(1) and therefore adopts it as final.

C. Part 97 Rules for Powered-Lift

Title 14 CFR part 97 prescribes standard instrument approach procedures, obstacle departure procedures, and weather minimums that apply to IFR takeoffs and landings at civil airports in the United States. It further defines copter procedures as helicopter procedures, with applicable minimums as prescribed in § 97.35. The definition is limited to helicopters because when part 97 was promulgated, the FAA did not envision that aircraft would have hybrid airplane and helicopter characteristics. Consequently, powered-lift are currently excluded from using copter procedures, even if they can perform the operations safely. The purpose of this section of the SFAR is to propose a regulatory pathway that allows powered-lift to use the copter procedures defined in § 97.3.

In the NPRM, the FAA proposed § 194.305 to ensure that powered-lift seeking to use copter procedures can be certified under § 21.17(b), be approved for IFR operations, and meet equivalent system design and stability as helicopters currently type certificated for instrument flight under part 27 and appendix B to part 29. If the powered-lift does not meet that equivalency, the aircraft's flight manual will contain a limitation prohibiting use of copter procedures. As explained in the NPRM, the specific airworthiness standards will be established during the type certification process. The criteria the FAA considers necessary for powered-lift to conduct copter procedures under part 97 are provided in greater detail in the NPRM.³⁹⁷

The FAA received five public comments that were in support of the proposed language. Joby and Bristow generally supported the language. Both commenters (from CAE and National Business Aviation Association (NBAA)) considered the draft language to be a practical application of IFR procedures to powered-lift and expressed their support. GAMA expressed very strong support of the draft language allowing certified powered-lift to use helicopter procedures stating it is "welcomed by industry stakeholders."

³⁹⁷ See 88 FR 39040–39041 (June 14, 2023). Specifically, the NPRM further explains the TERPs Manuals and Copter instrument procedures (IP) process, as well as the airworthiness evaluation process for copter procedures. 88 FR 39040 (June 14, 2023). The NPRM also explains that the minimums prescribed for copter procedures are not published in the Code of Federal Regulations; rather, the Standard for Terminal Instrument Procedures (TERPs) are documented on FAA Forms 8260–3, 8260–4, 8260–5, and 8260–15A, and depicted on aeronautical charts published by the FAA. They are incorporated by referenced pursuant to 5 U.S.C. 552(a) and 1 CFR part 51.

Therefore, the FAA adopts § 194.305 as proposed.

D. Part 135 Rules for Powered-Lift

The FAA conducted a review of the part 135 regulations to identify which rules specified aircraft, airplane, helicopter, rotorcraft, or powered-lift in the text of the rule. All part 135 regulatory requirements imposed on “aircraft” apply to powered-lift, so any portions of part 135 which are silent to aircraft category are applicable to all part 135 operations conducted with powered-lift. The FAA considered the safety aspects of the rule and whether powered-lift have similar operating and performance characteristics to airplanes or helicopters, and determined which should be applicable to powered-lift. This final rule uses existing requirements for airplane, helicopter, or rotorcraft and includes some new requirements specifically for powered-lift. This final rule will apply to all powered-lift when used in part 135 operations.

In response to comments received, the FAA drafted some new performance-based requirements. These new requirements allow the use of some helicopter rules as long as the operator complies with the appropriate risk mitigations that are detailed in the final rule, as an alternative to the airplane rules. Therefore, there is no longer a distinct dividing line between airplane or helicopter rules being applicable to powered-lift, so the final rules below are listed in numerical order.

1. Subpart A: General

Subpart A prescribes requirements regarding the applicability, manual requirements, aircraft requirements, and crewmember certificate requirements for part 135.

Section 135.1 outlines the applicability of part 135. In particular, § 135.1(a)(9) lists helicopter air ambulance (HAA) operations, as defined in § 135.601(b)(1), as being governed by part 135. Regulations for HAA operations are found in subpart L of part 135. As discussed in section VI.D.8. of this preamble, the FAA is applying subpart L of part 135 to powered-lift that conduct air ambulance operations. Therefore, it is necessary for § 135.1(a)(9) to be applicable to powered-lift that conduct air ambulance operations. The application of § 135.1(a)(9) to powered-lift conducting air ambulance operations was proposed in § 194.308(a).

The FAA received one comment from GAMA on proposed § 194.308(a). GAMA requested that powered-lift be treated as helicopters for the purposes of

§ 135.1(a)(9). As the FAA proposed that § 135.1(a)(9) be applicable to powered-lift conducting air ambulance operations, GAMA’s comment was already addressed in the NPRM. Therefore, the FAA adopts § 194.308(a) as final, but as a result of renumbering it is now § 194.306(a).

Section 135.23 specifies the required content for those operators required to have a manual under § 135.21. Section 135.23(r) specifies the manual content requirements of a Destination Airport Analysis. However, the Destination Airport Analysis manual content requirements are only required if a Destination Airport Analysis is required by § 135.385 (“Large transport category airplanes: Turbine engine powered: Landing limitations: Destination Airports”). As specified in section VI.D.6. of this preamble, § 135.385 applies to large powered-lift per § 194.306(hhh) and (iii).

In the NPRM, the FAA proposed in § 194.307(a) that, if a large powered-lift is required by § 194.307(qq) and (rr) to comply with § 135.385, then the requirements of § 135.23(r)(7) would be applicable to powered-lift.

The FAA received no comments on proposed § 194.307(a); however, the FAA determined that clarification on § 135.23(r) is necessary. Although subparagraph (r)(7) contains the only specific reference to “airplane” under § 135.23, the FAA is revising the proposed regulatory text under § 194.307(a) to reference “Section 135.23(r)” instead of “(r)(7)” because the introductory text to paragraph (r) of § 135.23 cross-references an airplane-specific section of part 135 (§ 135.385). As a result, to minimize any confusion of whether all of § 135.23(r) applies to powered-lift, the FAA is revising § 194.307(a) to state “Section 135.23(r)”. The FAA therefore adopts § 194.307(a) as revised, but as a result of renumbering, it is now § 194.306(b).

2. Subpart B: Flight Operations

Subpart B prescribes requirements for flight operations under part 135.

Section 135.93 details minimum altitudes for use of an autopilot. The altitude requirements of this section are in place to provide pilots with sufficient altitude for obstacle clearance, taking into consideration the reaction time needed to disengage the autopilot and apply a corrective action should an autopilot malfunction occur.

In the NPRM, the FAA stated that the autopilot requirements in § 135.93(a)–(f) would apply to powered-lift because the section is generally applicable to aircraft. While § 135.93 is applicable to aircraft in general, § 135.93(g) excludes

rotorcraft from having to comply with the minimum altitudes for use of an autopilot. However, the FAA chose in the NPRM to not apply the exception in § 135.93(g) to powered-lift.

In § 194.307(b), the FAA proposed to apply the requirements referencing the “airplane” flight manual to powered-lift, as reflected in a powered-lift’s AFM. The FAA anticipated that powered-lift will conduct most of their autopilot-controlled flight operations much like an airplane (in wing-borne flight mode), with the lift being primarily produced by the wings thereby enabling a powered-lift to travel at a greater forward velocity than a helicopter.

The FAA received three comments on proposed § 194.307(b). The commenters argue that the requirement to use airplane regulations for this rule is prohibitive, short sighted, and is not in the public’s interest. Commenters recommended using ICAO direction, which utilizes the helicopter rules.

AWPC asserted that restricting the use of an autopilot in their aircraft below 500 feet AGL is prohibitive. The commenter suggested this is against public interest since their aircraft is capable of sustained hovering maneuvers and is expected to be used for Search and Rescue (SAR) operations at minimum use heights 30 feet above the surface. AWPC indicated that their aircraft will have specific autopilot modes—such as radar altimeter hold, transition down to a hover, barometric altimeter hold, and winchman trim mode—and contends the use of an autopilot should be based on aircraft capabilities. Therefore, AWPC argued that their aircraft should be allowed to engage the autopilot at a certified minimum use heights under the same regulations as permitted for helicopters in § 135.93(g).

AUVSI asserted the FAA’s proposal falls short in regard to supporting autonomy, including advanced autopilots, by applying the airplane altitude requirements of § 135.93. The commenter also asserted the FAA is short sighted and safety-limiting by not considering a fully autonomous auto flight system. AUVSI contended the FAA is prohibiting a safety-enhancing system from being able to be used during some of the phases of flight most susceptible to pilot error accidents when autonomous takeoff and landing are being routinely demonstrated by eVTOL (and other) aircraft today.

GAMA submitted a comment indicating it represents consensus recommendations from the following powered-lift member companies: AIR, Joby, Vertical Aerospace Group, Airbus Helicopters, AWPC, Volocopter, Archer,

Lilium, Wisk, BETA, Overair, Zipline, EVE Air Mobility, and Supernal. In this comment, they conducted a gap analysis with those regulations they identified and the ICAO guidance to determine whether helicopter or airplane rules should apply. In general, GAMA recommended that the FAA use the ICAO Document 10103 and apply rules for helicopters to powered-lift most of the time. They stated these recommendations were crafted by broad powered-lift industry consensus and supports their entry into service by 2024. GAMA's group comment requested that powered-lift be included in the rotorcraft exception of § 135.93(g), which means there would be no minimum altitudes for the use of an autopilot installed on powered-lift.

The FAA has evaluated the comments and the information that AWPC provided in their comment regarding the capabilities that are built into their autopilot system and the type of operations where the autopilot use would be desirable. This prompted the FAA to reconsider the proposal from the NPRM to unilaterally apply the autopilot enroute requirements of § 135.93(c) to all powered-lift. Due to the hybrid nature of powered-lift and the varying performance capabilities of these aircraft designs, the FAA determined unilaterally applying the rotorcraft exception of § 135.93(g) would not necessarily provide the safety parameters for enroute operations currently set forth in § 135.93(c) to all powered-lift designs.

In response to the comments received, for those powered-lift manufacturers that have requested the FAA to evaluate the autopilot system and to subsequently have a published minimum engagement altitude for enroute operations in the AFM, the FAA is providing a performance-based alternative for those aircraft. This performance-based alternative would permit a powered-lift to conduct enroute operations with the autopilot engaged below 500 feet. For an autopilot system to have a minimum engagement altitude for enroute operations specified in the AFM, it must be shown during type certification that the powered-lift can be safely operated at the minimum engagement altitude. However, if no minimum engagement altitude is specified in the AFM, then a powered-lift could not use the autopilot in enroute operations below 500 feet or at an altitude that is no lower than twice the altitude loss specified in the AFM for an autopilot malfunction in cruise conditions, whichever is greater.

The addition of the performance-based alternative will maintain the level

of safety provided by the current rule since the autopilot system will be evaluated during the aircraft certification process. During the type certification of the powered-lift the authorizations and limitations of the aircraft autopilot system can be documented in the AFM. For those powered-lift that do not have a minimum engagement altitude specified in the AFM, safety will be maintained because the autopilot in the powered-lift may not be used enroute either below 500 feet, or at an altitude that is twice the altitude loss specified in the AFM for an autopilot malfunction, whichever is higher, and this is consistent with the current requirements of § 135.93(c).

GAMA recommended to follow the ICAO requirements, which would use the helicopter rule. The FAA disagrees with GAMA's recommendation and believes that due to the hybrid nature of powered-lift and the varying performance capabilities of these aircraft designs, unilaterally applying the rotorcraft exception of § 135.93(g) would not necessarily provide the safety parameters currently set forth in § 135.93(a)–(f) to all powered-lift designs, and they should be required to adhere to the autopilot limitations provided in their AFM.

Therefore, the FAA has amended § 194.307(b), which as a result of renumbering is now § 194.306(c), to provide powered-lift a performance-based alternative for enroute use of autopilots. The FAA is also retaining the provision in § 135.93(c)(3) which permits enroute use of the autopilot at an altitude specified by the Administrator.

Section 135.100 details flightcrew member duties and activities in relation to critical phases of flight. Section 135.100 defines “critical phases of flight” as including “all ground operations involving taxi, takeoff and landing, and all other flight operations conducted below 10,000 feet, except cruise flight.” A note appended to § 135.100 states that “taxi” is defined as “movement of an airplane under its own power on the surface of an airport.” The FAA adopted the § 135.100 note in 1981 (Elimination of Duties final rule, 46 FR 5500). As illustrated by the § 135.100 note's focus on airplanes, people often only associate the ground movement of airplanes with taxiing. However, there are comparable movements of aircraft under their own power, such as ground taxiing by wheeled helicopters. The narrowed focus of the § 135.100 note limits the restrictions in § 135.100 just to airplanes, even though helicopters and powered-lift may have the ability to move under their own power in a

similar manner. To maintain an equivalent level of safety for all aircraft conducting operations at an airport, regardless of the category of aircraft and the kind of taxiing they do, all movement of any aircraft under its own power at an airport must be done free from distraction of non-safety related duties and activities. As such, the FAA proposed in the NPRM to amend the note as a permanent change in § 135.100 by broadening the term to “aircraft” from “airplane,” and by applying references to “taxi” in § 135.100 to all categories of aircraft. This change would satisfy the intent of the rule by requiring a sterile cockpit environment for all aircraft during critical phases of flight, which improves safety by reducing distractions for all aircraft operations, including powered-lift.

The FAA received one comment on § 135.100 from an individual, who indicated that the proposed definition of “taxi” under § 135.100 does not fully encompass the capabilities or current operating procedures for powered-lift. Specifically, the commenter noted that some powered-lift have the design capability to hover taxi, which the commenter noted was defined in the Pilot-Controller Glossary as “movement conducted above the surface and in ground effect at airspeeds less than approximately 20 knots.” The commenter recommended amending the note in § 135.100 to incorporate the Pilot-Controller Glossary definition of hover taxi to accommodate these types of powered-lift.

The FAA agrees with the commenter that the note in § 135.100 does not fully encompass the capabilities or current operating procedures for powered-lift. To ensure the sterile cockpit requirements are being applied during all critical phases of flight, including various forms of taxiing, the FAA is adding both hover taxi and air taxi from the Pilot Controller Glossary to the existing note in § 135.100. This will ensure that flight crewmembers are not distracted when taxiing their aircraft, whether such taxiing is traditional ground taxiing, hover taxiing, or air taxiing. Therefore, the FAA is amending § 135.100 as a permanent change to add paragraph (d), which includes both hover and air taxi under the definition of “taxi.”

Section 135.117(a) requires each PIC of an aircraft carrying passengers to ensure that passengers have been orally briefed on certain specific items. In particular, § 135.117(a)(6) requires that, for flights involving extended overwater operations, passengers must be orally briefed on ditching procedures and the use of required flotation equipment.

With respect to helicopters, an extended overwater operation is defined in § 1.1 as an operation over water at a horizontal distance of more than 50 nautical miles from the nearest shoreline and more than 50 nautical miles from an off-shore heliport structure. Section 135.117(a)(6) applies to all aircraft, including powered-lift conducting extended overwater operations as defined in § 194.103.

In addition, § 135.117(a)(9) requires that, before each takeoff, the PIC of a rotorcraft that involves flight beyond the autorotational distance from the shoreline must ensure that all passengers have been orally briefed on the use of life preservers, ditching procedures, and emergency exit from the rotorcraft in the event of a ditching. This briefing must include the location and use of life rafts and other life preserver devices as applicable.³⁹⁸ In the NPRM, the FAA proposed applying § 135.117(a)(9) to powered-lift in § 194.308(b).

The FAA received one comment from GAMA, cosigned by other industry stakeholders on proposed § 194.308(b). Regarding § 135.117, GAMA recommended the FAA apply the ICAO guidance and use the paragraphs stipulated for airplanes for powered-lift, rather than the regulations for rotorcraft.

The FAA disagrees with GAMA's recommendation to only apply the airplane provisions of § 135.117 to powered-lift operations. Powered-lift may have the ability to glide, autorotate, or both. Not all powered-lift designs may be able to perform a glide and ditch similar to an airplane in an emergency. For those powered-lift that are unable to glide and can only conduct an autorotation in an emergency, it is critical to ensure that passengers receive the briefing required by § 135.117(a)(9). Failing to require the § 135.117(a)(9) briefing would expose passengers to unnecessary risk in the event of a water landing.

Additionally, the FAA does not have the historical data on powered-lift designs to assert that the positive buoyancy characteristics and the potential to float for a longer period of time—characteristics of airplane designs—will exist in powered-lift. Therefore, the FAA will address powered-lift as helicopters for the purpose of overwater operations.

In response to the comment received, the FAA did not make any changes to the proposed regulatory text. Therefore,

the FAA adopts § 194.308(b) as final, but as a result of renumbering, it is now § 194.306(d).

Section 135.128 regulates the use of safety belts and child restraint systems, requiring that each person onboard an aircraft operated under part 135 occupy an approved seat or berth with a separate safety belt properly secured about him or her during movement on the surface, takeoff, and landing. For seaplane and float equipped rotorcraft operations during movement on the surface, § 135.128(a) makes clear that the person pushing off the seaplane or rotorcraft from the dock and the person mooring the seaplane or rotorcraft at the dock are excepted from the seating and safety belt requirements. This is because a pilot would be unable to moor or launch a seaplane or a float equipped rotorcraft unless a pilot or passenger has their safety belt or shoulder harness unfastened so that they can vacate their seat for the purpose of launching or mooring the seaplane or float equipped rotorcraft.

In the NPRM, the FAA proposed in § 194.307(c) to apply the exception delineated in § 135.128(a) to powered-lift pilots or passengers when the powered-lift is operating like a seaplane or a float equipped rotorcraft. The FAA received no comments on proposed § 194.307(c). Therefore, the FAA adopts § 194.307(c) as final, but as a result of renumbering, it is now § 194.306(e).

3. Subpart C: Aircraft and Equipment

Subpart C prescribes requirements for aircraft and associated equipment for operations under part 135.

Section 135.145 sets out the parameters and the requirements for the Proving and Validation Tests that must be accomplished by a certificate holder.³⁹⁹ In the NPRM, the FAA proposed in § 194.307(d) that, if a certificate holder has not previously proven a powered-lift in operations under part 135, they would be required to conduct at least 25 hours of proving tests as detailed in § 135.145(b)(1) through (3).

Section 135.145(d)(1) requires validation tests for the addition of an aircraft that requires two pilots for flight in VFR conditions, or turbojet airplanes. In the NPRM, the FAA proposed in § 194.307(e) that validation testing required by § 135.145(d)(1) would apply to all powered-lift. Under the proposed § 194.307(e), validation testing would be required when an operator requests

authorization to use a powered-lift, unless a powered-lift of the same make or similar design has been previously proved or validated by that operator in operations under part 135.

EASA supported the FAA's intent "to ensure powered-lift operate to the highest level of safety in part 135," as noted in the FAA's rationale for proposed § 194.307 in Notice 23–8. EASA asked if the FAA intends to have increased safety requirements similar to part 121 operations.

In the SFAR, the FAA intends for powered-lift to comply with the level of safety provided in part 135. To require powered-lift to comply with a higher regulatory requirement than already stipulated in part 135 would place an undue burden on powered-lift operators with no basis to support higher regulatory requirements, such as those found in part 121.

In response to the comments received, the FAA did not make any changes to the proposed regulatory text. Therefore, the FAA adopts § 194.307(d) and (e) as final, but as a result of renumbering, they are now § 194.306(f) and (g), respectively.

Section 135.150 requires a public address and crewmember interphone systems for aircraft that have a passenger seating configuration of more than 19, excluding any pilot seat. Section 135.150 works in conjunction with § 25.1423, which requires any public address (PA) system that is required for use in air carrier service to be powered by a source that remains powered when the aircraft is in flight or stopped on the ground, after the shutdown or failure of all engines and auxiliary power units, or the disconnection or failure of all power sources dependent on their continued operation.

The FAA proposed in § 194.307(f) that, for large powered-lift, the public address system required by § 135.150(a)(7) must comply with § 25.1423 or such airworthiness criteria as the FAA may find provides an equivalent level of safety in accordance with § 21.17(b). Additionally, the FAA proposed in § 194.307(g) that for large powered-lift that have more than 19 passenger seats, regardless of the type of powerplant, the crewmember interphone system must comply with the requirements of § 135.150(b)(7) or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b).

The FAA received no comments on proposed § 194.307(f) and (g). Therefore, the FAA adopts § 194.307(f) and (g) as final, but as a result of renumbering,

³⁹⁸ "As applicable" means if the aircraft is carrying rafts or other life preserver devices onboard, passengers must be briefed on the location and use of these items.

³⁹⁹ Proving tests are necessary to evaluate each certificate holder's ability to conduct operations safely and in accordance with the applicable regulations.

they are now § 194.306(h) and (i), respectively.

Section 135.151 requires cockpit voice recorders (CVRs) on certain turbine-powered airplanes and rotorcraft. CVRs enhance safety and are required in turbine-powered airplanes and rotorcraft carrying a certain passenger count as a necessary hazard analysis tool used during an accident investigation. In the NPRM, the FAA proposed in § 194.307(h) through (m) to require CVRs for powered-lift with the same seating configurations and pilot requirements that are in § 135.151. In § 194.307(h), the FAA proposed that powered-lift which have a passenger seating configuration of six or more and for which two pilots are required by certification or operating rules, or that have a passenger seating configuration of 20 or more seats will be required to comply with § 135.151(a) or (b), regardless of the type of powerplant. In § 194.307(k), the FAA proposed applying § 135.151(g)(1) to powered-lift with a passenger seating configuration of six or more seats, for which two pilots are required by certification or operating rules, and that are required by § 135.152 to have a flight data recorder. In § 194.307(l), the FAA proposed applying § 135.151(g)(2) to powered-lift with a passenger seating configuration of twenty or more seats and which are required by § 135.152 to have a flight data recorder. The FAA also proposed in § 194.307(j) and (m) that, although § 135.151(d) and (h) reference airplanes or rotorcraft, these paragraphs will also apply to powered-lift to ensure that uninterrupted audio signals are recorded and that all datalink messages are recorded when required. The FAA will include CVR airworthiness requirements during type certification based on an applicant's proposed operational needs. Operators must ensure that the CVR for each powered-lift be installed and equipped in accordance with the certification provisions listed in the applicable paragraph of § 135.151 or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b).

The FAA received two comments on when a powered-lift would be required to be equipped with a CVR. ALPA provided a comment arguing that limiting the requirement to equip powered-lift with CVRs, FDRs, or TAWS (see section VI.B.7. of this final rule) based on seating configuration would exclude the first generation of powered-lift from the safety benefits of this equipment. ALPA disagreed with the FAA's rationale, arguing that the FAA has based its rationale on traditional

aircraft and flight operations. They asserted these emerging novel entrants into the NAS pose a new challenge to the safety matrix of commercial aviation, and therefore the existing practices of aircraft weight, size, and seating capacity for required safety equipment is unjustified. ALPA recommended all powered-lift (regardless of seating capacity) should be equipped with a CVR. EASA commented about the requirement to equip powered-lift with CVRs and FDRs. EASA argued that it is crucial to consider the important role this equipment provides in incident and accident investigations, emphasizing its importance for those eVTOLs with lower passenger capacity who are engaging in commercial passenger transportation in congested areas. EASA asked the FAA to take into consideration that the majority of the current designs of eVTOL will not be required to equip their aircraft with a CVR due to seating capacity. They requested that the FAA clarify if alternatives are going to be considered to compensate for the lack of such recording capability in the AAM group.

The FAA agrees that CVRs provide valuable information during accident investigations. However, the FAA does not agree that it is necessary for all powered-lift, regardless of seating capacity, be equipped with a CVR. The FAA reduced the minimum seat requirement in § 135.151(a) and (g)(1) from 10 passenger seats to 6 passenger seats in 1987 because of the large number of small airplanes that operate with seating configurations of six to nine passenger seats and that are required by certification or part 135 operating rules to have two pilots. In 1988, the FAA required rotorcraft with the same passenger seat configurations and operational requirements as airplanes to be equipped with a CVR. For the same reasons that the FAA imposed the CVR requirements for airplanes and rotorcraft with certain seating capacities, the FAA will require CVRs for powered-lift with those same seating configurations and pilot requirements, regardless of the types of powerplant. The FAA has determined that requiring equipment such as CVR for all powered-lift regardless of the seating capacity is not warranted at this time because the FAA does not have the data to support requiring CVRs to be installed on powered-lift with less than six passenger seats. Additionally, requiring a CVR on powered-lift with less than six passenger seats increases the associated costs and requires a higher standard than what is currently

in place for other aircraft of similar passenger seating capacity.

Therefore, the FAA adopts § 194.307 (h), (i), (j), (k), (l) and (m) as final, but as a result of renumbering, they are now § 194.306(j), (k), (l), (m), (n) and (o).

Section 135.152 specifies when a flight data recorder (FDR) is required to be installed on an aircraft, parameters to be recorded, and installation requirements. The FAA proposed in § 194.307(n) to apply § 135.152(c), (d), (f), and (j) to powered-lift with a passenger seating configuration, excluding crewmember seats, of 10 to 30. The FAA proposed in § 194.307(o) to apply § 135.152(a) to powered-lift with a passenger seating configuration of 10 to 19 seats. Additionally, the FAA proposed in § 194.307(p) that § 135.152(b) and (b)(3) apply to powered-lift with a passenger seating configuration of 20 to 30 seats, regardless of the type of powerplant.

The FAA received three comments on when a powered-lift would be required to be equipped with a FDR, and one comment on the FDR recording parameters.

ALPA expressed general support for the FAA's analysis of part 135 regulations and identification of helicopter rules that are appropriate for powered-lift. However, ALPA pointed out several proposed rules under § 194.307 that would only apply to powered-lift with certain minimum seating capacities. ALPA said that, because powered-lift generally have less than six seats, many powered-lift would be excluded from the safety benefits provided by these rules. ALPA therefore recommended that these rules apply to all powered-lift, regardless of seating capacity, for enhanced safety.

Similarly, EASA stated in their comment that most current eVTOL do not meet the minimum passenger seating configurations and therefore would not be affected by the proposals requiring either a CVR or FDR under § 194.307. Without these CVR and FDR provisions, EASA noted that there will be a lack of data. EASA advocated for applying § 194.307 to all powered-lift, regardless of seating capacity.

Additionally, GAMA noted that the ICAO Document 10103 framework would result in powered-lift of certain weight to be required to install FDRs, rather than basing it on seating capacity. GAMA stated that this would enable operators to collect and share data about the suitability of rotorcraft rules. GAMA further recommends that the FAA apply ICAO guidance and replace the term "helicopter" or "rotorcraft" with "powered-lift," as written in ICAO Annex 6, Part 3, Section 2, Chapter 4,

4.3.1.1. This would add a weight requirement of 4,960 pounds to trigger the installation of an FDR, instead of a 10-passenger seat capacity trigger.

The FAA considered the comments requesting the FAA to require all powered-lift to be equipped with an FDR, regardless of the passenger seating capacity, as well as an aircraft weight in lieu of a passenger seat capacity threshold. When the FDR rule was first promulgated in 1988, it was based on NTSB safety recommendations. In response to a number of significant events and the substantial growth in commuter air transportation, the FAA required FDRs for all multiengine turbine-powered airplanes and rotorcraft operated under part 135 having a passenger seating configuration of 10–19 seats. In the FDR final rule, the FAA acknowledged that the FDR requirements for larger aircraft operating under part 135 are more stringent than those for smaller aircraft because the small aircraft are required to be equipped with cockpit voice recorders.⁴⁰⁰ The FAA determined the cost of installing cockpit voice recorders is substantially less than that of flight data recorders and therefore would not be a significant burden on small operators.⁴⁰¹ The FAA acknowledges that FDR data is beneficial for accident investigations. However, the FAA continues to believe that the benefits of requiring an FDR would not be justified in aircraft with less than 10 passenger seats because the FAA does not yet have the data to support requiring FDRs to be installed on powered-lift with less than ten passenger seats. Without the data to support requiring an FDR on powered-lift with less than ten passenger seats, the associated costs and mandating a higher standard than what is currently in place for other categories of aircraft of similar passenger seating capacity is not justified. As such, the FAA will not adopt ALPA and EASA's recommendation to require FDRs for all powered-lift, regardless of seating capacity.

Additionally, the FAA will not adopt GAMA's suggestions to base the FDR requirement on aircraft weight rather than seating capacity. Basing the FDR requirement on seating capacity for powered-lift is consistent with how the FAA has historically determined whether FDR is required. Therefore, the FAA will continue basing the determination of whether FDR is

required on seating capacity, not aircraft weight.

An individual commenter said the proposed FDR tables for part 135 only address vertical-lift and wing-borne flight modes. The commenter said the rule should address powered-lift transition (VTOL-airplane), and conversion (airplane-VTOL) modes of flight under all applicable and relevant sections.

In response to the individual commenter regarding the proposed FDR Tables, the FAA responds that not all powered-lift designs will have transition and conversion modes like a tilt-rotor as referenced by the commenter. The NPRM discussed the two flight modes that the operational rules refer to, these are wing-borne and vertical-lift flight modes.⁴⁰² Wing-borne flight mode is when a powered-lift is operating more like a traditional airplane, which uses a wing to generate lift and depends exclusively or partially on nonrotating airfoil(s) for lift during takeoff, landing, or horizontal flight. Vertical-lift flight mode refers to a powered-lift that is operating like traditional rotorcraft, which is in a configuration that allows vertical takeoff, vertical landing, and low speed flight; and depends principally on engine-driven lift devices or engine thrust for lift. The FAA recognizes powered-lift will have the ability to transition in and out of the vertical-lift flight mode. In the NPRM, the FAA proposed requiring the FDR to record all data during the manipulation of all primary flight controls for all axes, which includes recording the full range during any transitions in and out of the vertical-lift flight mode. These parameters were included in Table 1 to § 194.312 and Table 1 to § 194.314 in the proposed SFAR. Therefore, the FDR would record all parameters, including when a powered-lift is transitioning in and out of the vertical-lift flight mode.

In response to the comments received, the FAA did not make any changes to the proposed regulatory text, and adopts as final § 194.307(n), (o), and (p), which as a result of renumbering is now § 194.306(p), (q), and (r), as well as Table 1 to § 194.314 and Table 1 to § 194.315, which as a result of renumbering are now Table 1 to § 194.312 and Table 1 to § 194.313, respectively.

While considering the FDR requirements of § 135.152, the FAA became aware of the need for a technical correction in § 135.152(j), which cross-references the operational parameters

that must be recorded for turbine-engine powered airplanes with a seating configuration of 10 to 30 passenger seats. The FAA proposed to correct the cross-reference in § 135.152(j) to refer to § 135.152(h)(1) through (h)(88).

The technical correction for paragraph (j) will be adopted as final to § 135.152.

Section 135.154 requires turbine-powered airplanes to be equipped with TAWS. To ensure that powered-lift engaged in air carrier operations will be operated at the highest possible degree of safety, as required by 49 U.S.C. 44701(d)(1)(A), the FAA proposed in § 194.307(q) that powered-lift having a passenger seating configuration, excluding any pilot seat, of 6 or more be equipped with a HTAWS that meets the requirements in Technical Standard Order (TSO) C194 and Section 2 of RTCA DO-309, as prescribed for helicopters and contained in § 135.605, unless equipped with a FAA approved TAWS A/HTAWS hybrid system.

In addition, the FAA proposed in § 194.307(q) that § 135.154(c) apply to powered-lift as they will be required to have an AFM that contains the appropriate procedures on the use of this equipment and the proper flight crew reactions in response to the activation of a terrain awareness system. This ensures powered-lift equipped with HTAWS or an FAA-approved TAWS A/HTAWS hybrid system are operated at a level of safety that a terrain awareness system currently provides for airplanes.

The FAA received two comments, one from ALPA and one from EASA, on when a powered-lift would be required to be equipped with a TAWS or HTAWS.

ALPA recommended that TAWS or HTAWS as applicable should be required for all powered-lift regardless of seating capacity. ALPA stated that, if HTAWS is required for helicopter operations, it should also be required for similar powered-lift operations regardless of the seating capacity. ALPA argued that this would ensure the highest level of safety in this novel aircraft type, and operations.

The FAA has determined that without a TAWS A/HTAWS hybrid system, and until a TAWS specification is developed specifically for powered-lift, the current HTAWS specification, which requires a terrain display unit, would provide the best level of safety without an undue number of nuisance alerts. To ensure that powered-lift engaged in air carrier operations will be operated at the highest possible degree of safety, as required by 49 U.S.C. 44701(d)(1)(A), the FAA will require any powered-lift having a passenger seating

⁴⁰⁰ See *Cockpit Voice Recorders (CVR) and Flight Recorders*, final rule, 53 FR 26134, 26137 (Jul. 11, 1988).

⁴⁰¹ *Id.*

⁴⁰² See Section XIII ("Definitions") for more information on how the FAA defines these flight modes in the final rule.

configuration, excluding any pilot seat, of 6 or more be equipped with a HTAWS that meets the requirements in Technical Standard Order (TSO) C194 and Section 2 of RTCA DO-309, as prescribed for helicopters and contained in § 135.605, unless equipped with a FAA approved TAWS A/HTAWS hybrid system.

The FAA does not believe there is any justification to require a terrain awareness system for all powered-lift and will retain the threshold of a passenger seating capacity of 6 or more for those powered-lift conducting operations other than air ambulance operations. Powered-lift conducting air ambulance operations, regardless of passenger seat configuration, will be required to be equipped with an HTAWS or a FAA-approved TAWS-A/HTAWS hybrid system. This will align the powered-lift requirements with those currently required for helicopters and airplanes. Therefore, the FAA has determined requiring any terrain warning system for all powered-lift, regardless of the seating capacity, is not warranted at this time. Additionally, the FAA has no data to support ALPA's request to require terrain warning systems on all powered-lift. The FAA has determined the justification of complexity, size, speed, and flight performance characteristics mentioned in the final rule of March 29, 2000, including passenger seating capacity, is still valid today and will be applied uniformly to powered-lift.⁴⁰³

In their comment, EASA asked whether the FAA considered standards for the implementation of congested area databases for the HTAWS requirements.

In response to EASA's comment regarding the implementation of congested area databases for the HTAWS requirements, the obstacle and terrain databases include data for congested areas, and this subject is covered in TSO-C194 and Section 2 of RTCA DO-309, which are incorporated by reference under § 194.306(s) and (ooo).

In response to the comments received, the FAA did not make any changes to the proposed regulatory text and adopts § 194.307(q) as final, but as a result of renumbering it is now § 194.306(s).

Section 135.158 requires transport category airplanes equipped with a flight instrument pitot heating system to also be equipped with an operable pitot heat indication system that complies

with § 25.1326.⁴⁰⁴ The FAA anticipates that powered-lift will incorporate technological advances in aircraft display, will require highly augmented advanced flight control systems, and will be capable of operations in conditions conducive to icing. Accordingly, in the NPRM, the FAA proposed in § 194.307(r) that § 135.158 apply to all powered-lift that have a required pitot heating system installed. Section 194.307(r) cites the § 135.158 rule and invokes § 25.1326, which mandates a prescriptive means ("amber light") to indicate pitot heat failures.

The FAA received one comment on the proposed § 194.307(r) from BETA. BETA agreed that it is necessary for highly augmented, advanced flight control systems to include indication of pitot heat failures. BETA also agreed that the safety intent of the rule makes sense to apply to powered-lift. However, BETA argued that it does not make sense to apply the prescriptive means of indication used by part 25 transport category aircraft to powered-lift. BETA stated that many modern aircraft present pilot alerts through means other than colored flight deck lights, such as Crew Alerting System (CAS) alerts. BETA noted that, in March 2022, the FAA accepted ASTM F3120/F3120M-20 as an accepted means of compliance for § 23.2605, which covers crew alerting. Section 8.2.1 of ASTM F3120/F3120M-20 provides that the alert must conform to a "Caution" alert that is in clear view of a flightcrew member. This means of compliance allows the applicant to maintain a consistent flight deck indication philosophy, which is preferable from a safety and human factors perspective. BETA understood the FAA's safety intent is to require a crew alert that conforms to a prioritization hierarchy based on the urgency of flightcrew awareness and response if the pitot heat fails. BETA asserted this can be accomplished without the prescriptive aspects of § 25.1326(a), which may be inconsistent with the crew alerting philosophy or flight deck design of a specific powered-lift.

BETA recommended the FAA revise the SFAR to adopt § 135.158 with modifications to change "amber light" in the referenced § 25.1326(a) to "Caution alert" to allow for the pitot heat indication as appropriate for powered-lift.

The FAA agrees with BETA that the alert should not only be limited to an amber light and that there should be

another FAA-approved method of crew notification, such as a caution alert. Technological advances in aircraft crew alerting systems, including electronic cockpit displays, can provide equal or better notification to the flightcrew of improper operation or failure of systems. These highly automated systems will provide an equal or better indication to the flightcrew as would be provided by an amber light. The FAA is therefore amending the proposed regulatory text for § 194.307(r) to allow for the indication in powered-lift to be something other than an amber light when a pitot system is not operating. Therefore, the FAA has amended the SFAR to allow compliance with the criteria established under § 23.2605, § 25.1326, or equivalent airworthiness criteria established during certification under § 21.17(b). The requirement will be that the alert is in clear view of a flightcrew member. The FAA adopts the amended regulatory text in § 194.307(r) as final, but as a result of renumbering it is now § 194.306(t).

Section 135.159 stipulates the equipment requirements for when an aircraft is carrying passengers under VFR at night or under VFR over-the-top conditions.

When powered-lift are operated in wing-borne flight mode, they operate much like a traditional airplane in cruise flight. As such, the FAA proposed in § 194.307(s) that the exception in § 135.159(a)(1), which allows for an aircraft to be equipped with a third attitude indicator in lieu of a gyroscopic rate-of-turn indicator, should apply to powered-lift with a third attitude indicator. Section 135.159(a)(1) provides a separate standard for the third attitude indicator for airplanes as compared to helicopters. Under § 194.307(s), operators seeking to use the exception in § 135.159(a)(1) must ensure that the powered-lift is equipped with an attitude indicator capable of displaying the pitch and roll specifications of flight attitudes of 360 degrees of pitch-and-roll.

The FAA received two comments on proposed § 194.307(s), one from Joby and one from GAMA.

Joby indicated the FAA's proposal is overly prescriptive and inappropriate for powered-lift. Joby argued that their own systems inherently understand attitude and rates. Joby further stated that, if their attitude control system were to improperly estimate this data, the pilot cannot take control of the aircraft, even if the pilot correctly understands the attitude, because all pilot commands would be interpreted via a malfunctioning flight computer. Joby argued that such fly by wire

⁴⁰³ See *Terrain Awareness and Warning System*, final rule, 65 FR 16736 (Mar. 29, 2000).

⁴⁰⁴ Transport Category Airplanes—Pitot Heat Indication Systems, final rule, 46 FR 43804 (Aug. 31, 1981).

systems will be designed to the appropriate development assurance level (DAL) to control the aircraft under all conditions and will generally include redundant sensing with voting and exclusion of failed or misleading sensors.

Joby asserted that, in these full-time fly-by-wire aircraft, there is no safety benefit from independent sensing of attitude or other primary flight indications. Joby stated that it is sufficient for their system to display the output of its own attitude estimation since their system will be designed with the availability and redundancy needed to control the aircraft in all conditions. Joby also stated that, given the level of flight augmentation in their fly-by-wire system, the pilot will not perform attitude management or other stability tasks, instead being primarily focused on navigating the aircraft. Joby stated this is the case even in IMC conditions. Joby also argued that requiring a specific number of sensors, displays, or type of sensing is inappropriate and should instead be performance-based. Joby stated that each proposed design should be evaluated against the criticality of attitude information to the pilot and the hazard presented by loss of information, as well as the integrity of the source of information. Joby further asserted that, for powered-lift, there may not be a need to have multiple attitude sources displayed to the pilot simultaneously. Joby stated that, in their aircraft, the pilot does not have the task of comparing multiple data sets and deciding which are not correct, and thus there should not be a prescriptive requirement to show multiple displays of attitude or turn rate to the pilot.

Joby also asserted that the highly augmented systems installed on powered-lift are often envelope-limited and will therefore prevent the aircraft from exiting a narrow set of pitch and roll angles. As such, Joby argued that no pilot input can cause an exceedance, which is inherently a loss of control event, as it represents a failure of the fundamental control laws. With indirect controls, the pilot would not be able to recover an aircraft beyond programmed pitch or roll limits, as the flight control system itself is already outside of approved functionality.

According to Joby, requiring sensing that works through 360 degrees is also inappropriate. They asserted that this would require implementation and demonstration of a device which cannot be exercised by a properly functioning flight control system and may require applicants to design attitude sensing beyond aircraft performance only to meet this rule.

In their comment, GAMA provided the recommendation to use the ICAO guidance provided for helicopters for this rule.

The FAA disagrees with both of the commenters. According to § 91.3, the pilot in command of an aircraft is directly responsible for, and is the final authority as to, the operation of that aircraft. This cannot be delegated away from the pilot in command, regardless of the flight control or avionics package installed in the aircraft. Section 135.159 requires the aircraft to be equipped with certain instrumentation when carrying passengers under VFR at night or under VFR over-the-top conditions. Pilots engaging in VFR night operations may often unexpectedly encounter unpredicted adverse weather conditions which necessitate the use of instruments to safely pilot the aircraft out of the area. Additionally, during flights on dark nights over areas in which few, if any, ground reference lights are available, control of the aircraft is, to a great extent, dependent upon reference to instruments. Instrument flight may also become necessary in over-the-top operations due to such things as mechanical emergencies and weather conditions. The rate-of-turn indicator and the pitch and bank indicator ensures a single point of failure will not leave a pilot with no bank indication, enabling a pilot in command to maintain the safety of the flight and fulfill his responsibility for that flight.

The FAA asserts the equipment requirements of § 135.159 are essential, and since powered-lift in wing-borne flight mode operate similar to an airplane, the powered-lift needs to be equipped with a gyroscopic rate-of-turn indicator, except a third attitude indicator capable of displaying the pitch and roll specifications for airplanes may be used in place of the required gyroscopic rate-of-turn indicator.

Additionally, there is no requirement to use the exception provided in § 135.159(a)(1). Operators could choose to comply with § 135.159(a) and install a gyroscopic rate of turn indicator. Section 194.307(s) simply gives powered-lift operators the option to use a third attitude instrument system instead of a gyroscopic rate of turn indicator, as allowed for airplanes in § 135.159(a)(1).

Therefore, the FAA adopts § 194.307(s) as final, but as a result of renumbering it is now § 194.306(u).

Section 135.160 requires radio altimeters for all rotorcraft operations conducted under part 135. The FAA proposed in § 194.308(c) to require persons operating powered-lift to comply with the radio altimeter

requirements of § 135.160(a).⁴⁰⁵

Consistent with rotorcraft that must comply with § 135.160(a), the FAA also proposed to allow persons operating powered-lift with a maximum takeoff weight no greater than 2,950 pounds to have the ability to apply for a deviation from the radio altimeter requirements in accordance with § 135.160(b).

The FAA received two comments with one being partially in favor of the FAA's proposal.

Joby indicated that the FAA's proposed rationale for requiring a radio altimeter is overly broad and does not address specifics for electric powered-lift or their intended types of operations, namely urban air taxi, air tours, or short, regional flight operations. Joby argued that a radio altimeter may not be necessary or even beneficial to safety for those types of operations. Joby asserted that powered-lift with advanced flight control systems do not exhibit the same safety concerns from inadvertent IMC encounters as traditional part 135 helicopters. Joby further stated that the use of radio altimeters in urban settings does not provide the same assumed benefits and may decrease operational safety.

Joby urged the FAA to consider revising the radio altimeter requirements for powered-lift to address the types of operations where radio altimeters would be most beneficial, and to carefully consider specific aircraft design characteristics, equipage, or functionality when determining "unless otherwise authorized in the certificate holder's approved minimum equipment list" under § 135.160(a). They also suggested revising § 135.160(b) to allow deviations based on the type of operations and specific aircraft design characteristics, equipage, and functionality.

According to Joby, electric powered-lift are not intended to be operated in the type of missions or environments that lead to the type of accidents that motivated the adoption of § 135.160. Joby stated that helicopters flying under part 135 are traditionally used for a wide variety of missions, while electric powered-lift are intended to be operated in a very narrow range of missions with ranges typically under 100 NM. Joby argued that the value of a radio altimeter for additional situational awareness and safety margin due to unknowns from off-airport operations and unimproved landing zones will inherently be much lower for electric powered-lift than for traditional helicopters.

⁴⁰⁵ A-02-35 NTSB recommendation to incorporate radio altimeters for passenger carrying operations.

Joby asserted that the risk of losing visual acuity due to flat light, whiteout, or brownout is much more likely to occur during off airport operations or flight over rural or mountainous terrain. Joby stated the environments for urban air taxi, urban air tour, and short regional flights in metropolitan areas are different. These operations will be conducted in well developed areas where there are more buildings, roads, lights, surrounding structures, and prepared surfaces which provide good visual cues and allow pilots to maintain good depth of field and contrast in their vision. Therefore, according to Joby, the risk of exposure to flat light, whiteout, and brownout conditions will be significantly diminished. Joby also mentioned that some electric powered-lift being developed may be prohibited from operating in falling or blowing snow and takeoff and landing from snow covered surfaces.

Joby stated that “many powered-lift currently in development are using advanced flight control systems with advanced means of flight stabilization, flight augmentation, and envelope protection—such as flight path hold, altitude hold, airspeed hold, hover hold, level flight mode, ROC/ROD protection, and similar functionality.” According to Joby, these aircraft exhibit much lower pilot workload for aviating and navigating tasks than traditional helicopters and allow for much safer flight in situations with reduced visibility. Joby stated that these aircraft use modern flight deck avionics systems that have significantly improved situational awareness compared to traditional rotorcraft. Therefore, Joby argued that the pilots of these powered-lift will have a much higher level of situational awareness in general than pilots of traditional VFR helicopters. Joby asserted that this situational awareness is more effective than radio altimeters in most phases of flight because radio altimeters cannot look forward of the aircraft, while technologies such as HTAWS can.

Joby stated that, during a loss of visual reference due to flat light, whiteout, brownout, or any other inadvertent IMC encounter, powered-lift will behave significantly differently from traditional rotorcraft that depend on the pilot to maintain stability and control and ascertain the flight path relative to the ground or obstacles. According to Joby, powered-lift flight control systems are intentionally designed to revert to safe and stable flight when the pilot lets go of the controls. Therefore, Joby stated the assumed safety benefit of a radio altimeter for loss of visual reference due

to flat light, whiteout, brownout, or other, inadvertent IMC encounter is significantly reduced and may be negligible.

Joby argued that the proposed requirement is problematic due to the current radio altimeter TSO performance requirements. Joby suggested allowing for alternative, lower power, lower performance radio altimeters or for performance-based functionality, which may be non-TSO equipment or functionality approved under the Type Design. Joby argues that increased flexibility, to meet the “FAA-Approved radio altimeter” requirement would allow the industry to develop solutions better suited to improve safety in urban environments. For these reasons, Joby contended that a universal requirement for all powered-lift to be equipped with a radio altimeter for part 135 operations is misplaced and would negatively impact electric powered-lift conducting air taxi flight operations.

The FAA disagrees with Joby and has determined that radio altimeters are an important safety device designed to inform the pilot of the aircraft’s actual height above the surface. The FAA also believes that radio altimeter requirements should not be limited to only IMC flights, as radio altimeters provide additional situational awareness during inadvertent encounters with IMC as well as additional situational awareness after encounters with brownout, whiteout, or other situations where vision is suddenly limited and pilots lose their reference to the horizon and the ground. Powered-lift, like rotorcraft, can conduct vertical-lift flight mode take-offs and landings, so they could be susceptible to these same hazards that are applicable to rotorcraft.

Furthermore, the regulation takes into consideration the various designs of powered-lift and the different types of operations/missions that may be conducted with those aircraft, not just a segment of the operations that could be conducted with a powered-lift as requested by the commenter. Additionally, the FAA believes that electric powered-lift transporting passengers, including those operations conducted in concentrated urban environments, could encounter some of the hazards cited above and would benefit from the information that a radio altimeter provides to the pilot. As such, the FAA intends to apply the radio altimeter rule broadly, so that the safety enhancements provided by the radio altimeter will be available to all powered-lift regardless of the types of operations they perform.

The FAA disagrees with Joby’s recommendation to expand the deviation authority contained in § 135.160(b). When the FAA published the final rule requiring radio altimeters, it recognized there was a limited number of older helicopters used in part 135 operations that may not have adequate room on the flightdeck to install a radio altimeter.⁴⁰⁶ Therefore, the FAA included the ability for a certificate holder to obtain a deviation from this rule for circumstances when a radio altimeter cannot physically be located on the flightdeck. The FAA also noted that an HTAWS or other device such as a multi-function display that incorporates a radio altimeter would be permitted under this rule and that deviation authority may not be warranted for helicopters in which a radio altimeter can be incorporated into the flightdeck’s existing configuration. The FAA believes there is no justification to expand the deviation for powered-lift beyond the original limit of no greater than 2,950 pounds. This would ensure that powered-lift and helicopters will use the same criteria for authorization of a deviation as explained in the *Helicopter Air Ambulance, Commercial Helicopter, and Part 91 Helicopter Operations* final rule of 2014.

In response to Joby’s request for a discussion about the relief provided for radio altimeters in a certificate holder’s MEL, the FAA notes that powered-Lift MMELs will be treated no differently than any other aircraft with regard to MMELs. Proposed MMEL relief is normally submitted to the FAA by manufacturers or operators. The entity that requests the relief is responsible for submitting an evaluation plan that considers all phases of flight operation and that demonstrates that flight operations with the inoperative item will have an equivalent level of safety compared to flight operations with the same item operative. In response to Joby’s comment requesting the FAA revise part 194 rules to allow for alternative, lower power, lower performance radio altimeters or performance-based functionality, which may be non-TSO equipment or functionality approved under the Type Design, the FAA notes that § 135.160 requires a radio altimeter be “FAA-approved.” Radio altimeters installed as part of the initial type design or a type design change would be FAA-approved. However, if the equipment was to be installed after initial aircraft certification, then the radio altimeter

⁴⁰⁶ 79 FR 9932, 9939 (Feb. 21, 2014).

would need to meet a TSO standard and be an FAA-approved device.

GAMA recommended that the FAA use ICAO Document No. 10103 and apply the rule for helicopters in § 135.160 to powered-lift. The FAA reviewed ICAO Document No. 10103 and notes that the document indicates that radio altimeters should only be required in powered-lift that must perform a forced landing when experiencing a critical power-unit failure at any stage in the flight profile while operating in Instrument Meteorological Conditions (IMC).

The FAA agrees with GAMA in that § 135.160 should be applicable to powered-lift as it is applicable to rotorcraft. However, the FAA disagrees that the radio altimeter should only be required when a powered-lift must perform a forced landing when experiencing a critical power unit failure at any stage in the flight profile while operating in IMC. As stated in the NPRM, radio altimeters are valuable safety tools that can provide additional situational awareness during an inadvertent encounter with IMC, as well as additional situational after encounters with brownout, whiteout, or other situations where vision is suddenly limited and pilots lose their reference to the horizon and the ground. Additionally, radio altimeters can greatly improve a pilot's awareness of height above the ground during hover, landing in unimproved landing zones, and landings in confined areas where a more vertical approach may be required. The situations where a radio altimeter can provide valuable situational information are not limited to only operations conducted in IMC conditions but can also occur during VFR or flights conducted in VMC conditions where a pilot encounters conditions that they initially did not anticipate.

In response to the comments received, the FAA did not make any changes to the proposed regulatory text and adopts § 194.308(c) as final, but as a result of renumbering it is now § 194.306(v).

Section 135.163 outlines the equipment requirements for all aircraft carrying passengers under IFR. Section 135.163(g) contains an exception for multi-engine helicopters that states the two required generators may be mounted on the main rotor drive train and a loss of one powerplant will not affect both generators since they are on a common drive train. Section 135.163 currently applies to powered-lift as written. The FAA proposed in § 194.308(d) to allow powered-lift to utilize the exception for helicopters contained in § 135.163(g) when that powered-lift is equipped with a

drivetrain system that is driven by two separate powerplants and able to run the two required generators because, just as for rotorcraft, the loss of one powerplant would not affect both generators.

The FAA received no comments on proposed § 194.308(d) and therefore adopts § 194.308(d) as final, but as a result of renumbering it is now § 194.306(w).

Section 135.165 details communication and navigation equipment for extended over-water or IFR operations. This section is general to aircraft except for § 135.165(d) and (g)(1), which are specific to airplanes. The FAA determined that paragraph (d) should also apply to powered-lift with a passenger seating configuration, excluding any pilot seat, of 10 seats or more, or a powered-lift used in commuter operations, regardless of the type of powerplant, as proposed in § 194.307(t).

Paragraph (g) provides for extended over-water exceptions that allow the use of a single long-range navigation and single long-range communication system in certain geographic areas as authorized by the FAA. A list of operational factors the FAA may consider is listed in paragraph (g)(1)–(3) of § 135.165. Although (g)(1) uses the term airplane, the FAA proposed in § 194.307(u) to extend the ability to request that exception to powered-lift that are able to conduct extended over-water operations. The FAA proposed that paragraphs (d) and (g)(1) apply to powered-lift, as this will ensure powered-lift will be able to communicate as required during IFR and extended over-water flights.

The FAA received no comments on proposed § 194.307(t) and (u), and therefore, adopts § 194.307(t) and (u) as final, but as a result of renumbering they are now § 194.306(x) and (y).

While developing this final rule, the FAA noted that § 135.165(d) inadvertently continued to reference part 119 for the definition of “commuter operation.” The definition of “commuter operation” was moved to § 110.2 in the Operations Specifications final rule (76 FR 7482, Feb. 10, 2011). The FAA is adopting a permanent amendment to § 135.165(d) to reflect the current location of the “commuter operation” definition.

Section 135.168 contains requirements for emergency equipment for rotorcraft overwater operations. In the NPRM, the FAA proposed to apply § 135.168 to powered-lift under § 194.308(e). Under the proposed § 194.308(e), if the powered-lift is operating overwater beyond the gliding

or autorotational distance of the shoreline, then life preservers must be provided and worn by each occupant.

In the NPRM, the FAA indicated that powered-lift operated overwater will have a survivability sequence (sequence of events which occur upon impact with the water) more similar to rotorcraft than airplanes, and that the donning of life preservers would provide for the greatest likelihood of surviving in the water versus requiring the carriage of a life raft whenever powered-lift are conducting overwater operations beyond gliding and/or autorotational distance from the shoreline.

The FAA received three comments on proposed § 194.308(e).

According to GAMA, certain powered-lift demonstrate the capability to glide in a manner similar to airplanes when carrying passengers over water. GAMA asserted that, in such cases, it is imperative that the FAA apply the relevant airplane version of the rule to ensure appropriate and effective oversight. GAMA argued that, by recognizing the glide capabilities of these powered-lift, the FAA can optimize safety measures and streamline regulations accordingly. GAMA further argued that it is crucial to take full advantage of the similarities to airplane operations in these specific scenarios to maintain an equivalent level of safety for passengers and to facilitate smooth and efficient operations.

AWPC stated that their aircraft, the AW609, is a tiltrotor and is designed to operate like a pressurized turboprop airplane when in horizontal flight mode. AWPC argued that the AW609 has the equipment and related characteristics of a helicopter to conduct ditching procedures. This design approach, according to AWPC, addressed the concerns the FAA stated in the proposed SFAR such as buoyancy and the duration to remain afloat after ditching in water. AWPC further stated that the AW609 Tiltrotor has design features such as a door above the waterline, wing fuel tanks, and a pressurized cabin with closeable outflow valves, as well as being equipped with an overhead escape hatch and flotation system. Therefore, AWPC contended that the application of helicopter rules is inappropriate for the AW609 Tiltrotor and requests the FAA apply a performance and equipage-based approach to applying regulations for overwater operations to the AW609 Tiltrotor.

Joby recommended the FAA follow the ICAO guidance for powered-lift, which Joby stated applies airplane rules to powered-lift for overwater operations. Joby also recommended that the FAA

reverse course on many of the proposed powered-lift rules and instead use helicopter-based rules to align with ICAO Document 10103. Joby stated that, for situations like overwater operations where helicopter rules would not be advisable, limitations can be placed in the AFM or, in very limited situations, addressed through placards. According to Joby, this approach would result in a more logical transition from existing aircraft types to powered-lift.

The FAA has reviewed the comments received and as part of the review, the FAA considered § 136.9, which addresses commercial air tours operating over water beyond the shoreline. Sections 136.9 and 135.168 are similar because they stipulate when a life preserver is required to be worn. The FAA determined that the performance-based criteria of § 136.9(b)(3) could provide flexibility to the life preserver requirements of § 135.168(b)(1) without any degradation to safety. Therefore, under § 194.306(z), which addresses § 135.168, the FAA will introduce the provision only requiring the life preservers to be readily available instead of requiring them to be worn when the powered-lift is able to meet certain performance requirements. In order to use this provision under § 194.306(z)(1), the multi-engine powered-lift must be operated at a weight that will allow it to climb with the critical engine inoperative or when experiencing a critical change of thrust, of at least 50 feet a minute, at an altitude of 1,000 feet above the surface.

The term “critical change of thrust” is a new term the FAA has introduced since the publication of the NPRM, and it can be used for those powered-lift that do not necessarily have a critical engine. A critical change of thrust means a failure that would most adversely affect the performance or handling qualities of an aircraft. This new term ensures powered-lift that do not have a critical engine but do experience an adverse effect on performance or handling qualities resulting from failures of the flight control or propulsive system, either singular or in combination, must meet the same performance requirements specified for aircraft that have a critical engine. Adding the term “critical change of thrust” ensures that those novel aircraft that may not have a critical engine will be required to demonstrate the same performance requirements as those stipulated for aircraft with a critical engine, thereby ensuring the same level of safety is maintained.

The FAA took into consideration the ability of the powered-lift to remain at

least 1,000 feet above the surface after the critical engine becomes inoperative or the powered-lift experiences a critical change of thrust. This will ensure a powered-lift will have the ability to remain out of the water, providing ample time for each occupant to don their life preservers. For those powered-lift that do not have this performance capability, the occupants must wear life preservers during the flight.

The FAA also took into consideration that some powered-lift would be operated at higher altitudes overwater similar to airplanes, rather than the lower altitudes at which helicopters normally operate, and the requirement for each occupant to wear a life preserver when over water is therefore unnecessary for some powered-lift.

As a result of the foregoing, the FAA amends the proposed rule for multi-engine powered-lift that are operated at a weight that will allow it to climb, with the critical engine inoperative or while experiencing a critical change of thrust, at least 50 feet a minute, at an altitude of 1,000 feet above the surface. For those powered-lift, life preservers are not required to be worn but must be readily available and easily accessible to each occupant. Proposed § 194.308(e) is adopted as amended, but due to renumbering, it is now § 194.306(z).

Section 135.169 provides additional airworthiness requirements for large airplanes, as well as small airplanes with a passenger-seating configuration of 10 or more seats. These airplanes are held to a higher airworthiness safety standard either through aircraft certification basis or certain other regulatory standards or requirements. Section 135.169 also includes rules about the material used as a liner for cargo or baggage compartments.

Section 135.169(a) applies to large airplanes and requires them to meet the additional airworthiness requirements of §§ 121.213 through 121.283, and 121.307. The FAA proposed in § 194.307(v) to require a large powered-lift to comply with appropriate certification provisions listed in § 135.169(a) or such airworthiness criteria as the FAA determines will provide an equivalent level of safety in accordance with § 21.17(b). Powered-lift will spend their cruise portion of flight similar to airplanes. When a powered-lift is configured with 10 or more passenger seats or is large, the persons riding on the powered-lift should be afforded the same level of safety afforded to passengers on an airplane.

Section 135.169(b), which applies to operators of small airplanes that have a passenger seating configuration, excluding pilot seats, of 10 seats or

more, requires certain type certifications for such small aircraft. Since powered-lift are currently in development, the FAA has determined that § 135.169(b)(2) through (b)(7) should not be applicable to them. As discussed in the NPRM, the FAA has determined that § 135.169(b)(1) and (b)(8) should be applicable to powered-lift. Section 135.169(b)(1) requires that such airplanes be certificated in the transport category, while (b)(8) requires certification in the normal category as a multi-engine certification level 4 airplane, as defined in part 23. The FAA proposed in § 194.307(w) that small powered-lift with a passenger seating configuration of 10 seats or more operating under part 135 must comply with the applicable part 23 provisions identified in § 135.169(b)(8) or such airworthiness criteria as the FAA may find provides an equivalent level of safety in accordance with § 21.17(b). Section 194.307(w) will ensure that a small powered-lift utilized in part 135 operations and carrying more than 10 passengers will achieve a certification standard at least equivalent to the standard set forth in § 135.169(b)(8). The FAA notes that, although it proposed in the NPRM preamble to apply § 135.169(b)(1) to powered-lift, paragraph (b)(1) was inadvertently excluded from the proposed SFAR regulatory text at § 194.307(w). As a result, the FAA has added § 135.169(b)(1) to the SFAR at § 194.306(bb).

Section 135.169(d) addresses cargo or baggage compartments of 200 cubic feet or greater volume in transport category airplanes by requiring more flame-resistant materials. The intent of § 135.169(d) is to reduce the risk of fire burning through the compartment liner and becoming uncontained.⁴⁰⁷ Accordingly, the FAA proposed in § 194.307(x) that large powered-lift that have a cargo or baggage compartment of 200 cubic feet or greater will be required to meet the certification requirements of appendix F to part 25, part III or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b).

The FAA received one comment on proposed § 194.307(v), (w), and (x) from an individual commenter.

Specifically, the individual commenter sought guidance on the definitions of small and large powered-lift as used for this rule. The commenter mentions that part of the NPRM suggests that small powered-lift are those with 10

⁴⁰⁷ See Fire Protection Requirements for Cargo or Baggage Compartments, final rule, 54 FR 7384 (Feb. 17, 1989).

or more passengers. The commenter notes that other parts of the NPRM suggest that a large powered-lift would be one capable of 10 or more passengers. The commenter requests that the FAA provide guidance as to the specific definitions of small and large powered-lift and as to whether the definition of passenger capacity and cargo compartment type from § 135.169 applies to powered-lift.

Per § 1.1, passenger seating configuration does not define small or large aircraft. Instead, whether an aircraft is small or large is determined by weight alone. Specifically, the definition of large aircraft contained in § 1.1 is based upon maximum certificated takeoff weight, not on passenger seating configuration. As such, a large powered-lift may be configured with less than 10 passenger seats, while a small powered-lift may be configured with more than 10 passenger seats.

The FAA evaluated the weight parameters for both transport category airplanes and transport category rotorcraft and determined that the weight limit for large aircraft (over 12,500 pounds, § 1.1) would be an appropriate weight at which to apply airplane transport category standards to powered-lift. Accordingly, small powered-lift would include powered-lift weighing 12,500 pounds or less. To determine whether a powered-lift qualifies as small or large, the FAA will use the existing § 1.1 weight criteria definitions and not the commenter's suggested seat number because weight thresholds are already used in the regulations.

The commenter also inquired if the current § 135.169 applies, specifically in the context of the aircraft's number of passenger seats and cargo/baggage compartment size.

As stated in the NPRM, § 194.306(aa) through (cc) will require certain § 135.169 subparagraphs to apply based on the powered-lift's seating and cargo/baggage compartment size. The additional § 135.169 airworthiness requirements would be required for powered-lift based on the same criteria specified for airplanes, large airplanes (as defined in § 1.1), or small airplanes with a passenger-seating configuration, excluding pilot seats, of 10 or more. Therefore, large powered-lift, or small powered-lift with a passenger-seating configuration, excluding pilot seats, of 10 or more, would have to comply with the additional airworthiness requirements in § 135.169.

Moreover, large powered-lift that have a cargo or baggage compartment of 200 cubic feet or greater in volume would be

required to meet the certification requirements of appendix F to part 25, part III, or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b).

In response to the comments received, the FAA did not make any changes to the proposed regulatory text. Therefore, the FAA adopts § 194.307(v), (w), and (x) as final, but as a result of renumbering they are now § 194.306(aa), (bb), and (cc).

Section 135.170 lists the requirements for materials used in the compartment interiors of specific airplanes. Some powered-lift may be able to transition to a landing quickly; however, others may have descent, landing, and evacuation times similar to airplanes so to provide an equivalent of safety for passengers the FAA determined this rule should be applicable to large powered-lift. The FAA proposed in § 194.307(y) and (z) that large powered-lift must comply with the applicable paragraphs of § 135.170(b)(1) and (b)(2). Powered-lift must comply with appropriate certification provisions listed in § 135.170(b)(1) and (2) or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b).

Section 135.170(c) details the requirements for thermal/acoustic materials on transport category airplanes. The FAA asserted that the flame propagation requirements applicable to transport category airplanes should also be applicable to large powered-lift in order to ensure that persons or property carried on large powered-lift are afforded the same safety provided to persons or property carried in transport category airplanes. Accordingly, large powered-lift would be required to comply with the provisions of § 135.170(c). As proposed in § 194.307(aa), this section requires that large powered-lift comply with § 25.856 (Thermal/Acoustic insulation materials) or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b).

The FAA received no comments on proposed § 194.307(y), (z), and (aa), and therefore adopts § 194.307(y), (z), and (aa) as final, but as a result of renumbering they are now § 194.306(dd), (ee), and (ff).

Section 135.173(a) requires aircraft, excluding helicopters operating under day VFR conditions, that have a passenger seating configuration, excluding any pilot seat, of 10 seats or more in passenger-carrying operations to be equipped with either approved thunderstorm detection equipment or

approved airborne weather radar equipment.

Section 135.173(b) is specific for helicopters and only requires this equipment under night VFR when current weather reports indicate that thunderstorms or other potentially hazardous weather conditions that can be detected with airborne thunderstorm detection equipment may reasonably be expected along the route to be flown.

The FAA determined that the helicopter exception contained in this regulation should not apply to powered-lift because these new entrant aircraft are expected to operate similar to an airplane during the en route phases of flight. The FAA does not yet have enough information about the operations of powered-lift to state definitively whether such aircraft will have the agility and maneuverability of a helicopter during the cruise portion of flight. The FAA anticipates that powered-lift will likely require more time and space to recognize and successfully maneuver out of the dangers associated with hazardous thunderstorm activity.

The FAA received one comment from EASA questioning the logic of requiring large eVTOL to have thunderstorm detection equipment. EASA pointed out that many powered-lift operations are expected to be quite local. EASA also raised the question of waivers for this requirement.

This SFAR is not limited to only eVTOL by the FAA but applies to all powered-lift that may operate in the NAS, some of which will not be limited to local area flying. The use of airborne thunderstorm detection equipment or airborne weather radar contributes to greater safety in operations, even in local area flying areas, because it enables the pilot to detect and locate severe adverse weather areas early. The equipment also enables the pilot to avoid those thunderstorm areas and take other actions necessary for safety of the flight. Furthermore, the FAA has concluded that this equipment is an additional safety benefit for aircraft with 10 or more passenger seats. Throughout the FAA's regulations, 10 or more passenger seats is a threshold at which many additional regulatory requirements are imposed in order to mitigate the risk of carrying the additional people.

In response to the comments received, the FAA will not make any changes to the final rule, and powered-lift must adhere to the provisions provided in § 135.173(a) as written for all aircraft that have a passenger seating configuration, excluding any pilot seat,

of 10 seats or more in passenger-carrying operations.

Section 135.178 details additional emergency equipment applicable to airplanes with a passenger seating configuration of more than 19 seats. This section was implemented largely due to several studies conducted by the Civil Aerospace Medical Institute (CAMI) on exit row configurations and equipment necessary for the most efficient emergency exit of the airplane in the case of emergency.⁴⁰⁸

The FAA anticipates that, due to advances in technology, powered-lift developed in the future could surpass the 19-passenger seating configuration threshold requirement in § 135.178. Those powered-lift should have the requisite procedures and equipment to evacuate passengers in the event of an emergency such as is currently required for airplanes. As such, in the NPRM, the FAA proposed in § 194.307(bb) to apply § 135.178 to powered-lift with a passenger seating configuration of 19 seats or more.

The FAA received no comments on proposed § 194.307(bb); therefore, the FAA adopts § 194.307(bb) final, but as a result of renumbering it is now § 194.306(gg).

Section 135.179 contains the conditions required to take off an aircraft with inoperable instruments or equipment, lists the MEL requirements, and enumerates which instruments and equipment may not be contained within the MEL. In 1991, the FAA published a final rule expanding the availability of a MEL to any civil aircraft that can be operated under part 135, including single-engine aircraft. The notice of proposed rulemaking⁴⁰⁹ that is directly related to the 1991 final rule states that the MEL provisions would apply to “aircraft” and that “[t]he FAA also proposes to amend the language of §§ 135.179 and 125.201 to make them essentially the same as § 121.628.”⁴¹⁰ The FAA notes that the mention of airplane in § 135.179(b)(1) appears to be an oversight in transcription and should actually reference aircraft, as do the rest of the references in § 135.179. This is in contrast to § 121.628, where all references are to airplane. Review of the historical information for this rule revealed that the FAA’s original intent was for § 135.179 to apply to “any civil aircraft,” which includes powered-lift. As a result, the FAA proposed to make a technical amendment to

§ 135.179(b)(1) to reflect that intent by replacing the word airplane with aircraft.

The FAA received no comments on the proposed amendment to § 135.179(b)(1). Therefore, the FAA adopts the amendment to § 135.179(b)(1) as final.

Section 135.180 was implemented to require traffic alert and collision avoidance systems (TCAS) for turbine-powered airplanes that have a passenger seat configuration, excluding any pilot seat, of 10 to 30 seats. TCAS uses transponder signals from nearby aircraft to alert pilots to the danger of mid-air collisions. The FAA anticipates that certain powered-lift will have the same relative speed, size, and passenger-carrying capacity as the airplanes that must be equipped with TCAS under § 135.180. Additionally, the FAA anticipates that some powered-lift will have the ability to operate in the same airspace as other larger, high-performance aircraft, including airplanes operating under part 121. To afford the same level of safety through the mitigation of potential mid-air collisions and their devastating effects on persons and property onboard or in the same airspace as powered-lift, the FAA proposed in § 194.307(cc) this section apply to powered-lift that have a passenger seat configuration, excluding any pilot seat, of 10 to 30 seats.

Powered-lift that are required to have TCAS will also be required to have the content specified in § 135.180(b) in the powered-lift’s AFM. This will ensure that the persons operating a powered-lift will have access to the appropriate procedures for the use of the TCAS equipment, proper flightcrew action with respect to the TCAS equipment, and an outline of all the input sources that must be operating for proper TCAS operation.

The FAA received one comment on proposed § 194.307(cc) from ALPA. ALPA recommended all powered-lift (regardless of seating capacity) should be equipped with a Terrain Awareness and Warning System (TAWS) or a Helicopter Terrain Awareness and Warning System (HTAWS) as applicable, and an Aircraft Collision Avoidance System (ACAS), as well as CVR and FDR. They asserted that these sources of information aid in the avoidance of Controlled Flight into Terrain (CFIT) and Mid-Air Collisions (MAC), and they all directly enhance flight safety. ALPA recommended that, when a TCAS system is required for traditional airplanes or helicopter operations, under the SFAR it should also be required for powered-lift

regardless of seat capacity, to ensure the highest level of safety in this new and novel aircraft type and operations.

The FAA agrees with ALPA that a TCAS provides valuable collision avoidance information to flightcrew during flight. However, the FAA disagrees that all powered-lift, regardless of the passenger seat configuration, should be required to install a TCAS. When the FAA promulgated the TCAS final rule of 1989, the categories of commercial aircraft for which TCAS I or II will be required were based on the provisions of Pub. L 100–223 and on the relative speed of the aircraft, the size of the aircraft, and the number of passengers per aircraft who would benefit from TCAS installation. The FAA anticipates some powered-lift will have the same relative speed, size, and passenger-carrying capacity as the airplanes required to be equipped with TCAS. As such, those powered-lift of similar size will be required to equip their aircraft with TCAS.

The FAA believes the criteria established for TCAS installations in aircraft with 10 to 30 passenger seats is still valid today. Aircraft below the 10-passenger seat threshold are smaller and therefore don’t have the same need for TCAS. Additionally, the FAA believes the associated costs for requiring a higher standard than what is currently in place for other aircraft will place this new emerging industry at an unfair disadvantage. The SFAR enables the FAA to collect data to inform the FAA on future rulemaking for powered-lift operations, and once powered-lift operations become more commonplace and the FAA has a better understanding of the operational complexities for these aircraft, the FAA could consider making a future adjustment to the TCAS requirements. However, at this time, the FAA will require TCAS be installed on powered-lift that have a passenger seat configuration of 10 or more passenger seats.

In response to the ALPA comment, the FAA did not make any changes to the proposed regulatory text. Therefore, the FAA adopts § 194.307(cc) as final, but as a result of renumbering it is now § 194.306(hh).

Section 135.181 details performance requirements for all aircraft operated over-the-top⁴¹¹ or in IFR conditions. The FAA proposed in § 194.308(f) to apply § 135.181(b) to all powered-lift. A powered-lift that is able to meet the performance requirements of § 135.181(b) would provide the same

⁴¹¹ Over-the-top means above the layer of clouds or other obscuring phenomena forming the ceiling.

⁴⁰⁸ See Improved Access to Type III Exits, 57 FR 19220 at 19245 (May 4, 1992).

⁴⁰⁹ Minimum Equipment List Requirements, 54 FR 3320 (Jan. 23, 1989).

⁴¹⁰ Minimum Equipment List Requirements, 56 FR 12311 (Mar. 22, 1991).

level of safety established for helicopters. This exception would provide the same economic relief to powered-lift operators as that experienced by helicopter operators. In the NPRM the FAA did not propose any changes relating to § 135.181(a)(2) because this paragraph applies to all multi-engine aircraft.

The FAA received two comments on proposed § 194.308(f), one from GAMA and one from Joby.

GAMA recommended that the FAA apply the rotorcraft or helicopter rules in § 135.181 to powered-lift. GAMA agrees with the FAA that it was appropriate to allow powered-lift to use the performance requirements of § 135.181(b) when conducting offshore passenger-carrying operations.

The FAA received a comment from Joby not directly specifying § 135.181 but relating to § 135.183(c), which is a performance requirement for a multi-engine aircraft to maintain a certain altitude above the surface when a critical engine is inoperative. Joby's comment regarding § 135.183 advocated that the FAA use another term to capture aircraft that do not have a "critical engine" but may have other powerplants that could experience a loss of thrust impacting the aircraft's ability to stay aloft. As this comment raised the concern about powered-lift without a "critical engine," the FAA is including Joby's comment here.

The term "critical change of thrust" will be added to the SFAR alongside the current term "critical engine" in order to ensure that the performance requirements currently stipulated in § 135.181(a)(2) and (b) will apply to those powered-lift that do not have a critical engine but can experience a critical change of thrust.⁴¹² Using the term "critical change of thrust" ensures that those novel aircraft that may not have a critical engine will be required to demonstrate the same performance requirements as those stipulated for aircraft with a critical engine, thereby ensuring the same level of safety is maintained.

As a result, the FAA will add the term "critical change of thrust" with respect to powered-lift under § 135.181(a)(2) and (b). The FAA adopts § 194.306(ii), which addresses § 135.181(a)(2), as final. The FAA also adopts the proposed § 194.308(f) and the new verbiage of "critical change of thrust" as final. Due to renumbering, the proposed § 194.308(f) is being adopted as § 194.306(jj).

Section 135.183 provides the performance requirements for land aircraft to operate over water. Section 135.183(a) requires that any aircraft operate at an altitude that allows it to reach land in the event of an engine failure. Section 135.183(b) allows overwater operations strictly limited to only takeoff and landing operations. Section 135.183(c) requires a multiengine aircraft to be able to climb with its critical engine inoperative at least 50 feet a minute at 1000 feet above the surface. Section 135.183(d) allows helicopters the option of installing floats if they are unable to meet the requirements of paragraph (a) or (c). Section 135.183(a)–(c) are applicable to powered-lift because those paragraphs reference aircraft.

The FAA anticipates that powered-lift may be utilized in the same fashion as helicopters carrying passengers over water. Some powered-lift may not be equipped with floats. Powered-lift that are equipped with a flotation device will provide the same level of safety that is currently extended to helicopters since that flotation device will have gone through the FAA certification process. The FAA expects that a powered-lift equipped with floats would land similarly to a float-equipped helicopter. Accordingly, the FAA proposed in § 194.308(g) to allow powered-lift to utilize the exception contained in paragraph (d) if the powered-lift is unable to meet the requirements of paragraphs (a) or (c).

The FAA received four comments on proposed § 194.308(g), relating to § 135.183.

In their comment, Joby agreed with the FAA's proposal to include powered-lift with all references to helicopter floats.

Joby stated that most electric powered-lift being developed now use distributed electric propulsion (DEP) systems that include multiple electric engines/electric power units (EPUs). They also mention that some of these designs may not have a single engine that could fail and be critical for performance or handling qualities. According to Joby, with some of these DEP propulsion designs there may be likely failures that don't result in total loss of a single engine, result in partial loss of thrust on multiple engines, result in total loss of thrust on multiple engines/stations simultaneously, or other non-intuitive engine failure scenarios. For these reasons, airworthiness criteria and design standards have adopted the concept of "critical loss of thrust" for showing compliance for performance and handling qualities. Joby asserted the

term "critical loss of thrust" is specific to the aircraft and the electric propulsion system designs being used. Therefore, Joby recommended revising § 135.183(c) to better accommodate multi-engine aircraft with distributed electric propulsion systems by adding "or critical loss of thrust for distributed electric propulsion systems." Additionally, Joby stated, aircraft that can be shown to climb after a critical loss of thrust should be provided appropriate credit.

In their comment, EASA inquired what the FAA expects the buoyancy and demonstrated sea states to be, since the FAA is offering the option to install floats for powered-lift unable to meet the requirements of § 135.183(a) or (c).

AWPC stated that their aircraft, the AW609 a tiltrotor, is designed to operate like a pressurized turboprop airplane when in horizontal flight mode and has the equipment and related characteristics of a helicopter to conduct ditching procedures. This design approach, according to AWPC, addresses the concerns the FAA stated in the NPRM, such as buoyancy and the duration to remain afloat after ditching in water. The AW609 tiltrotor has design features such as a door above the waterline, wing fuel tanks, and a pressurized cabin with closeable outflow valves. It is also equipped with an overhead escape hatch and flotation system. Therefore, AWPC contended that the application of helicopter rules is inappropriate for the AW609 tiltrotor and requests the FAA apply a performance and equipage-based approach to applying regulations for overwater operations to the AW609 Tiltrotor.

GAMA argued that certain powered-lift demonstrate the capability to glide in a manner similar to airplanes when carrying passengers over water. GAMA asserted that, in such cases, it is imperative that the FAA apply the relevant airplane version of the rule to ensure appropriate and effective oversight. By recognizing the glide capabilities of these powered-lift, GAMA argued that the FAA can optimize safety measures and streamline regulations accordingly. GAMA stated that it is crucial to take full advantage of the similarities to airplane operations in these specific scenarios to maintain an equivalent level of safety for passengers and facilitate smooth and efficient operations.

The FAA agrees with Joby that another term to capture aircraft that does not have a "critical engine" but may have other powerplants that could experience a loss of thrust impacting the aircraft's ability to stay aloft needs to be

⁴¹² For a more detailed discussion on "critical change of thrust" see Section V.C.3 regarding § 135.168.

addressed. The FAA did not include the term “distributed electric propulsion” as recommended by Joby because the FAA determined this change should apply to all future propulsion systems that could experience a critical change of thrust, and not just those that are electrically driven. Therefore, the FAA will add “or while experiencing a critical change of thrust” under § 194.306(kk)(1) in the final rule thereby ensuring the safety mitigations for land aircraft operated over water under § 135.183(c) will also apply to powered-lift that may not have a critical engine.⁴¹³ This provision is adopted at § 194.306(kk).

In response to GAMA’s comment, the FAA states the requirements found in § 135.183 provides risk mitigations for all land aircraft when operated over water. This rule as written would apply to powered-lift except for paragraph (d), which as written for helicopters. To operate a powered-lift over water carrying passengers under part 135, the powered-lift must be operated at an altitude that allows it to reach land in the case of an engine failure. All aircraft are allowed to operate over water when it is necessary for takeoff or landing. Any aircraft that is multiengine and has the performance capability to climb, with the critical engine inoperative, at least 50 feet a minute, at an altitude of 1,000 feet above the surface will also be allowed to operate over water. Per § 194.308(g), powered-lift that cannot climb, with the critical engine inoperative or experiencing a critical change of thrust, at least 50 feet a minute, at an altitude of 1,000 feet above the surface must equip their aircraft with flotation devices in order to operate over water. The FAA anticipates that most powered-lift will be multi-engine and could have the performance capability to stay out of the water, but if they don’t and the powered-lift lacks that performance capability, the operator must install flotation devices or stay high enough to be able to either glide or autorotate to reach land in the case of engine failure.

The FAA believes the requirements that are currently in § 135.183 for all aircraft are in line with the comments received from both GAMA and AWPC aimed at following the airplane requirements. The only difference is the flotation requirement the FAA will place on powered-lift should they not have the performance capability to stay out of the water. As addressed in the overwater requirements of §§ 135.168,

136.9, and 136.11, the FAA does not know whether or not a powered-lift will take on water like a helicopter or float for a longer period of time like an airplane after ditching. AWPC requested the FAA apply a performance-based approach to applying overwater regulations. That performance-based approach is already found in § 194.306(kk), addressing § 135.183(c).

In response to EASA’s request on the expected buoyancy and demonstrated sea states, the FAA notes that buoyancy and sea states are defined within aircraft certification (combination of regulation and guidance material) if a ditching approval is sought. If a powered-lift applicant requests this approval, then the FAA would apply the appropriate airworthiness criteria from the existing airworthiness standards to meet the equivalent level of safety as required under § 21.17(b).

In response to the comments received, the FAA made one change to the regulatory text at § 194.306(kk) by using the term “or while experiencing a critical change of thrust.” The FAA is not making any changes regarding the provision to require powered-lift to be equipped with floats when unable to otherwise meet the requirements of § 135.183(a) and (c). The FAA is therefore adopting the proposed § 194.308(g), though due to renumbering, it is being adopted as § 194.306(ll).

4. Subpart D: VFR/IFR Operating Limitations and Weather Requirements

Subpart D prescribes operating limitations for VFR/IFR flight operations and associated weather requirements for operations under part 135.

Section 135.203 provides the VFR minimum altitude requirements for airplanes and helicopters. Different minimum altitudes for airplanes and helicopters exist because the special flight characteristics of a helicopter enable it to accomplish an emergency landing in a small space relative to an airplane. Additionally, the maneuverability of a helicopter permits it to make corrective actions in less distance than most airplanes. This enables a helicopter to be operated over congested areas at 300 feet above the surface without compromising the safety of persons or property on the surface.

In the NPRM, the FAA proposed in § 194.307(dd) to apply the airplane minimum altitude requirements of § 135.203(a) to powered-lift. The FAA anticipates that many powered-lift operators will prefer to utilize lift provided by the wing for as long as practicable in order to gain efficiencies

in speed and range. The FAA expects that the transition from forward flight to vertical flight will require additional time, distance, and altitude for powered-lift. Although some powered-lift may be capable of performing an emergency autorotation into a more confined space, the FAA anticipates that additional altitude would increase the chances of a successful outcome without undue hazard to persons or property on the surface.

The FAA received seven comments in response to the proposed § 194.307(dd). Several commenters disagreed with proposed § 194.307(dd) and recommended applying the helicopter requirements of § 135.203(b) instead. CAE and NBAA argued that the rationale provided by FAA for allowing powered-lift to use copter procedures should justify applying helicopter MSA requirements to powered-lift. CAE stated that powered-lift are capable of vertical takeoff and landing in small spaces and have helicopter-like maneuverability. Furthermore, CAE noted that the FAA is allowing powered-lift to use part 97 copter instrument procedures, recognizing the vertical capabilities of these aircraft, but then does not apply the same premise to minimum safe altitudes.

Lilium said that, although autorotation is a key feature for helicopters, it should not be the primary factor that allows powered-lift to operate using helicopter minimums. Lilium suggested determining on a case-by-case basis whether a powered-lift should be allowed to use the helicopter requirements of § 135.203(b), taking into consideration the aircraft’s redundant propulsion systems, equipment, operational environment, and design.

Archer recommended replacing category-based operational rules regarding minimum safe altitude with type-specific rules informed by the type certification and FSB process, similar to that proposed in the NPRM for the airworthiness evaluation and eligibility for copter procedures. Archer believed using this method to establish the operational rules would allow the FAA to evaluate the operational capabilities of each powered-lift before deciding which operational rules are appropriate. Archer argued that such evaluations would achieve the goal of an equivalent level of safety through performance-based rulemaking. Archer further stated that powered-lift which share the key operating capabilities that enable helicopters to safely operate at lower altitudes and reduced weather minima should be subject to the same operating rules.

⁴¹³ For a more detailed discussion on “critical change of thrust” see Section V.C.3 regarding § 135.168.

Eve asserted that the FAA has assigned powered-lift with the minimum safe altitude specified for airplanes based on two assumptions: that most powered-lift flights while in cruising phase are performed in wing-borne flight mode, and that, even if considering the possibility of transitioning from wing-borne to vertical flight mode in case of an emergency, that requires a safe landing in some place in the city, which would result in a loss of altitude. Even though the first assumption is valid for most powered-lift, Eve alleged that the second assumption deserves further consideration. Eve argued that the time, distance, and speed necessary to transition from wing-borne flight mode to vertical-lift flight mode should be considered when applicable to powered-lift operating in an urban environment. Without knowing those parameters, Eve argued that it is not reasonable to assume that powered-lift will perform as an airplane and not as a helicopter when time, speed, and speed necessary to transition are taken into consideration. Eve stated that, for most powered-lift, those time, distance, and speed responses will have a suitable certified performance because of the use of MEPS (Multi-Electric Propulsion System), which Eve alleged will provide increased thrust, efficiency, and redundancy to minimize any possible loss of altitude. Therefore, Eve recommended that the FAA apply the helicopter provisions of § 91.119(b)(1) and § 135.203(b) to powered-lift.

AWPC stated that the FAA's proposal to limit powered-lift to airplane MSAs will inhibit their AW609 Tiltrotor powered-lift from conducting low-altitude missions such as Search and Rescue (SAR) and Air Ambulance. AWPC stated that, while operating in horizontal flight mode, the AW609 crews can reach the distressed person or patient faster than helicopters. However, AWPC argued that, without the ability to operate at helicopter MSAs, even in vertical flight mode, the AW609 Tiltrotor would not be authorized to operate on the helicopter routes or even land at a hospital helipad. AWPC asserted that the minimum altitudes for powered-lift should be based on aircraft performance and capabilities. AWPC agreed that powered-lift operating in horizontal flight mode should operate in accordance with airplane MSA. However, AWPC argued that powered-lift capable of demonstrating category A performance or an ability to autorotate comparable to helicopters, such as the AW609 Tiltrotor, should be allowed to

operate at helicopter MSA when in vertical flight mode.

GAMA stated that powered-lift possess helicopter-like maneuverability, safe operation at low airspeeds and altitudes, and the capability of vertical takeoff and landing. Given these characteristics, GAMA felt that the helicopter provisions of this rule should apply.

Joby argued that, depending on the powered-lift's characteristics, the MSA rules for helicopters should be applied. Joby pointed to the ability of powered-lift to take off and land vertically in relatively small spaces, similar to a helicopter. Joby also states that many electric powered-lift currently in development have distributed electric propulsion systems, which Joby alleged provide a high level of redundancy in producing thrust and lift. Joby argued that requiring a higher minimum safe altitude for these powered-lift flight operations is not necessary to maintain an equivalent level of safety. For those aircraft which incorporate multiple electric engines or electric propulsion units, Joby alleged that the loss of a single electric engine/electric propulsion unit (EPU) or even a critical loss of thrust would not directly endanger the crew or passengers or create an undue hazard to persons or property on the ground. According to Joby, following an engine failure, these aircraft will be able to continue safe flight. Joby suggested powered-lift provide a higher level of safety than single engine airplanes or helicopters.

Joby specifically pointed to powered-lift flying air tour and air taxi operations, arguing that the ability to fly at lower minimum safe altitudes increases their ability to navigate under and around congested airspace, deconflict with other aircraft, fly missions more efficiently, and better meet market and community objectives in a manner consistent with safety. Joby believed that establishing higher minimum safe altitudes will inadvertently reduce safety while also negatively affecting marketability and community service. Joby also believed that, by allowing flight below airspace shelves or below approach paths, which is common for helicopters, operational safety will be improved while allowing for more inherent traffic deconfliction. Joby argued that this is especially important for electric powered-lift that have relatively shorter range and endurance capabilities than traditional aircraft.

In a group comment, AOPA, GAMA, HAI, NATA, NBAA, and VFS argued that, considering the FAA is allowing powered-lift to use part 97 copter

instrument procedures, thereby recognizing the vertical capabilities of these aircraft, the FAA should apply the same premise to minimum safe altitudes.

The FAA evaluated the information from the commenters and therefore will create a performance-based rule allowing powered-lift to use an altitude lower than specified for airplanes. The FAA considered the special flight characteristics of a helicopter, which can accomplish an emergency landing within a relatively small space as noted in the *Part 60—Air Traffic Rules* final rule.⁴¹⁴ The FAA has concluded that powered-lift that are able to autorotate or conduct an approved equivalent maneuver should be allowed to use the same VFR minimum altitudes as provided to helicopters. This provision is adopted at § 194.306(mm) and (nn). To use this provision, the powered-lift will have to be operating either in the vertical-lift flight mode or when operating in the wing-borne flight mode be able to transition from wing-borne flight to the vertical-lift mode and then conduct a safe autorotation or approved equivalent maneuver that permits a controlled descent to a landing.

When operating in the vertical-lift flight mode, the powered-lift must be certificated and be able to conduct an autorotation or an approved equivalent maneuver to a landing. Then the provisions of § 135.203(b) will apply. If a powered-lift is not certificated or able to conduct an autorotation or an approved equivalent maneuver to a landing, then the minimums specified in § 135.203(a) would apply.

In order to utilize a lower VFR minimum altitude in the wing-borne flight mode, an operator must be authorized by Operations Specifications. The Operations Specification will specify the VFR minimum altitude for each type of powered-lift. To receive this authorization, the powered-lift's AFM must have a minimum altitude specified that enables a transition from wing-borne flight to the vertical-lift mode and then conduct a safe autorotation or approved equivalent maneuver that permits a controlled descent to a landing. This authorization will be granted to each specific type of powered-lift since each type could have a different minimum altitude specified in the respective AFM. When operating in the wing-borne flight mode a powered-lift in no case will be allowed to go below 300 feet above the surface. If the powered-lift does not have this

⁴¹⁴ *Part 60—Air Traffic Rules*, final rule, 20 FR 6694, 6695 (Sept. 13, 1955).

limitation established in their flight manual, then when operating in the wing-borne flight mode, they will be limited to the airplane criteria found in § 135.203(a) for day and night operations. This is reflected in the amended § 194.307(dd), which is renumbered as § 194.306(mm).

Section 135.205 provides the visibility requirements for an airplane or helicopter operating under VFR in uncontrolled airspace. The FAA proposed in § 194.307(ee) that powered-lift operating under VFR in uncontrolled airspace would be required to maintain the ceiling and visibility requirements detailed for airplanes under § 135.205(a). The FAA based this proposal on the conclusion that powered-lift will have the potential to fly at airspeeds higher than rotorcraft and may need additional visibility to safely identify other aircraft and obstacles and to make appropriate corrective actions.

The FAA received nine comments on proposed § 194.307(ee). The FAA received one comment that agreed with the FAA proposal, seven comments that disagreed and wanted the FAA to apply requirements other than those specified for airplanes, and one comment relating to air ambulance operations.

Electra.aero supported the FAA's rationale and decision to apply airplane VFR/IFR weather minima to electric powered-lift. Electra.aero noted that powered-lift will have increased maneuverability and the ability to hover or loiter at lower speeds, similar to helicopters. However, according to Electra.aero, many electric powered-lift will be limited by the battery thermal capability and will only have the ability to hover for a few minutes.

Archer recommended replacing category-based operational rules regarding visibility minimums in favor of type specific rules informed by the type certification and FSB process. Archer argued that this method to establish the operations rules would allow the FAA to evaluate the operational capabilities of each powered-lift before deciding which operational rules are appropriate. Archer further asserted that powered-lift which share the key operating capabilities that enable helicopters to safely operate in reduced weather minima should be subject to the same operating rules.

CAE stated that many powered-lift will cruise at speeds lower than a fast helicopter but points out that the weather minimums for those helicopters have not been increased to mirror the airplane minimums. CAE also mentioned that, currently, weather

minimums are not based only on speed but also on maneuverability. Considering the ability of helicopters to operate at lower speeds and with increased maneuverability while maintaining safety under less restrictive minima, CAE suggested that same criteria should be considered for powered-lift.

AWPC contended that the blanket application of airplane VFR minimums for all powered-lift is prohibitive. AWPC asserted that their AW609 Tiltrotor can operate in vertical flight mode with maneuverability characteristics consistent with helicopters. AWPC argued that basic VFR and special VFR operations should be based on mode of flight.

Lilium urged the FAA to adopt a similar comprehensive and risk-based approach as Lilium suggested for altitude requirements. Lilium also suggested that the FAA evaluate the capabilities and performance of individual powered-lift for operating under the helicopter VFR weather requirements. Lilium argued that powered-lift are designed to operate in low-altitude environments (below 10,000 mean sea level (MSL) for short routes. Lilium asserted that utilizing helicopter VFR minimum weather requirements may improve airspace congestion and energy efficiencies with the ability to operate at lower in-route altitudes.

Lilium noted that ICAO Document 10103 provides guidance for the application of the appropriate operating rules based on the aircraft's performance characteristics demonstrated during type certification, effectively allowing powered-lift to utilize helicopter requirements if they are determined to be capable of safely operating under such conditions. Lilium suggested that the FAA consider adopting a similar performance-based approach, aligning with international standards and enabling U.S. operators to be competitive on a global scale. Lilium concluded by stating this approach will ensure each aircraft's safety capabilities are considered when determining appropriate visibility requirements.

GAMA stated the proposal to use the operational rules for airplanes limits the acceptability of rotorcraft rules and does not establish a pathway for the development and application of performance-based rules. GAMA mentioned that the application of prescriptive operating rules without consideration for the aircraft's performance reduces the usefulness of powered-lift. They strongly recommended the FAA to consider the diverse capabilities of powered-lift and

propose applying appropriate operating rules based on the performance characteristics of each powered-lift. Similar to Lilium, GAMA advocated for the FAA to adopt the approach laid out in ICAO Document 10103. GAMA stated that their members understand ICAO Document 10103 as an example of a performance-based approach that was developed for a large turbine-powered configuration. While the document primarily focuses on large turbine-powered tilt-rotors, GAMA argued that the document explicitly acknowledges that tilt-rotors are part of the powered-lift category. GAMA noted that, while the manual doesn't specifically address all types of powered-lift, it foresees its use as a basis for other civil powered-lift as they mature in design. GAMA argued that the FAA should recognize and allow operations based on the full capabilities of powered-lift to allow application of rotorcraft rules when appropriate, based on aircraft performance to ensure safety and operational effectiveness. GAMA firmly believed that regulations should encompass the entire spectrum of powered-lift.

GAMA suggested that the FSB report, type certificate data sheet, AFM, and other documents provide methods to establish appropriate operating rules. GAMA argued that an operator's Safety Management System (SMS), operational control policies, training requirements, and other factors demonstrate their capabilities. To achieve this, GAMA suggested the FAA can add "unless as otherwise specified," "unless otherwise authorized by the Administrator," or "as specified per Flight Standardization Board report" to §§ 194.302, 194.303, 194.307, and 194.308.

GAMA concluded by saying that powered-lift possess helicopter-like maneuverability, safe operation at low airspeeds and altitudes, and the capability of vertical takeoff and landing. Given these characteristics, GAMA asserted that the helicopter provisions for visibility minimums should apply to powered-lift.

Joby argued that powered-lift currently in development are mostly like helicopters in terms of performance and maneuverability capabilities. Joby stated that most electric powered-lift will cruise at speeds less than the fastest helicopters. Joby stated that powered-lift are able to abort continued flight and can land immediately if conditions deteriorate quickly. Joby argued that these qualities should allow electric powered-lift to operate at lower visibility and cloud clearance distances while maintaining the same degree of safety as fixed-wing aircraft flying under

more restrictive minima per the FAA's own rationale and previous policy established for helicopters. According to Joby, VFR visibility and cloud separation requirements also provide a safety margin from unintentional flight into Instrument Meteorological Conditions. Joby suggested that powered-lift can be operated with reduced visibility and cloud separation minima, while still maintaining the same degree of safety as fixed-wing aircraft flying under more restrictive minimums. Joby recommended that the FAA establish special allowances for VFR weather minima as a function of the type of operation being conducted, such as urban air taxi service, air ambulance, air tours, or regional travel. Joby argued that the FAA should consider the benefits of enhanced vision systems to support operations in basic VFR minimums.

In a group comment, AOPA, GAMA, HAI, NATA, NBAA, and VFS asserted that many powered-lift will cruise at speeds lower than fast helicopters, such as the Bell 429, Eurocopter AS365, and many other helicopter types, yet the weather minimums for those helicopters are not increased to the airplane minimums. Therefore, they contended that weather minimums are not based only on speed but also on maneuverability.

Airbus Helicopters asserted that some powered-lift designs may have performance characteristics comparable to helicopters and are expected to perform emergency medical services. They provided that the FAA's proposed approach is restrictive and could prevent the development of medical services with powered-lift. They recommended the FAA reconsider the application of these for powered-lift performing air ambulance operations.

In response to Airbus Helicopters comment, the FAA refers Airbus Helicopters to the visibility requirements specified for air ambulance operations as provided in § 194.306(qqq), pertaining to § 135.609. In the final rule the FAA made provisions for powered-lift conducting air ambulance operations to use visibility requirements based upon the mode of flight.

In reconsidering the proposal requiring powered-lift to comply only with airplane visibility minimums, the FAA has carefully re-evaluated the purpose of the visibility regulations established for helicopters to help determine if the justification used for helicopters could be applied to powered-lift today. The FAA considered the commenters' assertions that weather minimums are not only based on speed

but also on the maneuverability of an aircraft. The FAA agrees with the commenters that helicopters, which operate at lower speeds, benefit from the increased maneuverability while maintaining safety under a less restrictive visibility minima. The FAA believes powered-lift operating in the vertical-lift flight mode will benefit from increased maneuverability. The FAA has concluded that, when a powered-lift is operating in the vertical-lift flight mode at a speed that allows the pilot to see and avoid any other air traffic or any obstructions in time to avoid a collision, a lower visibility minimum can be used without any degradation of safety.

Therefore, the FAA will incorporate a change from the visibility minimums proposed in § 194.307(ee) of the NPRM by allowing powered-lift operating in the vertical-lift flight mode to comply with the helicopter visibility minimums of $\frac{1}{2}$ mile during the day and 1 mile at night. This provision is adopted at § 194.306(pp). This lower visibility minimum will be limited to VFR at an altitude of 1,200 feet or less above the surface or within the lateral boundaries of the surface areas of Class B, Class C, Class D, or Class E airspace designated for an airport. Powered-lift seeking to use the helicopter visibility minimums must be operated at a speed that allows the pilot enough time to see and avoid any other air traffic, or any obstructions in time to avoid a collision. All powered-lift operating in the wing-borne flight mode, and those operating in the vertical-lift flight mode which cannot be operated at a speed that allows the pilot enough time to see and avoid any other air traffic or any obstructions to avoid a collision, must comply with the airplane visibility minimums prescribed in § 135.205(a). The FAA will adopt the proposed § 194.307(ee) as amended, though due to renumbering, it is being adopted as § 194.306(oo).

Section 135.207 outlines helicopter surface reference requirements under VFR. The FAA anticipates that powered-lift will be equipped with advanced technologies and flight instrumentation that will provide adequate situational awareness as well as an ability to maintain positive control of an aircraft in lower light and visibility situations. The FAA proposed in § 194.308(h) that § 135.207 will only apply to powered-lift that do not have the flight instrumentation listed in § 135.159 installed and operable. This will ensure that the pilot can safely control a powered-lift that is manufactured without flight instruments required by § 135.159.

The FAA received two comments on proposed § 194.308(h), one from AWPC and one from GAMA. AWPC suggested that the title of § 135.207 should be amended to "Helicopters and powered-lift surface reference requirements." For the text of § 135.207, AWPC suggested that the phrase "or powered-lift" be added after "no person may operate a helicopter."

GAMA recommended that the FAA should use the ICAO guidance provided for helicopters most of the time. Similar to AWPC, GAMA placed the term powered-lift alongside helicopter for § 135.207 in their recommendation for the FAA to follow ICAO. The change suggested by AWPC and GAMA for § 135.207 is too restrictive and would prohibit powered-lift from flying VFR over the top, or at night without visual surface references, even when a powered-lift has the instruments specified in § 135.159 to conduct the operation safely. As stated in the NPRM, the FAA anticipates that powered-lift that are equipped with advanced technologies and flight instrumentation will provide adequate situational awareness as well as an ability to maintain positive control of an aircraft in lower light and visibility situations. The FAA will adopt the proposed rule as final, though due to renumbering, it is being adopted as § 194.306(qq).

Section 135.209(a) requires airplanes to have enough fuel supply under VFR, considering wind and forecast weather conditions, to reach the first point of intended landing at normal cruise fuel consumption and then fly after that point for 30 minutes. At night, this requirement increases to 45 minutes past the first point of intended landing. Section 135.209(b) states that helicopters must have enough fuel to fly to the first point of intended landing, considering wind and forecast weather conditions, and enough fuel to fly after that for at least 20 minutes regardless of day or nighttime.

In the NPRM, the FAA proposed in § 194.307(ff) to require powered-lift to adhere to the fuel reserves set forth in § 135.209(a). This is because powered-lift will likely conduct cruise operations in configurations similar to airplanes, while they will conduct takeoff and landing operations in a manner similar to helicopters. Because powered-lift will predominately use wing-borne flight during cruise, similar to airplanes, the FAA anticipates that some powered-lift would have the potential to fly at higher altitudes and speeds. Additionally, some powered-lift may require more surface area to conduct a landing than a helicopter, thereby reducing the number of available unplanned landing

sites, and would benefit from the additional fuel reserves required for airplanes.

There were 15 comments received for § 194.307(ff). The FAA received comments from two commenters that agreed with the FAA proposal and thirteen commenters that disagreed and wanted the FAA to apply requirements other than those specified for airplanes.

An anonymous commenter agreed with the FAA's proposal, noting that battery-powered aircraft should have the same energy "fuel" reserves as other propeller or jet aircraft, 30 minutes during the day and 45 minutes at night. The commenter pointed out that weather can be unpredictable. This commenter provided an anecdote from their own experience when flying on the Bay area side of the Pacific Coast mountains. During a flight, by the time the commenter saw the fingers of fog coming through the mountain passes from the Pacific Coast they barely had enough time to get back to Palo Alto airport, fly a landing pattern, and still land in VFR. Additionally, the commenter pointed out that un-forecast winds could exceed the capability of the powered-lift to land at a vertiport located on top of a building, thus requiring a diversion to another location, meriting extra reserves.

The Advanced Air Mobility Institute suggested the FAA consult with the Department of Defense to determine powered-lift fuel requirements.

Electra.aero supported the FAA's rationale and decision to apply airplane fuel reserve requirements to eVTOL aircraft. Electra.aero pointed out that operations in the National Airspace System (NAS) require margin, which can only come from appropriate reserves to allow for unexpected circumstances. Electra.aero also noted that electric energy storage technologies still have significant uncertainties which warrant this more conservative approach until sufficient operational experience is achieved.

Archer believed that the application of airplane fuel reserves to the powered-lift category is inappropriate and argues that the FAA is failing to consider the unique operational capabilities of powered-lift that are able to take off and land vertically. Archer pointed out that there is limited range and endurance inherent in battery electric propulsion. Archer urged the FAA to consider regulations that will enable approvals of performance-based fuel reserves tailored specifically for those eVTOL powered-lift seeking certification.

Archer further argued that aircraft certification should inform the decision on fuel reserves rather than operational

data. For example, Archer noted that, while helicopters have multiple single-point-of-failure vulnerabilities, their own "Midnight" aircraft has no single-point-of-failure vulnerabilities, a reliability Archer feels should also be recognized in the determination of reserve fuel.

Archer pointed out that existing airplane fuel reserve regulations in part 91 and 135 would permit, as an example, an aircraft operating a 3,000 nm, 5-hour flight, with a requirement to land on runways in excess of 5,000' in length, to carry just 30 minutes of reserve fuel. Archer said this should not be the standard applied to an aircraft anticipated to typically operate less than 50 nm, 20-minute flights.

In order to recognize the unique, short-range operating environment anticipated by powered-lift eVTOLs, Archer recommended a regulation that can follow long-standing precedent of the fuel reserve OpSpecs that are utilized by many part 121 air carriers. Archer argued that this data-driven fuel planning would recognize that eVTOLs operating on very short stage lengths are likely to be able to demonstrate, with data, consistency in operations that enable lower fuel reserves with equivalent levels of safety.

Archer recommended that the FAA adopt language in part 194 that will allow for Performance Based Contingency Fuel (PBCF) approvals for part 135 based on operational data.

CAE asserted that the FAA has failed to consider powered-lift characteristics and their operating environment. CAE noted that airplanes require longer fuel reserves because they might have to fly a farther distance to reach a suitable landing site, while helicopters are afforded the advantage of shorter fuel reserves because they are capable of landing in smaller locations. According to CAE, the same is true for powered-lift, which can land in a vertical mode at the same types of locations as helicopters.

Additionally, CAE argued that the proposed SFAR prescriptive time-based requirements do not consider each individual aircraft's performance-based capabilities when determining fuel reserves. CAE then suggested that the FAA should apply ICAO Document 10103 when assessing operational rules, as an application of the ICAO guidance would result in helicopter fuel reserve regulations being applied to powered-lift. Additionally, CAE proffered that the FAA should allow operators and manufacturers to seek waivers or exemptions based on the performance of their powered-lift.

AWPC argued that powered-lift capable of VTOL should be allowed to use helicopter VFR fuel reserves and that powered-lift authorized to utilize copter procedures should be allowed to use helicopter IFR fuel reserves. AWPC stated that this recommendation aligns with ICAO Document 10103, which they argue supports applying helicopter fuel reserves to powered-lift such as the AW609 Tiltrotor. AWPC argued that a performance-based approach to the fuel reserve requirements for their own AW609 Tiltrotor is appropriate based on its capabilities consistent with helicopters and confirmed by the empirical data from the V-22 operations. AWPC believed that applying the helicopter fuel reserves to their powered-lift likely would exceed the level of safety of existing helicopters and airplanes.

Eve stated that, while the FAA acknowledges that powered-lift operations seem to be more aligned with the type of missions helicopters operate, the FAA still disregards the rotorcraft fuel reserve requirements of 20-minute regardless of whether the operation occurs during the day or night. Eve argued that the FAA has opted for a much more conservative approach without considering the performance-based capabilities of powered-lift to be operated in urban environment. Eve recommended considering appropriate operational requirements applied for energy reserve based on the design and performance capabilities of each individual certified powered-lift. Eve further recommended that the FAA consider alignment with ICAO Document 10103 guidance to meet the existing operational safety level applied for helicopters and airplanes.

Eve recommended for the SFAR that the FAA introduce more practical, performance-based energy reserve requirements applied for planned routes and consider the type of energy used by the powered-lift relating to the operation applied for each type of aircraft (shorter range, alternate landing sites, energy capacity, performance capabilities). Eve provided an example of their concept for "Alternative Energy Reserve Requirement," which includes a specific risk mitigation assessment. Eve's proposed specific risk mitigation assessment would include at a minimum, certified energy consumption data provided by the manufacturer, energy planning and in-flight replanning, the selection of alternate landing sites, and in-flight energy management."

Lilium stated that the FAA's proposed requirement will create obstacles to market success for eVTOL powered-lift

operators. Lilium recommended a more flexible approach that allows powered-lift and part 135 commercial operators meeting specific performance requirements to utilize performance-based and/or helicopter reserve requirements. Lilium believed that the necessary aircraft performance criteria could be determined during aircraft certification and type rating evaluation processes. Lilium also believed the performance-based requirements combined with the appropriate operator requirements and evaluations can provide a safer and more appropriate reserve solution for certain powered-lift.

Lilium suggested taking cues from EASA, which is adopting a performance-based approach. Lilium suggested similarly embracing modern and sophisticated energy planning standards that surpass the FAA's adoption of airplane standards rooted in 1950–70s technology. Lilium proposed allowing operators who comply with EASA's proposed performance standards to adopt those standards for U.S. operations, thus enabling the use of EASA-approved performance-based reserve requirements.

Lilium supported the system framework and concepts outlined in an upcoming GAMA white paper⁴¹⁵ and asserts it should be adopted by the FAA as an alternative to what Lilium sees as overly strict airplane fuel reserve requirements. Alternatively, Lilium suggested that the FAA consider applying the 20-minute VFR fuel reserve requirements for helicopters to powered-lift or have available a performance-based fuel reserve requirement that would be approved by the FAA, in lieu of airplane requirements. Lilium believed such an approach, combined with the appropriate aircraft equipment and operator capabilities, would better serve the unique operational needs of powered-lift.

BETA asserted the FAA's proposal of the existing airplane VFR and IFR reserve requirements is overly burdensome for powered-lift that may only be capable of short duration flights and does not consider the variability in required energy reserves for electric propulsion powered-lift based on the planned flight profile and landing type. BETA recommended the FAA add an option for a performance-based fuel reserve that can be determined based on the capability of the aircraft and the intended flight plan because they

asserted the safety intent of the fuel reserve requirement can be met by using those parameters.

BETA argued that the initial certified electric propulsion powered-lift will likely have range capability below traditionally fueled aircraft of the same size and capability due to current technology limitations in energy storage. BETA also believed for short duration flights the existing airplane reserve requirements may represent carrying more than double the required energy for a VFR mission and triple the energy required for an IFR mission. BETA argued that this is a disproportionately heavy burden when compared to the performance impact of the same reserve on traditional aircraft using standard aviation fuels. BETA further stated that the FAA's proposed fuel reserve does not provide a commensurate increase in safety that balances the reduction in usefulness of the aircraft.

According to BETA, for electric propulsion aircraft, the rate of energy consumption is significantly higher during vertical flight operations like takeoff and landing and is not generally proportional to duration of flight or distance flown. BETA also mentioned that electric propulsion powered-lift will have variable energy reserve needs based on the planned flight profile.

The Vertical Aerospace Group stated the 30-minute energy reserve requirement for day VFR operation is overly conservative and fails to consider the unique operating characteristics of powered-lift, which are capable of vertical landings and performing approach and go-around maneuvers in low-speed thrust-borne mode, allowing more flexibility in emergency conditions.

The Vertical Aerospace Group argued that the proposed reserve requirement will hinder the development of the powered-lift industry in the United States. According to the Vertical Aerospace Group, eVTOLs are primarily designed for short distances, such as urban air mobility operations, and applying fuel reserve requirements for airplanes, which often undertake longer cross-country flights, is not aligned with the typical mission profiles of powered-lift eVTOLs and could hinder growth of this emerging sector.

Given the variation of aircraft designs within the powered-lift category, the Vertical Aerospace Group encouraged the FAA to take a performance-based approach, setting fuel requirements based on the performance and the type of operation of the specific aircraft, allowing for a more tailored approach in which the overall design, operational profile, and safety requirements of the

aircraft are considered. In addition, the Vertical Aerospace Group stated that such an approach would be in line with other regulators such as EASA supporting greater regulatory harmonization.

GAMA argued the approach to use airplane requirements for many of the operational rules does not consider that many powered-lift have performance capabilities similar to rotorcraft. GAMA further stated that the application of prescriptive operating rules without consideration for vehicle performance reduces the usefulness of powered-lift. GAMA strongly recommended the FAA consider the diverse capabilities of powered-lift and mentions that the broad diversity for the blanket application of airplane rules is not suitable for accommodating the unique design characteristics of these new aircraft.

According to GAMA, the distinct performance capabilities of powered-lift significantly impact their flight operations, fuel consumption, and the ability to respond to varying weather conditions and other unexpected circumstances that would drive a reserve requirement. GAMA noted that the ability for powered-lift to engage in vertical takeoff and landing means powered-lift can avoid lengthy diversions often required of fixed-wing aircraft to find suitable runways in emergency or uncertain conditions, thus reducing the need for prolonged extra reserve fuel. GAMA further stated that the ability to hover, decelerate rapidly, and maneuver at low speeds allows both helicopters and powered-lift to safely operate in conditions of reduced visibility, further justifying a reduced fuel reserve requirement.

GAMA believed a performance-based energy reserve concept has the same overarching objective as the prescriptive time-based reserve approach, which is to ensure a safe landing. According to GAMA, the FAA could assess the energy capabilities of each powered-lift in order to determine the performance-based energy reserve.

Joby argued that the FAA should amend their part 194 requirements to specify fuel reserves for powered-lift to align with today's requirements for helicopters. Joby stated that powered-lift share unique performance capabilities with helicopters, which differentiates them from traditional fixed-wing aircraft. Joby argued that these capabilities mean powered-lift can sidestep extensive detours to locate appropriate runways during emergencies or uncertain situations, thereby decreasing the necessity for extended reserve energy. According to

⁴¹⁵ General Aviation Manufacturers Association, *Managing Range and Endurance of Battery-Electric Aircraft* (2023), gama.aero/wp-content/uploads/Managing-Range-and-Endurance-of-Battery-Electric-Aircraft_v1-1.pdf.

Joby, the proficiency to hover and navigate at low velocities permits helicopters and powered-lift to function in reduced visibility scenarios.

Considering these abilities, powered-lift are often able to land in environments where conventional aircraft would be compelled to divert, further endorsing the case for equivalency with respect to reserve energy.

Joby noted that an electric powered-lift, when being dispatched, might be required to carry a more significant portion of its energy reserve under the proposed regulation compared to conventionally fueled aircraft and might be restricted from commencing flights merely because of disproportionate energy reserve mandates.

AOPA, GAMA, HAI, NATA, NBAA, and VFS provided a comment as a single document submitted by NBAA. These organizations stated they believe the FAA failed to consider the characteristics powered-lift and their operating environment by unilaterally applying airplane fuel reserves to all powered-lift. They also stated that airplanes require longer fuel reserves because they might have to fly a farther distance to reach a suitable landing site, while helicopters are afforded the advantage of shorter fuel reserves because they are capable of landing in smaller locations. The same should hold true of powered-lift, which can land in a vertical mode at the same types of locations as helicopters. These commenters recommended the FAA consider the capabilities of powered-lift and apply ICAO Document 10103 to its assessment of operational rules. This will allow for international harmonization and for aircraft to best utilize each aircraft's capabilities. The group also mentioned that if the FAA does not allow blanket permission for powered-lift to utilize helicopter operational rules while in vertical flight mode, the FAA should provide a pathway for an operator or manufacturer to seek approval or authorization to adopt the alternate rule.

Like several other commenters, L3Harris stated that the FAA should utilize ICAO Document 10103. Specific to the fuel requirements, L3 Harris suggests the FAA add a specific section to the SFAR that specifies fuel reserve requirements for both VFR and IFR operations.

An individual commenter asserted the FAA SFAR is far too conservative on operational guidance and that the FAA fails to understand the performance capability of powered-lift. The commenter indicated they have flown powered-lift for 11 years and indicated that having the flexibility to use

helicopter regulations and operating procedures has ensured their ability to safely complete the mission and care for the crew and passengers.

The FAA has considered the many comments requesting the FAA to allow powered-lift to use the helicopter VFR fuel minimums. In response, the FAA has decided to provide some relief from the VFR fuel supply requirements the FAA originally proposed in the NPRM for powered-lift when the aircraft has the performance capability to always conduct a landing in the vertical-lift flight mode along the entire route of flight. The FAA has considered the hybrid nature of a powered-lift and its ability to operate similar to a helicopter or an airplane, depending on the mode of flight in which it is being operated. The FAA acknowledges that, when a powered-lift can conduct a landing in the vertical-lift flight mode, which enables it to land in areas similar to what a helicopter requires, there will be more landing sites available to the powered-lift as compared to airplanes. Therefore, the FAA will allow a powered-lift to use the VFR helicopter fuel minimums when they are able to conduct a landing in the vertical-lift flight mode. This provision would not prevent a powered-lift from operating in the wing-borne flight mode but will require the powered-lift to have the performance capability, as detailed in the AFM, to conduct a landing in the vertical-lift flight mode along the entire route of flight.

This will provide powered-lift operational flexibility without a degradation of safety, as there is a long history of helicopter operations using the 20-minute fuel reserve requirement. When using this provision, a person must consider any landing performance data that enables a landing in the vertical-lift flight mode, including taking into consideration the energy requirements to successfully complete a descent and landing in the vertical-lift flight mode from the altitude they plan to use. There may be performance requirements or limitations contained in the AFM that would prevent a powered-lift from conducting a landing in the vertical-lift flight mode, such as a landing weight limitation, thereby requiring the use of the airplane fuel supply requirements of § 135.209(a).

In the comments, the FAA received requests from manufacturers that are developing aircraft with a non-traditional fuel supply, such as battery powered, to allow fuel requirements other than the prescriptive airplane or helicopter VFR fuel supply requirements. The FAA has decided to adopt a deviation process as an

alternative pathway to the VFR fuel supply requirements. The FAA concluded that the deviation process could maintain the level of safety provided by § 135.209 and be beneficial to those powered-lift using non-traditional fuel sources. In order to maintain this level of safety, the FAA has determined a deviation will be available only to those powered-lift operating over specific routes that have predetermined suitable landing areas available. A suitable landing area under § 194.306(rr) and (ss) is an area that provides the operator reasonable capability to land without causing undue hazard to persons or property. These suitable landing areas must be site-specific, designated by the operator, and accepted by the FAA. This will ensure that any operation conducted with less than the prescriptive VFR fuel supply minimums will be conducted under a controlled environment. The controlled environment will incorporate pre-determined suitable landing areas that are known by the pilot in advance and be based upon the specific route being flown along with the VFR fuel reserve specified in minutes. The FAA will evaluate each certificate holder's deviation request to determine if the proposed operation will maintain an equivalent level of safety as currently provided in the prescriptive rule. The authorization to use this deviation would be granted to the certificate holder via Operations Specifications (OpSpecs). In response to Archer's point on operational data being determined during aircraft certification, the FAA notes that the fuel reserve requirements are based upon the operational rules in which the flight is conducted and, unlike Archer alleged, are not determined during aircraft certification. Archer also mentioned that, while helicopters have multiple single-point-of-failure vulnerabilities, Archer's "Midnight" aircraft has none, a reliability Archer believed should also be recognized in the determination of reserve fuel. In response to this comment, the FAA states reliability is not a consideration for the fuel requirements of this rule. The FAA also disagrees with Archer's assertion that fuel reserve requirements should vary based upon the range of the aircraft. The FAA has consistently held that fuel reserve requirements do not vary based upon the range of the aircraft.

The FAA also disagrees with Eve's assertion that the FAA should consider appropriate operational requirements applied for energy reserve based on the design and performance capabilities of each individual certified powered-lift.

Fuel reserve requirements are based upon the operational rules in which the flight is conducted and are not based upon an aircraft's individual design or performance capability.

BETA also mentioned that electric propulsion powered-lift will have variable energy reserve needs based on the planned flight profile. The FAA does agree with BETA's assertion that fuel reserve requirements are not entirely based upon the duration of flight or distance flown. All operators must take into consideration the energy requirements based upon their entire planned flight including any extra energy requirements for vertical-lift flight operations. The FAA disagrees with BETA's argument that the variable energy reserve should be based upon the planned flight profile without any kind of mitigations to ensure the continued safety of the operation. However, as discussed above, the FAA is providing a pathway, through deviations, for a reserve amount less than the prescriptive airplane or helicopter fuel reserve minimums.

In response to the Vertical Aerospace Group's comments, the FAA notes that fuel reserves are based upon time to enable a pilot to take corrective/alternative action, not on the type of energy used to propel the aircraft. Therefore, time is the factor for fuel reserve planning, and that time computes into a specific quantity of fuel or energy remaining, based upon the fuel/energy usage of the aircraft.

In response to the Advanced Air Mobility Institute's comment, the FAA asserts that commercial flight operations do not have the same level of acceptable risk as Department of Defense operations. Therefore, using the Department of Defense VFR fuel requirements would not be the benchmark for setting the VFR fuel requirements for powered-lift in part 135 operations.

In conclusion, the FAA will require a powered-lift unable to land in the vertical-lift flight mode along the entire route to have 30 minutes fuel reserve during the daytime and 45 minutes during nighttime, as outlined in § 135.209(a). The FAA will add a provision enabling powered-lift that are continuously capable of conducting a landing in the vertical-lift flight mode along the entire route of flight to use 20 minutes of fuel reserve, as outlined in § 135.209(b). This provision is adopted at § 194.306(ss). Additionally, the Administrator may authorize deviations from the airplane or helicopter prescriptive fuel reserve requirements for powered-lift operations on specific routes that have one or more

predetermined suitable landing areas, if the FAA finds the operation can be conducted safely. The FAA will adopt the proposed § 194.307(ff) as amended, though due to renumbering, it is being adopted as § 194.306(rr).

Section 135.221 provides the requirements for alternate airport weather minimums. Per § 135.221(a), no person operating an aircraft other than rotorcraft may designate an alternate airport unless the weather reports or forecasts indicate the weather conditions will be at or above authorized alternate airport landing minimums for that airport at the estimated time of arrival. Section 135.221(b) provides alternate airport weather minimums for rotorcraft.

The FAA notes that powered-lift will likely spend the majority of flight time in wing-borne flight and cruise at higher altitudes with the potential for higher speeds than rotorcraft. As such, the FAA proposed the rules for rotorcraft in § 135.221(b) will not apply to powered-lift.

The FAA received four comments on the FAA's proposal to apply the requirements of § 135.221(a) to powered-lift and not permit powered-lift to use the provisions of § 135.221(b).

AWPC argued that their AW609 Tiltrotor, is capable of VTOL, can conduct copter instrument approaches, and has an endurance comparable to helicopters. AWPC noted the AW609 Tiltrotor can conduct copter instrument approaches as well as meet the requirements for copter procedures as defined in § 97.3 (allow for reduced visibility minimums). As such, AWPC argued that their powered-lift should be subject to a performance-based IFR alternate airport weather minima requirement.

Lilium believed that the safe use of helicopter flight rules for powered-lift can be evaluated during aircraft certification and/or the type rating evaluation process. Lilium recommended that the FAA adopt a similar comprehensive and risk-based approach as suggested by Lilium for altitude requirements in order to evaluate the capabilities and performance of each individual powered-lift to safely operate under helicopter IFR.

While GAMA did not specifically address § 135.221, GAMA recommended that the FAA consider the capabilities of powered-lift rather than adopting what GAMA characterized as a "blanket application" of airplane rules. GAMA generally supported the FAA adopting performance-based operating regulations for powered-lift and points

to ICAO Document 10103 as a source of guidance.

In response to the comments received, the FAA made changes to the original proposal and will add regulatory text at § 194.306(tt) to allow powered-lift to have the ability to use the rotorcraft alternate airport weather minimums specified in § 135.221(b), provided the powered-lift has the authorization to conduct copter procedures and can land in the vertical-lift flight mode, as provided in the AFM.

A powered-lift will only be authorized to utilize copter procedures if they are able to fly at the slower airspeeds necessary to conduct those procedures. Powered-lift that are unable to meet the requirements for copter procedures will be required to use standard approach procedures and therefore the alternate airport minimums specified for aircraft in § 135.221(a). During aircraft certification, the FAA will assess the aircraft's stability, system, and equipment for IFR operations. A powered-lift that does not possess these characteristics may still be certificated for IFR but will be prohibited from performing copter procedures and have a limitation in the AFM to that effect. Those powered-lift would not be authorized to use the rotorcraft option and would be required to use the IFR alternate airport minimums specified for aircraft. This requirement is adopted at § 194.306(tt).

When taking into consideration whether a powered-lift can land in the vertical-lift flight mode, a person must consider any landing performance data contained in the AFM that enables the aircraft to conduct a landing in the vertical-lift flight mode. There may be performance requirements or limitations contained in the AFM that would prevent a powered-lift from conducting a landing in the vertical-lift flight mode, such as a landing weight limitation, thereby requiring a person to use the IFR alternate airport minimums specified for aircraft in § 135.221(a).

In response to Lilium's comment about establishing operational rules during aircraft certification, the FAA disagrees with Lilium. During the certification process, an applicant should have an understanding of the requirements of the rules in which they wish to market their aircraft and design them accordingly.

Section 135.223(a) requires aircraft other than helicopters to carry a 45-minute fuel reserve. Section 135.223(a)(3) requires a fuel reserve for helicopters of at least 30 minutes. In the NPRM, the FAA proposed to retain the 45-minute fuel reserve requirement specified for aircraft for powered-lift

and did not apply the less restrictive helicopter fuel reserve requirement set forth in § 135.223(a)(3).

The FAA received one comment in support of and twelve comments opposing the FAA's proposal to apply § 135.223(a)(3).

An anonymous commenter agreed with the FAA's proposal noting that battery-powered aircraft should have the same energy "fuel" reserves as other propeller or jet aircraft, 30 minutes at day and 45 minutes at night, and 45 minutes IFR reserve plus "fuel" or battery power to fly to an alternate airport and conduct the approach if necessary.

Archer believed that the application of airplane fuel reserves to the powered-lift category is inappropriate, and that the FAA is failing to consider the unique operational capability of a powered-lift's ability to take off and land vertically. Archer urged the FAA to consider regulations that will enable approvals of performance-based fuel reserves tailored specifically for those eVTOL powered-lift seeking certification.

According to Archer, in order to recognize the unique, short-range operating environment anticipated by powered-lift eVTOLs, they recommend a regulation that can follow longstanding precedent of the fuel reserve OpSpecs that are utilized by many part 121 air carriers. This data-driven fuel planning would recognize that eVTOLs operating on very short stage lengths are likely to be able to demonstrate, with data, consistency in operations that enable lower fuel reserves with equivalent levels of safety. Archer recommended that the FAA adopt language in part 194 that will allow for Performance Based Contingency Fuel (PBCF) approvals for part 135 based on operational data.

The Advanced Air Mobility Institute suggested the FAA consult with the Department of Defense to determine powered-lift fuel requirements.

As stated above, CAE provided comments on fuel reserves distinguishing between the varying characteristics and differences between airplanes and powered-lift. CAE also recommended that the FAA should provide an alternate pathway for an operator or manufacturer to obtain approval for a different fuel reserve minimum.

AWPC argued that powered-lift capable of VTOL should be allowed to use helicopter VFR fuel reserves.

Eve recommended considering appropriate operational requirements applied for energy reserve based on the design and performance capabilities of

each individual certified powered-lift. Eve recommended that the FAA consider alignment with ICAO Document 10103 guidance to meet the existing operational safety level applied for helicopters and airplanes.

Eve recommended that the FAA introduce more practical, performance-based energy reserve requirements applied for planned routes and consider the type of energy used by the powered-lift relating to the operation applied for each type of aircraft.

Lilium recommended that the FAA adopt appropriate regulatory amendments to provide flexibility for certificate holders to operate powered-lift under helicopter instrument requirements where it has been determined appropriate and approved by the Administrator.

BETA asserted that the FAA's adoption of the existing airplane VFR and IFR reserve requirements is overly burdensome for powered-lift that may only be capable of short duration flights and fails to consider the variability in required energy reserves for electric propulsion powered-lift based on the planned flight profile and landing type.

The Vertical Aerospace Group asserted that the 30-minute energy reserve requirement for day VFR operation is overly conservative and that the FAA failed to consider the unique operating characteristics of powered-lift and access to powered-lift would be limited. It also alleged that powered-lift are capable of vertical landings and performing approach and go-around maneuvers in low-speed thrust-borne mode, allowing more flexibility in emergency conditions.

Vertical Aerospace Group also stated that the FAA should recognize that electric powered-lift have fundamentally different energy densities and limitations compared to traditional aviation fuel and the FAA should take this into consideration in setting the appropriate requirements. Powered-lift are primarily designed for short distance urban air mobility operations, and applying fuel reserve requirements for airplanes is not aligned with the typical mission profiles of these aircraft. It also asserted that electric propulsion systems offer a markedly higher precision in remaining energy indication compared to traditional turbine engines. This enhanced precision makes a time-based approach to energy-reserves limiting and fails to capitalize on the real-time, high-fidelity data that will be available for more precise energy management.

Vertical Aerospace Group encouraged the FAA to take a performance-based approach, setting fuel requirements based on the performance and the type

of operation of the specific aircraft. According to Vertical Aerospace Group, this will allow for a more tailored approach in which the overall design, operational profile, and safety requirements of the aircraft are taken into account. In addition, such an approach would be in line with other key regulators, such as EASA, supporting the collective ambition for greater regulatory harmonization.

GAMA stated that the approach to use airplane requirements for many of the operational rules does not consider that many powered-lift have performance capabilities similar to rotorcraft. GAMA further asserted that the application of prescriptive operating rules without consideration for the vehicle performance reduces the usefulness of powered-lift. GAMA strongly recommended that the FAA consider the diverse capabilities of powered-lift and mentions that the broad diversity for the blanket application of airplane rules is not suitable for accommodating the unique design characteristics of these new aircraft. GAMA's comments submitted for this section are identical to the comments submitted for § 135.209 and are cited in that section.

GAMA also submitted an additional document that recommends adopting most of the recommendations from ICAO Document 10103, stating that, for most operating rules where the term helicopter is used, powered-lift should also fit. The exception would extend certain operating rules applicable to airplanes to powered-lift, such as over water operations and oxygen requirements. GAMA recommended using operational concepts for some electric powered-lift that may be supported by performance-based fuel/energy reserves as an alternative to current time-based concepts. They stated that this approach would allow for adequate mission-specific energy reserves without lowering today's established safety levels and thus eliminate the need for recurring exemptions.

Joby stated the FAA should amend their part 194 requirements that specify fuel reserves for powered-lift to align with today's requirements for helicopters. Joby stated that powered-lift share unique performance capabilities with helicopters, which differentiates them from traditional fixed-wing aircraft. Joby argued that, under the proposed regulation, an electric powered-lift might be required to carry a more significant portion of its energy reserve compared to conventionally fueled aircraft. Joby's comments are identical to their comments for § 135.209 and are cited in that section.

AOPA, GAMA, HAI, NATA, NBAA, and VFS provided a comment as a single document submitted by NBAA. They believed the FAA failed to consider the characteristics powered-lift and their operating environment by unilaterally applying airplane fuel reserves to all powered-lift. They asserted that powered-lift should be permitted to utilize helicopter fuel reserves since powered-lift are capable of landing like helicopters. AOPA, GAMA, HAI, NATA, NBAA, and VFS comments are identical to their comments for § 135.209 and are cited in that section.

L3Harris Commercial Aviation Solutions—Advanced Air Mobility asserted the FAA's NPRM for powered-lift does not align with ICAO. L3Harris recommended that the FAA clarify the framework for powered-lift utilizing ICAO Document 10103.

In response to the commenters such as Archer, CAE, LTDA/Eve, Lilium, GAMA, Joby, and NBAA and their assertions stated above with regard to fuel reserves, the FAA will add an option to the final rule allowing powered-lift to use a 30-minute fuel reserve for IFR flight, which is the IFR fuel reserves specified for helicopters. The FAA will allow this provision only for those powered-lift that can use copter procedures and have the performance capability to land in the vertical-lift flight mode. If the powered-lift can meet those two provisions, they will be allowed to use the 30-minute fuel reserve requirement.

A powered-lift will only be authorized to utilize copter procedures if they are able to fly at the slower airspeeds necessary to conduct those procedures, see section IV.B. part 97. During aircraft certification, the FAA will assess the aircraft's stability, system, and equipment for IFR operations. This assessment will occur during the type certification process. A powered-lift design that meets the standards, which provides an equivalent level of safety to the relevant standards in parts 27 or 29, can be certificated for IFR flight and authorized to execute copter procedures. However, a powered-lift may still be certificated for IFR flight but could be prohibited from performing copter procedures and have a limitation in the AFM to that effect. Therefore, those powered-lift with a limitation in the AFM prohibiting copter procedures would not be authorized to use the 30-minute fuel reserve option and would be required to use the 45-minute fuel reserves specified for aircraft.

Although in the NPRM the FAA stated it did not have sufficient experience to grant relief for powered-

lift fuel requirements, the FAA evaluated the comments received about how a powered-lift can have the ability to fly at slower airspeeds like a helicopter. Therefore, the FAA considers that the mitigations of requiring a powered-lift to be able to conduct copter procedures and always be able to conduct a landing in the vertical-lift flight mode along the entire flight should ensure the safety of the operations will be comparable to those conducted with helicopters. Therefore, a person operating a powered-lift will have the option to use the 30-minute helicopter IFR fuel reserve requirement when the powered-lift is authorized to conduct copter procedures and has the performance capability, as provided in the AFM, to always conduct a landing in the vertical-lift flight mode along the entire flight. This aligns with the rationale provided in the March 13, 1985, NPRM where the FAA proposed to permit helicopters to use a 30-minute IFR fuel reserve. In that NPRM, the FAA asserted that helicopters, with their reduced IFR approach minimums stipulated in part 97, will have a better probability of completing a flight to the planned destination. On November 7, 1986, the FAA codified the 30-minute IFR fuel reserve requirement.⁴¹⁶ Therefore, by ensuring that a specific powered-lift can operate in flight at the reduced airspeeds required to conduct copter procedures, a powered-lift would also have a better probability of completing a flight to the planned destination and will be able to use a 30-minute IFR fuel reserve.

When taking into consideration the performance capability to conduct a landing in the vertical-lift flight mode, a person must consider the energy required to successfully complete a descent from the altitude they plan to use, any required instrument or visual procedure, and land in the vertical-lift flight mode. There may be performance requirements or limitations contained in the AFM, or in any approved Minimum Equipment List (MEL), that would prevent a powered-lift from conducting a landing in the vertical-lift flight mode, such as a landing weight limitation or a deferred maintenance item, thereby requiring a person to use the 45-minutes of reserve fuel.

In response to Archer's and Eve's argument related to operational data being determined during aircraft certification, the FAA notes that the fuel reserve requirements are based upon the operational rules under which the flight is conducted. Fuel reserve requirements

are not determined during aircraft certification.

In response to Archer's comment about single-point-of-failure vulnerabilities, the FAA notes that reliability is not a consideration for the fuel requirements of this rule. The FAA does not use reliability of an aircraft design as a determining factor for IFR fuel requirements.

Archer recommended the use of an Operations Specification to permit operators to use a lower fuel requirement for IFR flights. The FAA has determined that such an Operations Specification would not be in the interest of safety for short-haul domestic IFR flights. The FAA notes that Operations Specification B043 is only allowed for international flights, and the short haul domestic flights that Archer referenced in their comment is not within scope of what this Operation Specification permits.

In response to the Vertical Aerospace Group, GAMA, and Joby comments on fuel/energy reserve, the FAA asserts the operational rules for IFR fuel requirements that are based upon time are appropriate. The requirement, which is based upon a known amount of time, provides a suitable safety mitigation for unforeseen circumstances a pilot might encounter during an IFR flight. Utilizing a time-based requirement allows a universal standard in which a variety of aircraft (whose fuel/energy consumption can vary by significant margins due to the size of the aircraft and type of powerplant) will have the same amount of time available to deal with unforeseen circumstances.

Vertical Aerospace Group commented on electric propulsion systems offering a higher precision in remaining energy. The FAA agrees that having a highly precise display of remaining energy would be beneficial for a pilot to determine the amount of fuel/energy available. However, having an accurate reading of remaining fuel/energy onboard an aircraft is not a suitable replacement for the time aloft prescribed by the rule to deal with unforeseen circumstances that may occur during an IFR flight.

In response to the Advanced Air Mobility Institute's comment, the FAA asserts that commercial flight operations and their level of acceptable risk are not the same as what the Department of Defense would deem acceptable. Therefore, using the Department of Defense IFR fuel requirements would not be the appropriate benchmark for determining the IFR fuel requirements for powered-lift in part 135 operations.

In response to the comments received, the FAA will allow a powered-lift the

⁴¹⁶ 51 FR 40710 (November 7, 1986).

option to use the 30-minute helicopter IFR fuel reserve requirement when the powered-lift is authorized to conduct copter procedures and has the performance capability, as provided in the AFM, to always conduct a landing in the vertical-lift flight mode along the entire flight. Therefore, the FAA will add § 194.306(uu) to the final rule.

Section 135.225 contains requirements generally applicable to aircraft performing instrument approaches to airports. Section 135.225(e) requires a PIC of a turbine powered airplane who has not served at least 100 hours as PIC in that type of airplane to increase the Minimum Descent Altitude (MDA) or Decision Altitude/Decision Height (DA/DH) and visibility landing minimums by 100 feet and ½ mile, respectively.

In the NPRM, the FAA proposed in § 194.307(gg) to apply § 135.225(e) to powered-lift. PICs of powered-lift should also possess a high degree of familiarity with their aircraft and its controls, instruments, and performance requirements, and due to the complexity required as the aircraft transitions from winged to vertical flight during a critical phase of flight, the PICs of all powered-lift will have the increased MDA or DA/DH and visibility landing minimums.

The FAA received one comment on proposed § 194.307(gg) from Archer, generally expressing support for ensuring that there is an equivalent level of safety between airplanes, helicopters, and powered-lift.

In response to the comment received, the FAA did not make any changes to the proposed regulatory text. Therefore, the FAA adopts the proposed § 194.307(gg) as final, though due to renumbering, it is being adopted as § 194.306(vv).

Section 135.227 addresses the operating limitations in icing conditions for airplanes and helicopters. Section 135.227(a) applies to all aircraft, meaning that powered-lift must comply with those requirements as written. Paragraph (b) applies to only airplane operations and requires pilots to have completed training required by § 135.341 prior to conducting operations when the conditions are such that frost, ice, or snow may reasonably be expected to adhere to the airplane, if the certificate holder authorizes takeoffs in ground icing conditions.⁴¹⁷ In the

NPRM, the FAA proposed to apply § 135.227(b) to powered-lift in § 194.307(hh).

Section 135.227(d) states that no pilot may operate a helicopter under IFR into known or forecasted icing conditions, or under VFR into known icing conditions, unless the helicopter has been type-certificated and is appropriately equipped for operating in icing conditions. The FAA proposed in § 194.308(i) to apply § 135.227(d) to powered-lift, allowing powered-lift to conduct flights into known or forecast light or moderate icing conditions, providing the powered-lift has been type certificated and is appropriately equipped.

The FAA received one comment generally on operating in icing conditions and one comment on proposed § 194.308(i).

The Advanced Air Mobility Institute recommended that the FAA consult with the Department of Defense (DoD) on the final rulemaking regarding operations in known or forecast severe icing conditions.

This rulemaking is not addressing powered-lift operations in known forecast severe icing conditions. However, the FAA will take this recommendation into consideration if the FAA contemplates additional rulemaking permitting powered-lift to operate in known or forecast severe icing conditions.

GAMA agreed with the FAA's proposal in § 194.308(i), the helicopter requirement, to apply the requirements of § 135.227(d) to powered-lift.

The FAA did not make any changes to the proposed regulatory text in response to the comments received. The FAA noticed during the consolidation of the part 135 airplane and rotorcraft tables that the reference contained in proposed § 194.308(i) in the additional requirements column was incorrectly listed as § 194.307(ii). The FAA also determined the critical surface reference in the proposed § 194.308(i) would no longer be required because § 194.306(ww) already covers the critical surfaces requirement. Furthermore, the reference leading the reader to the helicopter requirements in proposed § 194.307(hh)(3), which stated "For IFR and VFR flight into certain icing conditions, see § 194.308(i)" is no longer needed. Due to the consolidation and subsequent renumbering, the proposed § 194.307(hh) is being adopted as § 194.306(ww) and proposed

conditions (*i.e.*, any time conditions are such that frost, ice, or snow may reasonably be expected to adhere to the airplane), if the certificate holder expects to authorize takeoffs in those conditions.

§ 194.308(i) is being adopted as § 194.306(xx).

Section 135.229 provides the airport requirements for part 135 operations. The requirements of § 135.229 apply to all aircraft, with the exception of § 135.229(b)(2)(ii), which states that helicopters are also allowed to land at an airport where the limits of the area to be used for takeoff and landing are marked using reflective material. The landing lights on helicopters are generally oriented so that they shine at an angle approximate to a normal approach angle used by helicopters.⁴¹⁸ This negates the need for illuminated runway lights on the landing area and permits the helicopter pilot to easily pick out and maintain a safe approach angle to an area marked by reflective material.

The FAA proposed in § 194.308(j) to allow powered-lift to takeoff from or land at an airport that uses reflective material when conducting a takeoff or landing in the vertical-lift flight mode and is equipped with landing lights oriented in a direction that enables the pilot to see the takeoff or landing area marked by reflective material.

The FAA received one comment from GAMA on proposed § 194.308(j) agreeing with the FAA's proposal to allow a powered-lift to takeoff from or land at an airport that uses reflective material when conducting a takeoff or landing.

The FAA did not make any substantive changes to the proposed regulatory text. In finalizing this rule, however, the FAA determined that it needed to revise the regulatory text to clarify the FAA's intent, as described in the NPRM, which was to include areas used for both takeoffs and landings. This also aligns with the provisions contained within the text of § 135.229. As a result, the FAA has clarified that § 135.229, adopted as final as § 194.306(yy), includes areas used for both takeoff and landing, not just landing areas.

5. Subpart F: Crewmember Flight Time and Duty Period Limitations and Rest Requirements

Subpart F details crewmember flight time, duty period limitations, and rest requirements.

Section 135.271 provides the rest and duty requirements for Helicopter Air Ambulance (HAA) operations conducted from a hospital. In order to ensure that the helicopter pilot is adequately rested, § 135.271(f) requires there to be an approved place of rest at,

⁴¹⁷ Section 135.227 references training required by § 135.341. Section 135.341(b) requires the training program for part 135 operators to include ground training for initial, transition, and upgrade training. Section 135.345 specifies the required content of initial, transition, and upgrade ground training. Specifically, § 135.345(b)(6)(iv) requires training on operating during ground icing

⁴¹⁸ Miscellaneous Amendments, 29 FR 2988 (Mar. 5, 1964).

or in close proximity to, the hospital where the helicopter is based.

Powered-lift can conduct vertical takeoffs and landings and can conduct air ambulance operations at a hospital heliport. Therefore, powered-lift operators authorized to conduct air ambulance operations based at a hospital should be allowed to use the rest and duty rules permitted by § 135.271. Therefore, the FAA proposed in § 194.308(k) that § 135.271 could apply to powered-lift conducting HAA operations in accordance with subpart L of part 135.

The FAA received two comments on proposed § 194.308(k). ALPA and GAMA both agreed with the FAA's proposal to apply § 135.271 to powered-lift conducting HAA operations in accordance with subpart L of part 135.

The FAA did not make any changes to the proposed regulatory text and adopts § 194.308(k) as final, though due to renumbering, it is being adopted as § 194.306(zz).

6. Subpart I: Airplane Performance Operating Limitations

Subpart I outlines the airplane performance operating limitations applicable to large transport category, large nontransport category, small transport category, and small nontransport category airplanes with different types of powerplants. Although Subpart I is airplane specific, the FAA acknowledged in this SFAR that some powered-lift may fit the definition of large aircraft, which is more than 12,500 pounds, while others will be considered small aircraft, which are 12,500 pounds or less. The FAA anticipated some powered-lift could operate similarly to an airplane during takeoff and landing and will routinely operate similarly to an airplane during horizontal flight. In those cases, the powered-lift will be supported in flight by the dynamic reaction of the air against their wings (termed wing-borne flight).

In the NPRM, the FAA anticipated that some powered-lift will only be able to conduct VTOL operations, while others may have the ability to conduct a takeoff or landing that depends on wing-borne lift, similar to an airplane. For the latter, some of the requirements of subpart I should be applicable.

For powered-lift that can conduct takeoff and landings using wing-borne lift, the performance data will be published in the AFM and will contain items such as: takeoff roll, takeoff distance, and landing distance required. This will enable a pilot of a powered-lift to determine that an adequate area is available to enable a safe takeoff or

landing. Persons or property being transported on powered-lift meeting the size and certification standards of this subpart should be afforded the safety requirements of this subpart that are currently afforded to those transported on airplanes.

Although the FAA has not yet published a transport category certification standard for powered-lift, the FAA proposed to apply the transport category requirements of subpart I to large powered-lift. Due to the novel designs of powered-lift and the varying capabilities of those aircraft, a combination of the aircraft certification standards from the various sections of parts 23, 25, 27, and 29 may be used to develop the certification criteria for each individual powered-lift design.

Section 135.361(a) states that subpart I of part 135 applies to the operation of the categories of airplanes listed in § 135.363 when operated under part 135. The FAA proposed in § 194.307(ii) that the sections of subpart I of part 135 should apply to powered-lift, regardless of powerplant type. The FAA has clarified in the regulatory text that any provisions within subpart I of part 135 that reference a specific category of aircraft, such as an airplane, and that are not referenced in the SFAR tables to §§ 194.302 or 194.306, do not apply to powered-lift.

The FAA received no comments on proposed § 194.307(ii); therefore, the FAA adopts the proposed § 194.307(ii) as final, though due to renumbering, it is being adopted as § 194.306(aaa).

Section 135.363(a) through (e) outline which sections of subpart I apply to certain types of airplanes, considering factors such as: the size, type of powerplant, and certification basis for the airplane. The FAA did not anticipate that there would be a large powered-lift produced with a reciprocating engine, therefore paragraph § 135.363(a) will not be applicable. The FAA proposed in § 194.307(jj) that when a powered-lift meets the criteria established in paragraphs (b) through (e), regardless of powerplant type, the referenced regulatory sections will apply.

Section 135.363(f) requires the performance data in the AFM to be used in determining compliance with §§ 135.365 through 135.387. Section 135.363(f) also contains a provision to allow the interpolation and computing the effects of changes in specific variables, so long as those calculations are substantially as accurate as the results of direct tests. The FAA proposed in § 194.307(kk) that if a powered-lift is required to be in compliance with a section contained in

§§ 135.365 through 135.387, then the provisions of § 135.363(f) will apply. Although § 135.365(f) specifies an AFM, the FAA asserted that for any powered-lift that requires compliance with a section contained in §§ 135.365 through 135.387, the powered-lift AFM will contain any applicable performance data. Additionally, the FAA expects that the interpolation and computation that is permitted in § 135.363(f) could be accomplished for powered-lift without any degradation of safety, just as it is allowed for airplanes.

The FAA received no comments on proposed § 194.307(jj) and (kk). Therefore, the FAA adopts the proposed § 194.307(jj) and (kk) as final, though due to renumbering, these sections are being adopted as § 194.306(bbb) and (ccc). Additionally, the FAA inadvertently included § 135.363(a) in the proposed § 194.307(jj), though the accompanying preamble text in the NPRM made clear that § 194.307(jj) was meant to only apply § 135.363(b) through (e) to powered-lift. The adopted § 194.306(bbb) corrects this error.

Section 135.379 contains takeoff limitations applicable to large turbine engine-powered transport category airplanes.

Section 135.379(a) states that no person operating a turbine engine-powered large transport category airplane may take off that airplane at a weight greater than that listed in the AFM. The calculation for determining that takeoff weight must consider the elevation of the airport and the ambient temperature existing at the time of takeoff.

Section 135.379(c) requires that an airplane subject to § 135.379(c) cannot takeoff at a weight greater than that listed in the AFM. Section 135.379(c) also lists specific performance requirements, such as the takeoff run must not be greater than the length of the runway, accelerate-stop distances, and required takeoff distance.

Section 135.379(d) states that an airplane cannot takeoff at a weight greater than that listed in the Airplane Flight Manual and lists specific performance requirements for obstacle clearance in the takeoff path (for airplanes certificated after August 26, 1957, but before October 1, 1958) and takeoff flight path (for airplanes certificated after September 30, 1958).

Section 135.379(e) requires certain corrections to be considered when determining maximum takeoff weights, minimum distances, and flight paths under § 135.379(a) through (d). These corrections include which runway is used and its gradient, airport elevation, ambient temperature, or wind

component. These corrections are made to ensure that operators take all relevant performance factors related to takeoff operations into account to ensure that the airplane safely remains within its weight limitations for a particular takeoff.

Section 135.379(f) sets two assumptions when calculating takeoff performance: the airplane is not banked before reaching a height of 50 feet, and after reaching a height of 50 feet, the maximum bank is not more than 15 degrees.

Section 135.379(g) applies the terms *takeoff distance*, *takeoff run*, *net takeoff flight path* to have the same meanings as set forth in the rules under which the airplane was certificated. In the NPRM, the FAA included paragraph (g) in the regulation text table making it applicable to large powered-lift certificated to conduct takeoff operations that utilize wing-borne lift as indicated in the AFM. For those powered-lift that have a takeoff distance, takeoff run and net takeoff flight path this will ensure the safety requirements relevant to those terms are taken in consideration just as they are for airplanes.

The FAA proposed in § 194.307(ll) that paragraphs (a) and (d) of § 135.379 apply to large powered-lift. In addition, the FAA proposed in § 194.307(mm) that paragraphs (c), (e), (f), and (g) of § 135.379 apply to large powered-lift that utilize wing-borne lift during takeoff and have the takeoff performance information contained in the AFM. The FAA finds that the expected commonalities between transport category airplane and large powered-lift operations warrant application of these provisions to large powered-lift. The accelerate-stop distance set forth in § 135.379(c)(1) must either meet § 25.109 or such airworthiness criteria as the FAA may find provides an equivalent level of safety in accordance with § 21.17(b).

The FAA received no comments on proposed § 194.307(ll) and (mm) and therefore, the FAA adopts the proposed § 194.307(ll) and (mm) as final. However, due to renumbering, these sections are being adopted as § 194.306(ddd) and (eee).

Section 135.381(a) specifies that a person operating a turbine engine-powered large transport category airplane must takeoff at a weight, allowing for normal consumption of fuel and oil, which will ensure that the airplane will be able to clear all terrain and obstructions within its flightpath with one engine inoperative. Section 135.381(b) lists six assumptions that must be considered when computing

the net flight path and horizontal and vertical safety areas required by § 135.381(a)(2). Large powered-lift will conduct en-route operations similar to transport category airplanes. The important safety criteria of § 135.381 should apply to powered-lift if one engine were to become inoperative. As such, the FAA proposed in § 194.307(nn) that this section be applicable to large powered-lift.

The FAA received no comments on proposed § 194.307(nn), and therefore, the FAA adopts § 194.307(nn) as final, though due to renumbering, it is being adopted as § 194.306(fff).

Section 135.383 provides en route limitations for turbine engine-powered large transport category airplanes with two engines inoperative. Specifically, § 135.383(c) specifies that a person operating a turbine engine-powered large transport category airplane on an intended route must ensure that the airplane is no more than 90 minutes away from an alternate airport, or that a powered-lift with two inoperative engines will clear all terrain and obstructions within its flightpath. Large powered-lift will conduct en route operations similar to airplanes, and this important safety criteria should apply if two engines were to become inoperative. Additionally, § 135.383(c)(2) contains assumptions that must be considered when computing the net flight path, required horizontal and vertical safety areas and fuel requirements. Having alternate airports planned along the route is essential for en route operations. Therefore, the FAA proposed in § 194.307(oo) that § 135.383(c) should apply to large powered-lift.

The FAA received no comments on proposed § 194.307(oo) and adopts § 194.307(oo) as final, though due to renumbering, it is being adopted as § 194.306(ggg).

Section 135.385 provides required landing limitations at destination airports for large turbine engine-powered transport category airplanes.

Section 135.385(a) stipulates that no person operating a turbine engine powered large transport category airplane may take off at a weight if the weight of the airplane on arrival would exceed the landing weight as contained in the AFM. Section 135.385(a) is intended to ensure an airplane will not arrive overweight for landing. Section 135.385(b) through (f) detail which factors must be applied when determining the required landing distances. The FAA believes these considerations are equally applicable to large powered-lift and therefore proposed in § 194.307(pp) that

paragraph (a) be applicable to large powered-lift.

Section 135.385(b) specifies that, in order for a person to conduct a takeoff in a turbine engine-powered large transport category airplane, the airplane weight on arrival must allow a full stop landing at the intended destination airport within 60 percent of the effective length of each runway. This rule provides for a 40 percent safety margin to help ensure that an airplane can safely land and prevents a person from attempting to operate into runways where there is no margin of error, which is also important for large powered-lift that utilize wing-borne lift during landing. The FAA proposed in § 194.307(qq) that § 135.385(b) applies to large powered-lift that utilize wing-borne lift during landing and provide landing performance information in the AFM.

Section 135.385(d) requires that, unless approved and included in the airplane flight manual, a large transport category turbojet airplane must add an additional 15 percent margin onto the landing distance calculated per § 135.385(b) when the destination may be wet or slippery at the estimated time of arrival. The FAA proposed in § 194.307(qq) that § 135.385(d) would be applicable to large powered-lift that utilize wing-borne lift during landing and have landing performance information contained in the AFM.

Section 135.385(e) provides that a turbojet-powered airplane that would otherwise be prohibited from conducting a takeoff because the airplane could not be landed on the most suitable runway may takeoff if an alternate airport is selected.

The FAA proposed in § 194.307(qq) that § 135.385(e) would apply to large powered-lift that conduct landing operations that depend on wing-borne lift and have that landing performance information contained in the AFM.

Section 135.385(f) provides an option to eligible on-demand operators to conduct a takeoff if the operation is permitted by an approved Destination Airport Analysis in that operator's manual and certain conditions are met. The eligible on-demand operator is authorized to calculate the required runway distance at 80 percent of the effective length of the runway. A powered-lift using the wing-borne lift mode during landing is similar in operation to a landing airplane. Therefore, the FAA proposed in § 194.307(qq) this paragraph be applicable to large powered-lift that utilize wing-borne lift during landing and have landing performance information contained in the AFM.

The FAA received no comments on proposed § 194.307(pp) or (qq); therefore, the FAA adopts § 194.307(pp) and (qq), as final. However, due to renumbering, these sections are being adopted as § 194.306(hhh) and (iii).

Section 135.387 stipulates landing limitations for selecting an alternate airport for large turbine engine powered transport category airplanes.

Specifically, § 135.387 requires that the selected alternate airport must allow the airplane to be brought to a full stop landing based on the weight of the airplane expected at the time of arrival at the alternate airport. The FAA proposed in § 194.307(rr) that paragraphs (a) and, for eligible on-demand operators, paragraph (b) would apply to large powered-lift that utilize wing-borne lift during landing and has landing performance information contained in the AFM.

The FAA received no comments on proposed § 194.307(rr) and is adopting § 194.307(rr) as final, though due to renumbering, it is being adopted as § 194.306(jjj).

Section 135.397 stipulates the performance operating limitations for small transport category airplanes.

Section 135.397(a) and (b) outline the performance requirements for small transport category airplanes. This section requires compliance with weight, takeoff, and landing limitations as contained in other sections of subpart I. Section 135.397(a) is applicable to reciprocating engine powered airplanes, and the FAA asserts that paragraph (a) would not be applicable to powered-lift. Therefore, the FAA proposed in § 194.307(ss) that only paragraph (b) be applicable for small powered-lift that have a passenger seating configuration of more than 19 seats, that utilize wing-borne lift during takeoff or landing, and that have takeoff or landing performance information contained in the AFM.

The FAA received no comments on proposed § 194.307(ss); therefore, the FAA adopts § 194.307(ss) as final, though due to renumbering, it is being adopted as § 194.306(kkk).

7. Subpart J: Maintenance, Preventative Maintenance, and Alterations

Section 135.429 applies to all aircraft used for operations conducted under part 135, including powered-lift, with the exception of § 135.429(d). Section 135.429(d) is focused on rotorcraft and states that the FAA may approve procedures for the performance of required inspection items by a pilot of a rotorcraft that operates in remote areas or sites. The rule is intended to allow a certificate holder the opportunity to establish a preventive maintenance

process when a mechanical interruption occurs in a remote area or site. Because powered-lift may take off and land like a rotorcraft, some powered-lift may operate in remote areas or sites. Consequently, powered-lift used in such operations experience the same challenges that exist for rotorcraft when an unscheduled mechanical interruption occurs. Therefore, the FAA proposed in § 194.308(l) to apply § 135.429(d) to powered-lift that operate in remote areas or sites.

The FAA received three comments, a group comment from AOPA, GAMA, HAI, NATA, NBAA, and VFS, and comments from CAE and Joby on proposed § 194.308(l). All three were in support of the FAA's proposal to apply the preventive maintenance requirements available to certificate holders operating rotorcraft under part 135 in remote areas to certificate holders operating powered-lift under part 135 in remote areas.

The FAA adopts § 194.308(l) as final, though due to renumbering, it is being adopted as § 194.306(III).

8. Subpart L: Helicopter Air Ambulance Equipment, Operations, and Training Requirements

Helicopter air ambulance (HAA) operations must comply with subpart L of part 135, as well as the other requirements of part 135. In the NPRM, the FAA proposed that powered-lift conducting air ambulance operations should be required to comply with subpart L of part 135. Because the FAA proposed that subpart L apply to powered-lift, it also proposed in § 194.308(a) that § 135.1(a)(9) apply to powered-lift conducting air ambulance operations.

Section 135.601 provides the applicability and definitions for subpart L of part 135. The FAA anticipated that operators utilizing powered-lift for air ambulance activities will present a new dynamic because these aircraft can be operated like an airplane and a helicopter. The FAA currently differentiates between airplane air ambulance operations and HAA operations including the required equipment, weather minimums, required risk analysis, flight monitoring, and the authorizing document issued to the operator.⁴¹⁹

Powered-lift conducting air ambulance operations should be

⁴¹⁹ Air ambulance operations conducted in an airplane are approved through issuance of Operations Specification A024, while air ambulance conducted in a helicopter are approved through issuance of A021. When the type of operation is proposed in powered-lift, the FAA will issue the appropriate operations specification.

provided to the public at the same level of safety as HAA operations, and the rules contained in subpart L provide this level of safety. Accordingly, the FAA proposed in § 194.308(m) that the applicability and definitions section of subpart L also apply to powered-lift.

The FAA received one comment on proposed § 194.308(m) from GAMA, who expressed support for the FAA's proposal that the applicability and definitions section of subpart L apply to powered-lift that conduct air ambulance operations. Therefore, the FAA adopts § 194.308(m) as final, though due to renumbering, it is being adopted as § 194.306(mmm).

Section 135.603 requires the PIC of a helicopter air ambulance operation to meet the requirements of § 135.243 and to hold either a helicopter instrument rating or an ATP certificate with a category and class rating for that aircraft, not limited to VFR. It is equally important for PICs of powered-lift air ambulance operations to meet the requirements set forth in this section. The FAA proposed in § 194.308(n) that these requirements also apply for powered-lift operations occurring under subpart L.

The FAA received one comment on proposed § 194.308(n) from GAMA that supported the FAA's proposal that the requirements of § 135.603 should apply to powered-lift that conduct air ambulance operations. The FAA realized in finalizing this rule that further clarification is necessary under § 194.306(nnn), pertaining to § 135.603. As mentioned above, the regulation currently requires the PIC to hold either a helicopter instrument rating or an ATP certificate with a category and class rating for that aircraft, that is not limited to VFR. These references are not applicable to powered-lift.⁴²⁰ As a result, the FAA has clarified that the PIC must hold a "powered-lift" instrument rating or an ATP certificate with a category rating for that aircraft. Therefore, the FAA adopts § 194.308(n) as final, though due to renumbering, it is being adopted as § 194.306(nnn).

Section 135.605 stipulates the requirements for using a HTAWS. Consistent with proposed § 194.307(q), for powered-lift operating under subpart L, the FAA proposed to allow a hybrid system in a powered-lift that utilizes the features of a TAWS A system for wing-borne flight and HTAWS for vertical-lift flight modes of operation for compliance with § 135.605. The FAA proposed in § 194.308(o) that any powered-lift that is used in air

⁴²⁰ For discussion on "class" ratings, see Section V.A ("Certification of Powered-Lift Pilots").

ambulance operations as defined § 135.601 be equipped with HTAWS, unless equipped with an FAA approved TAWS A/HTAWS hybrid system, in accordance with § 135.605.

The FAA received no comments on proposed § 194.308(o) and therefore adopts § 194.308(o) as final, though due to renumbering, it is being adopted as § 194.306(ooo).

Section 135.607 requires flight data monitoring systems for HAA operations. The FAA determined that it would be appropriate to apply the requirement for helicopters to have flight data monitoring system capable of recording flight performance data to powered-lift conducting air ambulance operations as set forth in § 135.607. The FAA did not identify any reason to differentiate between helicopters and powered-lift conducting air ambulance operations for purposes of compliance with this requirement, as it would be equally important for powered-lift to record flight performance data in the dynamic environment contemplated by subpart L. Accordingly, the FAA proposed § 194.308(p).

The FAA received one comment on proposed § 194.308(p) from ALPA that referenced both a Flight Data Monitoring Systems (FDMS) and § 135.607. ALPA's comment was not specifically directed toward the FAA's requirement for powered-lift conducting air ambulance operations to equip the aircraft with a FDMS, but rather that all powered-lift should be required to be equipped with an FDMS. While the FAA is not requiring FDMS for all powered-lift, as discussed in section VI.B.6. of this preamble, the FAA is requiring all powered-lift that conduct air ambulance operations to equip their aircraft with an FDMS. As such, the FAA adopts § 194.308(p) as final, though due to renumbering, it is being adopted as § 194.306(ppp).

Section 135.609 provides rules for VFR ceiling and visibility requirements for part 135 air ambulance operations in Class G airspace. For powered-lift, the FAA evaluated the VFR minimum altitudes, required visibility, and distance from cloud requirements for airplanes as contained in § 135.203 (VFR minimum altitudes), § 135.205 (VFR visibility requirements), and § 91.155 (distance from cloud requirements) and applied these airplane minimums to the table contained in § 135.609(a), which resulted in minimums that are most closely aligned with the FAA's intent

during the NPRM of applying the ceiling and visibility requirements of airplanes to powered-lift. In § 194.308(q), the FAA proposed the ceiling and visibility requirements for powered-lift air ambulance operations. In the NPRM the FAA proposed to change the nighttime ceiling requirements for all powered-lift operating as an air ambulance regardless of the mode of flight. The FAA also proposed no changes to the current ceiling and visibility minimums for daytime operations.

The FAA received three comments on the proposed visibility requirements for powered-lift air ambulance operations.

GAMA recommended that the FAA use the ICAO guidance provided for helicopters for this rule.

AWPC argued that the FAA's proposal to limit powered-lift to airplane minimums will inhibit the ability of their aircraft to conduct low altitude air ambulance operations. AWPC also stated that their powered-lift, the AW609, is able to operate in horizontal flight mode and reach the patient's location faster than helicopters.

However, AWPC expressed concern that the proposed rule will prohibit the use of helicopter minimums, helicopter routes, or hospital helipads.

Airbus Helicopters stated that some powered-lift designs are expected to perform emergency medical services and may have performance characteristics comparable to helicopters. According to Airbus Helicopters, the restrictive approach proposed in the NPRM could prevent the development of medical services with powered-lift that would have been otherwise beneficial for the public. Airbus Helicopters therefore proposed the FAA reconsider the proposed § 194.308(q).

The FAA disagrees with GAMA's recommendation to universally apply the helicopter VFR ceiling and visibility requirements for Class G airspace for HAA operations to powered-lift. Universally applying the helicopter minimums provided in § 135.609 to powered-lift when they are operating in the wing-borne flight mode during night operations would not provide the same level of safety required by the minimums specified for airplanes in § 135.203(a)(2). Applying higher nighttime minimums, as proposed in the NPRM, to powered-lift operating in wing-borne flight mode will maintain the safety margins already built into the regulations when a powered-lift is being

operated in a manner similar to an airplane.

Based upon the comments received, the FAA reevaluated the requirements that were proposed in the NPRM and has added minimums based upon existing helicopter minimums. These new minimums will apply to a powered-lift being operated in the vertical-lift flight mode at night. When operating in the vertical-lift flight mode, much like a helicopter, a powered-lift will benefit from the increased maneuverability and the ability to conduct flight at slower speeds to include hovering. Therefore, the FAA will apply the helicopter minimums as provided for day and nighttime operations in § 135.609 when a powered-lift is operating in the vertical-lift flight mode. The daytime helicopter minimums for powered-lift operating in vertical-lift flight mode are the same minimums proposed in the NPRM. The nighttime minimums for powered-lift operating in vertical-lift flight mode are lower than what the FAA proposed, and they are the same minimums currently outlined for helicopters operating at night with an approved HTAWS under § 135.609(a). Since the flight characteristics are akin to helicopters, there should be no degradation of safety by allowing powered-lift to use the helicopter minimums when operating in the vertical-lift flight mode.

The FAA will apply the minimums as proposed in the NPRM when the powered-lift is being operated in the wing-borne flight mode, which includes both daytime and nighttime ceiling and visibility minimums. These VFR ceiling and visibility requirements will provide the pilot the time and space to maneuver the powered-lift to avoid other aircraft, terrain, and obstacles. As mentioned in the NPRM, the intent behind the HAA rules is to ensure a higher level of safety for air ambulance operations because they are conducted under unique conditions. The below table outlines the amended ceiling and visibility requirements for powered-lift depending on the flight mode and whether the operations occur during the day or at night. As mentioned, the only change to the minimums that were proposed in the NPRM is the addition of the ceiling and visibility minimums for powered-lift operating at night in the vertical-lift flight mode, and those minimums reflect the current helicopter (with HTAWS) nighttime minimums under § 135.609(a).

TABLE 9—REVISED VFR AIR AMBULANCE MINIMUMS IN CLASS G AIRSPACE

Location	Day vertical-lift and wing-borne mode		Night vertical-lift mode		Night—wing-borne mode	
	Ceiling (FT)	Visibility (SM)	Ceiling (FT)	Visibility (SM)	Ceiling (FT)	Visibility (SM)
Non-mountainous Local Flying Areas	800	2	800	3	1500	3
Non-mountainous Non-Local Flying Areas	800	3	1000	3	1500	3
Mountainous Local Flying Areas	800	3	1000	3	2500	3
Mountainous Non-Local Flying Areas	1000	3	1000	5	2500	5

The FAA adopts § 194.308(q) as revised and as § 194.306(qqq), due to renumbering.

Section 135.611 sets forth requirements for HAA IFR operations at locations without weather reporting. The FAA proposed the applicability of this section in § 194.308(r). The provisions of § 135.611 are only available to certificate holders that are authorized to conduct IFR operations under subpart L and are authorized to conduct IFR air ambulance operations at airports with an instrument approach procedure and at which a weather report is not available from the U.S. National Weather Service (NWS), a source approved by the NWS, or a source approved by the FAA. That authorization will be subject to the provisions detailed in § 135.611 and is also available to powered-lift authorized to conduct air ambulance operations.

The FAA received one comment on proposed § 194.308(r) from GAMA that supported the FAA's proposal that a powered-lift conducting air ambulance operations can be authorized by the Administrator to conduct IFR helicopter air ambulance operations at airports with an instrument approach procedure and at which a weather report is not available from the U.S. National Weather Service (NWS), a source approved by the NWS, or a source approved by the FAA. Therefore, the FAA adopts § 194.308(r) as final, though due to renumbering, it is being adopted as § 194.306(rrr).

Section 135.613 details the ceiling and visibility requirements for approach and departure IFR transitions for HAA operations. Section 135.613 establishes weather minimums for HAA that are using an instrument approach and are now transitioning to visual flight for landing. Section 135.613 also permits VFR to IFR transitions for departures if the pilot has filed an IFR flight plan, will obtain an IFR clearance within 3 NM of the departure location, and departs following an FAA-approved obstacle departure procedure. In § 194.308(s), the FAA proposed applying § 135.613 to powered-lift

conducting operations in accordance with subpart L of part 135.

The FAA received one comment on § 194.308(s) from GAMA, which recommended the FAA apply ICAO rules for helicopters for § 135.613. The FAA took this general comment into consideration when writing this final rule and made some changes throughout the SFAR to provide some flexibility to enable powered-lift to use helicopter-based requirements when they are operating in the vertical-lift flight mode.

Section 135.613(a)(1) requires a flight visibility of 1 statute mile (SM) and a ceiling based upon the minimums published on the approach chart. This is applicable for Point-in-Space (PinS) Copter Instrument approaches that are annotated with a "Proceed VFR" segment, and the distance from the missed approach point to the landing area is 1 NM or less. The FAA proposed in § 194.308(s) that § 135.613(a)(1) only apply to powered-lift that are equipped and certified to conduct these PinS approaches. The FAA is not making changes from the proposed regulatory text in § 194.308(s) related to § 135.613(a)(1).

Section 135.613(a)(2) has VFR ceiling and visibility requirements for helicopters when conducting instrument approaches to a landing area that is 3 NM or less away from the missed approach point. As stated in the NPRM, the FAA established more stringent VFR ceiling minimums for powered-lift because the minimums currently prescribed for helicopters in § 135.613(a)(2)(i) and (ii) would not allow a powered-lift to maintain an acceptable level of obstacle and cloud clearances when operating in the wing-borne flight mode and conducting VFR transitions to landing areas. Therefore, the FAA will leave the VFR ceiling of 1,000 feet and visibility requirements of 2 NM for day operations and 1,500-foot ceiling and 3 NM visibility for night operations as proposed in the NPRM for powered-lift when they are operating in the wing-borne flight mode.

The FAA has determined that, when the powered-lift is operating in the vertical-lift flight mode during the

visual transition from the approach to the landing area, helicopter minimums will be acceptable. Because a powered-lift will be flying like a helicopter when in the vertical-lift flight mode and operating at slower speeds, the aircraft is able to maneuver more like a helicopter. Therefore, in the final rule, the FAA will allow powered-lift that are operating in the vertical-lift flight mode to use the VFR ceiling and visibility minimums prescribed for helicopters in § 135.613(a)(2)(i) and (ii). Therefore, the FAA adopts § 194.308(s) as revised and as § 194.306(sss), due to renumbering.

Section 135.613(b) provides two scenarios for transitions from VFR to IFR upon departure. The first scenario provided in § 135.613(b)(1) stipulates the VFR weather minimums providing the powered-lift follows an FAA-approved obstacle departure procedure, and an IFR clearance is obtained on or before reaching a predetermined location that is not more than 3 NM from the departure location. In these instances, the FAA proposed weather minimums for powered-lift of no less than 1000-foot ceiling with 2 statute miles visibility for day and no less than 1500-foot ceiling and 3 statute mile visibility for nighttime. The FAA will retain this requirement for those powered-lift operating in the wing-borne flight mode. When the powered-lift is operating in the vertical-lift flight mode during the transition from VFR to IFR and meets the above requirements regarding an obstacle departure procedure and the 3 nautical mile distance from the departure location, then the VFR weather minimums for day operations will be no less than a 600-foot ceiling and 2 statute miles flight visibility, and for night operations, no less than a 600-foot ceiling and 3 statute miles flight visibility.

In the second scenario for § 135.613(b)(2) if the departure does not meet the criteria relating to the obstacle departure procedure and is unable to obtain the IFR clearance within 3 NM from the departure location then the VFR weather minimums required for

powered-lift by the class of airspace apply.

Therefore, the FAA is adding § 194.306(ttt) to ensure the weather minimums stipulated in § 194.306(sss) are captured dependent on the mode of flight.

Section 135.615 requires helicopter air ambulance pilots to perform pre-flight planning to determine the minimum safe cruise altitude and to identify and document the highest obstacle along the planned en route phase of flight prior to conducting VFR operations. Section 135.615(b) requires the pilot in command, while conducting VFR operations, to ensure that all terrain and obstacles along the route of flight are cleared vertically by no less than those prescribed in § 135.615(b). In proposed § 194.308(t), the FAA proposed applying § 135.615 to powered-lift conducting operations in accordance with subpart L of part 135 using the VFR minimum altitudes specified for airplanes in § 135.203(a)(1) and (2).

The FAA received one comment on proposed § 194.308(t) from GAMA, who requested that the FAA allow powered-lift to use the helicopter minimums stipulated in § 135.615(b)(1) and (2). In the NPRM, the FAA noted that there are similarities between airplanes and powered-lift using wing-borne lift during the cruise portions of flight. In the proposed § 194.308(t), in order to comply with the en route altitude requirements of § 135.615(b)(1) and (2), a powered-lift conducting a VFR air ambulance operation must clear all terrain and obstacles along the route of flight vertically by the minimum altitudes and horizontal distances specified in § 135.203(a)(1) and (2). Similarly, the FAA proposed that the pilot in command of a powered-lift must use the minimum altitudes specified in § 135.203(a)(1) and (2) when making the determinations required by § 135.615(a)(3). In the final rule, the FAA will still require the pilot in command of a powered-lift to use the minimums specified in § 135.203(a)(1) and (2) for the VFR flight planning required by § 135.615(a) and for the enroute operations required by § 135.615(b) when the powered-lift will be operated enroute in the wing-borne flight mode.

In consideration of the comments received, the FAA will now allow a powered-lift operated in the vertical-lift flight mode during enroute operations to use the minimums described in § 135.615(b). Powered-lift that will be operated in the vertical-lift flight mode during the enroute phase of flight will use the altitudes specified in

§ 135.615(b) to determine the minimum required ceiling and visibility to conduct that planned flight as required by § 135.615(a). The FAA made this change because a powered-lift in the vertical-lift flight mode will be flying like a helicopter and operating at slower speeds thus enabling the powered-lift to maneuver more like a helicopter.

Section 135.615(c) addresses the rerouting of the planned flight path, change in destination, or other changes to the planned flight that occur while the helicopter is on the ground at an intermediate stop. This occurrence requires an evaluation of the new route in accordance with § 135.615(a). In the NPRM, the FAA proposed this provision apply to powered-lift and adopts it as final. When the powered-lift is operated in the vertical-lift flight mode during the enroute phase of flight, when conducting the evaluation of the new route, the altitudes specified in § 135.615(b) will apply. However, when the powered-lift is operated in the wing-borne flight mode during the enroute phase of flight, when conducting the evaluation of the new route, the altitudes specified in § 135.203(a)(1) and (2) will apply.

Therefore, the FAA adopts § 194.308(t) as revised, but as a result of renumbering, it is now § 194.306(uuu).

The FAA also proposed in § 194.308(u) that the pre-flight risk analysis requirements contained in § 135.617 apply to powered-lift. This section details several items that must be documented in the certificate holder's manual regarding pre-flight considerations, such as human factors, weathers, and other critical considerations.

The FAA received one comment on proposed § 194.308(u) from GAMA, which agreed with the FAA's proposal to apply the pre-flight risk analysis requirements of § 135.617 to powered-lift conducting air ambulance operations. Therefore, the FAA adopts § 194.308(u) as final, though due to renumbering, it is being adopted as § 194.306(vvv).

Section 135.619 requires a certificate holder who is authorized to conduct HAA operations with 10 or more helicopter air ambulances assigned to the certificate holder's operations specifications to have an operations control center. The FAA proposed in § 194.308(v) that any operator utilizing helicopters, powered-lift, or any combination thereof, that total 10 or more of these aircraft utilized in air ambulance operations would trigger the requirements to have an operations control center as detailed in § 135.619.

The FAA received one comment on proposed § 194.308(v) from GAMA, which agreed with the FAA's proposal to apply the Operations control center requirements of § 135.619 operators utilizing powered-lift to conduct air ambulance operations. Therefore, the FAA adopts § 194.308(v) as final, though due to renumbering, it is being adopted as § 194.306(www).

Section 135.621 stipulates the requirements for the briefing of medical personnel on HAA flights. The FAA proposed in § 194.308(w) to apply the briefing requirements contained in § 135.621 for medical personnel to air ambulance operations that occur in powered-lift.

The FAA received one comment on proposed § 194.308(w) from GAMA, which agreed with the FAA's proposal to apply the briefing of medical personnel requirements of § 135.621 to operators utilizing powered-lift to conduct air ambulance operations. Therefore, the FAA adopts § 194.308(w) as final, though due to renumbering, it is being adopted as § 194.306(xxx).

E. Part 136 Rules for Powered-Lift

In the Update to Air Carrier Definitions final rule, the FAA expanded the definitions and applicability of part 136 to accommodate powered-lift and to ensure that the stringent safety risk mitigations would apply to powered-lift that conduct commercial air tours.⁴²¹ In the NPRM, the FAA proposed to apply certain part 136 requirements that are specific to helicopters to powered-lift. The FAA also took into consideration powered-lift may conduct commercial air tours in the wing-borne flight mode to address the risks associated with enabling the operation of commercial air tours in powered-lift.

The FAA received six comments relating to part 136 with one commenter submitting two comments. Some comments were specific to the sections within part 136. Most comments broadly suggested the FAA follow ICAO Document 10103, Guidance on the Implementation of ICAO Standards and Recommended Practices for Tilt-rotors and apply the airplane rules. All commenters agreed the safety provisions of part 136 should also apply to powered-lift.

GAMA recommended the FAA follow ICAO guidance and to read "helicopter" or "rotorcraft" as "powered-lift" or read "airplane" as "powered-lift" depending on the regulation. GAMA suggested the FAA should apply the relevant airplane

⁴²¹ See Update to Air Carrier Definitions NPRM, 87 FR 75005 (Dec. 07, 2022).

version of the rule to §§ 136.9 and 136.11 and the relevant rotorcraft version of the rule to §§ 136.1 and 136.13. According to GAMA, certain powered-lift demonstrate the capability to glide in a manner similar to airplanes, therefore GAMA suggested the FAA take full advantage of the similarities to airplanes during overwater operations.

CAE and ADS (a UK trade association) both stated that using the ICAO Document 10103 as a basis for powered-lift should be considered. For part 136 this would translate to using the airplane rules for overwater operations. NBAA submitted a group comment for AOPA/GAMA/HAI/NATA/NBAA/VFS which also stated the FAA should consider using the ICAO Document 10103 as a basis for powered-lift rule development.

In response to these comments from GAMA, and CAE, ADS, and NBAA who also recommended the FAA follow the ICAO document 10103 in relation to part 136, the FAA notes that these recommendations did not provide any justification for following ICAO document 10103. This ICAO guidance acknowledges the operation of tilt-rotors closely aligns with that of helicopters and therefore states that ICAO Annex 6, Part III, Section 2, the helicopter provisions should apply most of the time. In some cases, the ICAO guidance recommends the use of Annex 6, Part I, which are provisions for airplanes. Flight over water is one example in which this guidance recommends airplane provisions. The FAA noted that no comments were provided relating to part 136 and features that may influence buoyancy or whether powered-lift will take on water or float for a longer period of time after ditching. The FAA does not have the historical data on these new aircraft designs to assert that the positive buoyancy characteristics and the potential to float for a longer period—characteristics of airplane designs—will exist in all powered-lift. Therefore, the FAA will not adopt the ICAO guidance across the board for powered-lift but will look at each regulation individually.

In finalizing this rule, the FAA determined that creating a table for part 136 would maintain consistency throughout the SFAR operating rules for parts 91, 135, and 136. In addition, as already explained in the introduction to the operational rules, the FAA combined the airplane and rotorcraft provisions in parts 91 and 135 so that each section now only has one table instead of two. Similarly, the FAA has created a table to § 194.308 outlining both the airplane and rotorcraft provisions applicable to powered-lift

under part 136. As part of this revision, the FAA added paragraph § 194.308(a) reiterating that powered-lift must continue to comply with rules applicable to all aircraft under part 136.

1. Suitable Landing Area for Rotorcraft (§ 136.1)

The term “suitable landing area for rotorcraft” is codified in § 136.1 as an area that provides the operator reasonable capability to land in an emergency without causing serious injury to persons. These suitable landing areas must be site-specific, designated by the operator, and accepted by the FAA.⁴²² In the NPRM, the FAA proposed to apply § 136.1 to powered-lift in § 194.310(b)(1). Applying the definition for suitable landing areas for rotorcraft to powered-lift ensures powered-lift operators designate potential landing areas in advance of an operation. Designating potential landing areas reduces the risk of an accident because the PIC is aware of potential sites for emergency landings. The FAA expects operators conducting commercial air tours in powered-lift to designate a site-specific landing area that, when used, would not cause serious injury to persons.

The FAA received one comment on proposed § 194.310(b)(1) from GAMA who agreed with FAA that powered-lift should be aligned with rotorcraft in § 136.1 and therefore adopts as proposed. As a result of renumbering, this is now codified under § 194.308(b).

2. Life Preservers for Over Water (§ 136.9)

Section 136.9(a), which applies to powered-lift as written, requires the operator and PIC of commercial air tours over water beyond the shoreline to ensure each occupant is wearing a life preserver from before takeoff until the flight is no longer over water.⁴²³ Section 136.9(b) provides exceptions to this requirement when a life preserver is readily available and easily accessible to each occupant. Section 136.9(c) states no life preserver is required if the overwater operation is necessary only for takeoff or landing. In the NPRM, the FAA stated the exceptions in § 136.9(b)(1), (b)(3), and (c) apply to powered-lift as written.

Section 136.9(b)(2) requires the operator and PIC of a commercial air tour over water beyond the shoreline to ensure that a life preserver for each occupant is readily available and easily accessible if the airplane is within power-off gliding distance to the

shoreline for the duration of the time that the flight is over water. In the NPRM, the FAA proposed in § 194.310(a)(1) to apply § 136.9(b)(2) to powered-lift when it is operating in the wing-borne flight mode within the power-off gliding distance to the shoreline. Therefore, when a powered-lift is operating in the wing-borne flight mode, life preservers only need to be readily available and easily accessible to each occupant. Conversely, when operating in vertical-lift mode, those life preservers must be worn by each occupant.

The FAA received one comment on proposed § 194.310(a)(1) from GAMA, who agreed with the FAA that powered-lift should be aligned with airplanes in § 136.9(b)(2). The FAA therefore adopts § 194.310(a)(1) as proposed but, as a result of renumbering, it is now § 194.308(d)(1)(i).

The FAA received a comment from Joby related to § 136.9(b)(3), which was not explicitly addressed in the NPRM because § 136.9(b)(3) already applies to aircraft in general, including powered-lift. Joby indicated the critical engine inoperative for multiengine aircraft does not apply to electric powered-lift. Joby also mentioned that electric powered-lift currently being developed may not have a single engine failure which would be critical for performance or handling qualities. Joby commented about the airworthiness criteria and design standards for electric powered-lift, mentioning they have adopted the concept of “critical loss of thrust,” which is specific to an aircraft and the electric propulsion system architecture being used. Therefore, Joby recommended adding “or critical loss of thrust for distributed electric propulsion systems” to § 136.9(b)(3) to better accommodate multi-engine aircraft with distributed electric propulsion systems.

The FAA agrees with Joby that another term to capture aircraft that does not have a “critical engine” but may have other powerplants that could experience a loss of thrust impacting the aircraft’s ability to stay aloft needs to be addressed. The FAA addresses Joby’s comment in section VI.D.3 of this preamble.⁴²⁴ For the reasons previously discussed, the FAA will add “or while experiencing a critical change of thrust” under § 194.308(d)(1)(ii) in the final rule which will read, “Section 136.9(b)(3) applies to multiengine powered-lift that can be operated with the critical engine inoperative or while experiencing a critical change of thrust, at a weight that

⁴²² § 136.1.

⁴²³ § 136.9.

⁴²⁴ For a more detailed discussion on “critical change of thrust” see Section V.C.3 regarding § 135.168.

will allow it to climb, at least 50 feet a minute, at an altitude of 1,000 feet above the surface, as provided in the approved Aircraft Flight Manual for that aircraft.” By adding this term to the SFAR, it will allow the exception for a life preserver to be readily available for its intended use and easily accessible to each occupant rather than requiring each occupant to wear a life preserver providing the powered-lift can meet the performance criteria discussed above. If a powered-lift cannot meet the performance criteria as discussed above or is not equipped with floats, then each occupant must wear a life preserver from before takeoff until the flight is no longer over water.

The FAA did not include the term “distributed electric propulsion” as recommended by Joby because the FAA wanted this change to apply to all future propulsion systems that could experience a critical change of thrust, and not just those that are electrically driven.

Joby also recommended, regarding § 136.9(b)(3), that the term aircraft be used in place of airplane and rotorcraft in reference to flight manual. That change was made in the Update to Air Carrier Definitions rule which was published July 26, 2023.

As a result of the foregoing, the FAA adopts § 194.308(a)(1) as proposed, but as a result of renumbering it is now § 194.308(d)(1)(i). The FAA also adds § 194.308(d)(1)(ii), which adds the term “critical change of thrust” to § 136.9(b)(3) in response to Joby’s comment.

3. Rotorcraft Floats Over Water (§ 136.11)

Section 136.11 permits single-engine rotorcraft in commercial air tours to operate over water beyond the shoreline only when they are equipped with fixed floats or an inflatable flotation system adequate to accomplish a safe emergency ditching. Similarly, multiengine rotorcraft that cannot be operated with the critical engine inoperative at a weight that will allow it to climb at least 50 feet a minute at an altitude of 1,000 feet above the surface as provided in the AFM also must be equipped with fixed floats or an inflatable flotation system.

Rotorcraft that are equipped with flotation systems must have an activation switch for that system on one of the primary flight controls, and the system must be armed when the rotorcraft is over water and flying at a speed that does not exceed the maximum speed prescribed in the AFM. These requirements, however, do not apply to operations over water during

the takeoff and landing portions of flight, or to operations within the power-off gliding distance to the shoreline for the duration of the flight provided each occupant is wearing a life preserver from before takeoff until the aircraft is no longer over water.⁴²⁵

In the NPRM, the FAA proposed to apply § 136.11(a)(2), (b), and (c) to powered-lift that are conducting air tour operations in the vertical-lift flight mode beyond the auto-rotational distance or gliding distance from the shoreline. Requiring flotation equipment is a necessary requirement for mitigating the serious risks posed by engine failures over water for these aircraft.

Joby commented on § 136.11 with a suggestion to add the term powered-lift alongside helicopter to the entire section except for § 136.11(a)(1), which is for single-engine rotorcraft. Joby also requested to add “critical loss of thrust for distributed electric propulsion systems” to § 136.11(a)(2) for the same reasons specified in their comment on § 136.9(b)(3).

GAMA suggested § 136.11 would not need to be changed because the overwater requirements for powered-lift are covered by § 136.9. The FAA disagrees with GAMA. These two over water regulatory requirements are both necessary for powered-lift, as § 136.11 provides criteria for inflatable floats that is not found within § 136.9 (b)(1). Section 136.11 requires rotorcraft to install floats when used in commercial air tours over water beyond the shoreline unless it is a multi-engine aircraft that can meet the performance criteria to keep it out of the water. The same criteria are equally important for powered-lift. If the powered-lift is operating beyond the shoreline and cannot meet that performance criteria to keep it out of the water, then each occupant must wear a life preserver. Powered-lift, just like multiengine rotorcraft, that have the performance capability to keep the aircraft out of the water are not required to install floats. However, the operator or pilot in command of a commercial air tour over water beyond the shoreline must still ensure a life preserver is readily available and easily accessible to each occupant as required for all aircraft under § 136.9(b).

Based on the information the FAA received during the comment period, the FAA decided to remove the reference to “vertical-lift flight mode” in § 194.310(b)(2) because powered-lift designs are still in the development

phase and there is no operational data to support that most powered-lift designs will behave like an airplane in a ditching scenario regardless of the flight mode. One of the purposes of the SFAR is to gain knowledge such as this before a final rule is codified. The FAA also believes many of the powered-lift will have the performance capability to keep the aircraft out of the water and will therefore not be required to install floats. As a result, the FAA has removed reference to “vertical-lift flight mode” in § 194.308(d)(2).

As discussed above, in the NPRM, the FAA proposed to apply § 136.11(a)(2), (b), and (c) to powered-lift that are conducting air tour operations beyond the “auto-rotational distance or gliding distance from the shoreline.” The FAA is removing this reference for three reasons. First, due to the removal of the reference to vertical-lift flight mode, the FAA determined the term “auto-rotational” is no longer required for § 194.308(d)(1) and (2). Second, in review of the *National Air Tours Safety Standards* final rule published February 13, 2007, the FAA used the term “gliding distance” with respect to helicopters and implied that the use of the term gliding was inclusive of an autorotation.⁴²⁶ Third, removing the reference “auto-rotational” will maintain consistency and avoid any confusion with the term “gliding” contained in § 136.11. As a result, the FAA has used the verbiage from § 136.11 stating that § 136.11(a), (b), and (c) apply to powered-lift “used in commercial air tours over water beyond the shoreline.” In addition, the exceptions under § 136.11(c) still apply—the exception under § 136.11(c)(2) would apply to powered-lift that meet those criteria, which includes both autorotating and gliding distance to the shoreline.

In the NPRM, the FAA stated it would not apply the single-engine provision from § 136.11(a)(1) to powered-lift because all powered-lift coming to the market are currently multiengine, not single-engine. However, the FAA has reconsidered the decision to not apply § 136.11(a) to single-engine powered-lift because a single-engine powered-lift could be developed during the duration of the SFAR and should be equally covered by the safety provisions stipulated for rotorcraft in § 136.11(a). Without knowing whether a powered-lift will float for a longer period of time than a rotorcraft after ditching, the safety justifications to require floats be installed on single-engine powered-lift

⁴²⁵ See Update to Air Carrier Definitions NPRM, 87 FR 75004 (Dec. 07, 2022).

⁴²⁶ *National Air Tours Safety Standards*, final rule, 72 FR 6904 (Feb. 13, 2007).

are equal to those for single-engine rotorcraft used in commercial air tours over water beyond the shoreline. Therefore, the FAA will add powered-lift alongside rotorcraft in the SFAR and change § 194.310(b)(2) to meet the intent of § 136.11(a)(1). This new provision is codified at § 194.308(d)(2)(i).

The FAA is making a change to the final regulatory text pertaining to § 136.11(a)(2). Joby's comment on § 136.11(a)(2) is identical to their comment on § 136.9(b)(3), and therefore the FAA will incorporate the verbiage into SFAR § 194.308(d)(2)(ii) with minor revision to Joby's proposal for § 136.11(a)(2) as discussed in the section regarding § 136.9(b)(3). As discussed in § 136.9(b)(3), the FAA will add the term "critical change of thrust" to § 194.308(d)(2)(ii). Adding this paragraph will ensure a powered-lift operating in commercial air tours over water beyond the shoreline must meet the performance requirements of § 136.11(a)(2) or be equipped with fixed floats or an inflatable flotation system adequate to accomplish a safe emergency ditching.

In their comment relating to § 136.11(b)(2), Joby also recommended that the term aircraft be used in place of airplane and rotorcraft in reference to flight manual. That change was made in the Update to Air Carrier Definitions rule which was published July 26, 2023.

Therefore, the FAA adopts § 194.310(b)(2) with the changes referenced above; however, due to renumbering this provision is now § 194.308(d)(2). The FAA will add the provisions of § 136.11(a) to single-engine powered-lift under § 194.308(d)(2)(i), add the term "critical change of thrust" to § 194.308(d)(2)(ii), remove the provision that § 194.308(d)(2) is only applicable to powered-lift operating in the vertical-lift flight mode, and remove references to "auto-rotational or gliding distance" in § 194.308(d)(2).

4. Rotorcraft Performance Plans and Operations (§ 136.13)

Section 136.13 requires operators using rotorcraft to develop a performance plan before each commercial air tour operation. These plans must be reviewed by the Pilot in Command (PIC) for accuracy and adhered to during flights. Such plans play a crucial role in mitigating risks by requiring the PIC to be prepared to respond to unexpected situations.

Similar to rotorcraft, commercial air tour operators of powered-lift will likely take advantage of the vertical takeoff, out of ground effect hovering capabilities, and out of ground effect

slow flight capabilities of these aircraft while operating at speeds that may not exceed effective translational lift airspeed. Operating in this condition increases the exposure to the risk of not being able to perform a successful autorotation landing in the event of an engine failure. The FAA acknowledged that operating within the "avoid" zone of the height/velocity (H/V) diagram or the "avoidance area related to the transitions that may occur between the vertical-lift and wing-borne mode" decreases the ability to successfully perform an autorotation, or a safe landing following a critical change of thrust. Hence, operators must not just plan, but operate in alignment with the performance plan to ensure aviation safety. As a result, operators should be aware of H/V diagrams or the performance capability of their aircraft following a critical change of thrust. This will require a performance plan for commercial air tours that are conducted in powered-lift which have height velocity information or performance criteria with avoidance area information contained in the AFM related to the transitions that occur between the vertical-lift and wing-borne mode.

The FAA received one comment from GAMA who agreed the provision of § 136.13 should apply to powered-lift. The FAA did not make any substantive changes to the proposed regulatory text. As a result, the FAA adopts § 194.310(b)(3), which requires a person to comply with the requirements specified for rotorcraft contained § 136.13, as final. As a result of renumbering, it is now § 194.308(d)(3).

5. Commercial Air Tours in Hawaii

In the Update to Air Carrier Definitions final rule, the FAA amended the applicability and definitions that were contained in subpart A of part 136 and appendix A to include powered-lift.⁴²⁷ Additionally, the information contained in appendix A to part 136 was moved to subpart D of part 136. Subpart D of part 136 now contains the special operating rules for air tour operators in Hawaii.⁴²⁸ This subpart prescribes operating rules for air tour flights conducted in airplanes, powered-lift, or rotorcraft under VFR in the State of Hawaii pursuant to parts 91, 121, and 135.⁴²⁹

⁴²⁷ Update to Air Carrier Definitions final rule, 88 FR 48077 (July 26, 2023).

⁴²⁸ In the Update to Air Carrier Definitions final rule, the FAA recodified appendix A, which was previously SFAR No. 71, as subpart D of part 136. Update to Air Carrier Definitions, final rule, 88 FR 48078 (July 26, 2023).

⁴²⁹ *Id.*

The FAA received one comment from GAMA relating to appendix A Special Operating Rules for State of Hawaii. They made a broad statement to apply either airplane or helicopter rules for powered-lift, including for appendix A, without any specifics. The FAA agrees with GAMA, as their broad statement is in line with the FAA's general approach to integrating powered-lift into the regulations. As stated in the NPRM, for rules that are not generally applicable to aircraft, the FAA will apply the rotorcraft rules to powered-lift as contained in subpart D of part 136—Special Operating Rules for Air Tour Operators in the State of Hawaii.

Flotation Equipment: Section 136.75(a) replaced section 3 of appendix A, as identified in the NPRM, and does not permit an air tour in Hawaii in a single-engine⁴³⁰ rotorcraft beyond the shore of any island unless the rotorcraft is amphibious, equipped with floats adequate to accomplish a safe emergency ditching, and approved flotation gear is easily accessible for each occupant or each person on board the rotorcraft is wearing approved flotation gear. The FAA proposed to apply section 3 of appendix A (now § 136.75(a)) to powered-lift in § 194.310(b)(4)(i). Applying the requirement for flotation equipment would increase the likelihood of surviving in the event of a water landing. These requirements were created specifically for Hawaii due to the rugged terrain. The FAA determined that extending this requirement to all powered-lift operators conducting air tours in Hawaii beyond the shore of any island was appropriate because powered-lift will likely operate in a manner that is similar to rotorcraft when conducting air tour operations in Hawaii.

The FAA did not receive any comments on SFAR 194.310(b)(4)(i). The only change the FAA is making to the proposed § 194.310(b)(4)(i) is that it now references § 136.75(a), rather than section 3 of Appendix A. The FAA adopts § 194.310(b)(4)(i) as amended, but as a result of renumbering, it is now § 194.308(d)(4).

i. Performance Plan (§ 136.75(b))

Section 136.75(b) replaced section 4 of appendix A as identified in the NPRM and requires each rotorcraft operator to complete a performance plan that is based on the current approved AFM for that aircraft and the PIC must

⁴³⁰ See below for further discussion on the FAA permanently amending § 136.75(a) to refer to "single-engine" rotorcraft.

comply with that plan.⁴³¹ The performance plan must be based upon information contained in the AFM and must consider the maximum density altitude for the flight; maximum gross weight and center of gravity for hovering while in and out of ground effect; and the highest combination of weight, altitude, and temperature. Environmental conditions relevant to the altitude and temperature of the operation are critical considerations in ensuring safety of flight because both affect the performance of the aircraft. Operators' performance plans would ensure operators' awareness of how conditions could affect the flight; as a result, operators will be in a position to make appropriate contingency plans and make suitable decisions should they encounter hazards during an air tour operation.

In the NPRM, the FAA proposed to apply section 4 of appendix A (now § 136.75(b)) to powered-lift in § 194.310(b)(4)(ii). Applying this performance plan requirement to operators of powered-lift conducting air tours in Hawaii would ensure the operator conducting the operation is aware of the necessary information concerning the aircraft and operation.

In response to the one comment received from GAMA, noted above, the FAA did not make any changes to the proposed regulatory text. The only change the FAA is making to § 194.310(b)(4)(ii) is that it now references § 136.75(b), rather than section 4 of appendix A. The FAA adopts § 194.310(b)(4)(ii) as revised, but as a result of renumbering, it is now § 194.108(d)(5).

Section 136.75(c) replaced section 5 of appendix A as identified in the NPRM and requires the PIC to operate at a combination of height and forward speed that would permit a safe landing in the event of engine power loss or a critical change of thrust in accordance with the height-speed envelope under current weight and aircraft altitude.

In the NPRM, the FAA proposed to apply section 5 of appendix A (now § 136.75(c)) to powered-lift in § 194.310(b)(4)(iii). Applying the operational limitations for rotorcraft to powered-lift was determined to be appropriate because the FAA expects powered-lift will hover and have other operating characteristics like rotorcraft when conducting air tours. Because engine power loss or a critical change of thrust could have detrimental consequences, powered-lift may require quick landings in response to engine failures or critical changes of thrust. The

FAA determined that requiring the PIC to operate the aircraft in a manner that permits the PIC to land safely was an appropriate means of mitigating the risk associated with engine power loss or critical changes of thrust. Overall, the proposal aims to ensure that powered-lift operations in commercial air tours adhere to safety standards equivalent to those established for rotorcraft in Hawaii. This extension was deemed appropriate given the similarities in operating profiles between powered-lift and rotorcraft during air tour operations in Hawaii.

In response to the one comment received from GAMA as mentioned above, the FAA did not make any changes to the proposed regulatory text. However, to align with the new verbiage, critical change of thrust, associated with powered-lift and previously discussed in section VI.D.3. of this final rule, the FAA will add language to clarify that the term "critical change of thrust" is included after "in event of engine power loss" in § 136.75(c). The FAA is further amending § 194.310(b)(4)(iii) to refer to § 136.75(c), rather than section 5 of appendix A. As a result, the FAA adopts § 194.310(b)(4)(iii) as amended, but as a result of renumbering, these amendments are reflected in § 194.308(d)(6).

ii. Permanent Rule Change for § 136.75(a)

In the *Update to Air Carrier Definitions* rule, when appendix A was moved to subpart D and the term helicopter was changed to rotorcraft, a word was inadvertently omitted. As a result, the applicability of required flotation equipment was mistakenly expanded to all rotorcraft, instead of only single-engine rotorcraft. Therefore, the FAA will add the term "single-engine" ahead of "rotorcraft" as a permanent change in § 136.75(a) because the FAA never intended for this requirement to apply to all rotorcraft, but instead to only apply to single-engine rotorcraft.

F. Part 43 Applicability to Powered-Lift

Part 43 outlines maintenance, preventive maintenance, rebuilding, and alteration rules for any aircraft with U.S. airworthiness certificates; foreign-registered civil aircraft used in common carriage or carriage of mail under the provisions of part 121 or 135; and airframe, aircraft engines, propellers, appliances, and component parts of such aircraft.⁴³² Aircraft operating under parts 91 or 135 must be

maintained and inspected in accordance with part 43.

Section 43.3(h) states that the Administrator may approve a certificate holder, operating rotorcraft in a remote area under part 135, to allow a pilot to perform specific preventive maintenance items, under certain limitations, when no certificated mechanic is available and an unscheduled malfunction occurs. The FAA proposed in § 194.402(a) that the preventive maintenance protocols outlined in § 43.3(h) also apply to certificate holders under part 135 operating powered-lift in remote areas. A pilot who is trained under the requirements of § 43.3(h) would provide the same level of competency as a certificated mechanic when performing the authorized preventive maintenance function.⁴³³ The pilot is required to complete an FAA-approved training program and perform the specific preventive maintenance items under the direct control of the certificate holder's preventive maintenance program. Some powered-lift pilots may operate in remote areas and would consequently experience the same challenges that exist for rotorcraft when an unscheduled malfunction occurs.

The FAA did not receive any comments on § 43.3(h). Therefore, the FAA adopts § 194.402 as final and applies § 43.3(h) to powered-lift.⁴³⁴

The FAA also proposed to apply § 43.15(b) to powered-lift in § 194.402(b). Section 43.15(b) requires persons performing an inspection on a rotorcraft, as required by part 91, to inspect certain rotorcraft systems in accordance with the maintenance manual or Instructions for Continued Airworthiness.⁴³⁵

The systems listed under § 43.15(b) are generally considered systems comprised of "critical parts" as defined in §§ 27.602 and 29.602.⁴³⁶ However, these systems are specific to rotorcraft and may or may not apply to powered-lift. Powered-lift are new entrant aircraft, and as a result, the FAA did not

⁴³³ See Rotorcraft Regulatory Review Program Amendment No. 5; Operations and Maintenance, 51 FR 40692 at 40702 (Nov. 7, 1986).

⁴³⁴ The regulations under Title 14 of the Code of Federal Regulations that reference "aircraft" currently apply to powered-lift. Sections 43.2, 43.5, 43.10, 43.11, 43.12, 43.13, 43.17, and Appendix F to part 43 all apply to "aircraft," and, accordingly, to powered-lift. See 14 CFR part 43.

⁴³⁵ § 43.15(b).

⁴³⁶ Sections 27.602 and 29.602 define a "critical part" as "a part, the failure of which could have a catastrophic effect upon the rotorcraft, and for which critical characteristics have been identified which must be controlled to ensure the required level of integrity." The procedures referenced in §§ 27.602(b) and 29.602(b) will be addressed during the § 21.17(b) certification process.

⁴³¹ § 136.75(b).

⁴³² § 43.1.

have the information to know all the systems on any given powered-lift that may be considered a critical part. The parts the powered-lift manufacturer identifies as “critical parts” for flight are required inspection items and must be listed in the aircraft manufacturer’s maintenance manual. In determining critical parts, the manufacturer must consider a flight safety-critical aircraft part list which, if nonconforming, missing, or degraded, could cause a catastrophic failure resulting in loss of, or serious damage to, the aircraft or an uncommanded engine shutdown resulting in an unsafe condition. The characteristic can be critical in terms of dimension, tolerance, finish, or material; an assembly, manufacturing, or inspection process; or an operation, maintenance, or overhaul requirement.

For powered-lift with critical parts, a type design must include a critical parts list and define the critical design characteristics, identify processes that affect those characteristics, and identify the design change and process change controls necessary for showing compliance with the quality assurance requirements of part 21. Requiring a powered-lift critical parts inspection under § 194.402(b) will ensure that the owner or operator’s inspections comply with both § 43.15(b) as well as § 91.409, which requires aircraft inspections conducted in accordance with part 43 to obtain or keep an airworthiness certificate. The FAA did not receive any comments on the proposed § 194.402.

Therefore, the FAA adopts § 194.402 as final and applies §§ 43.3(h) and 43.15(b) to powered-lift.

G. Pilot Records Database

Part 111 prescribes rules governing the use of the Pilot Records Database (PRD). The PRD facilitates the sharing of pilot records among air carriers and other operators in an electronic data system managed by the FAA. Part 111 requires air carriers, specific operators holding out to the public, entities conducting public aircraft operations, air tour operators, fractional ownerships, and corporate flight departments to enter relevant data on individuals employed as pilots into the PRD. The PRD is intended to help maintain records about a pilot’s performance with previous employers that could influence a future employer’s hiring decision.

Section 111.1(b)(4) states that part 111 applies to an operator who operates two or more aircraft described in paragraphs (i) and (ii), solely pursuant to the general operating rules in part 91, or that operates aircraft pursuant to a Letter of Deviation Authority issued

under § 125.3. Paragraphs (i) and (ii) apply to standard airworthiness airplanes that require a type rating under § 61.31(a) and turbine-powered rotorcraft, respectively.

In the NPRM, the FAA proposed permanently amending § 111.1(b)(4) to include a new paragraph (iii) that applies to large powered-lift. The FAA did not propose amending other paragraphs within § 111.1 because, as currently written, they already apply to operators of powered-lift. Pilots of large powered-lift may go on to work for an air carrier in the future, and reporting these pilot records would be relevant to a future hiring air carrier. This proposal aligns with the current requirements and intent of § 111.1(b)(4) and the type rating requirements in § 61.31(a).

The FAA received one comment related to § 111.1(b)(4). A4A agreed with the FAA’s proposed amendment to § 111.1(b)(4), stating that obtaining information before a pilot is hired via the FAA’s PRD is necessary for safety.

The FAA agrees with A4A that the PRD provides a crucial level of detailed information on pilots operating in the NAS. The PRD provides air carriers with pilot certificates, ratings and limitations, medical certificate information, failed attempts to pass a practical test, and accidents and incidents from the FAA, employment history from air carriers, and the date of request for motor vehicle driving records from the National Driver Register.

In response to the comment received, the FAA did not make any changes to the proposed regulatory text. Therefore, the FAA adopts § 111.1(b)(4)(iii) as final.

VII. Air Traffic Operations

In the NPRM, the FAA proposed to leverage its existing standards and procedures for powered-lift air traffic operations. These standards and procedures encompass separation protocols managed by Air Traffic Control (ATC) to ensure safe and orderly air traffic flow. These standards vary based on factors like airspace classification and aircraft type.

FAA Order JO 7110.65 details the air traffic separation standards and addresses separation standards and procedures for aircraft and helicopters differently. Factors like aircraft weight, wake turbulence, and radar distance influence separation standards, with ongoing monitoring to maintain safety. Currently, the FAA’s Air Traffic Organization is working to modify JO 7110.65, ensuring safe and efficient powered-lift operations in the National Airspace System (NAS). While updates to accommodate powered-lift are

underway, ATC will leverage its existing standards for aircraft.

Eve suggested the SFAR did not consider emerging technology and benefits of advanced traffic management services that will support operations coordination at scale. The FAA will not make any changes at this time. The FAA will use existing traffic management systems to support and manage powered-lift operations as necessary. However, the FAA may consider whether changes are appropriate as demand for powered-lift operations grows.

One commenter asserted people on the ground should be protected from the unique risks posed by eVTOLs’ battery systems, which the commenter said are highly flammable. The commenter recommended considering flight routes for battery powered eVTOLs and said, if these aircraft operate over densely populated areas, they should follow railroads, highways, and street paths, rather than cutting across neighborhoods. Additionally, the commenter argued the flying public should be made aware ahead of time whether an eVTOL they intend to fly on as a passenger has a pilot on-board.

The FAA did not make any changes to the proposed regulatory text and determined no additional rulemaking is necessary at this time to address air traffic procedures. As mentioned above, the FAA will use existing traffic management systems to support and manage powered-lift operations as necessary. In addition, these aircraft are required to be type certificated, including those used for carrying passengers, and thus required to meet the FAA’s expectations for safety and reliability. Today, one way the FAA helps protect persons and property on the ground with manned aviation is by using minimum safe altitudes which pilots must follow to help ensure the pilot has enough time to respond to an emergency. As discussed in section VI. of this preamble (“Operational Rules for Powered-Lift”), during this rulemaking, the FAA evaluated the current minimum safe altitudes to determine how they should apply to powered-lift. The FAA determined that some powered-lift have operating characteristics similar to helicopters in that they can land in a relatively small space and have the ability to autorotate (or perform an equivalent maneuver) with precision during power-out emergencies. If a powered-lift can meet the performance-based requirements outlined in the SFAR, it can use the minimum safe altitudes for helicopters with no adverse effect on safety. Powered-lift that cannot meet the

performance-based requirements will use the minimum safe altitudes outlined for aircraft other than helicopters. In regard to the suggestion that powered-lift operations alert passengers on whether a pilot is operating the aircraft, the powered-lift rule does not contemplate powered-lift operating without a pilot, and therefore does not address passenger-carrying operations without a pilot on board.

VIII. International Operations for Powered-Lift

The FAA's policy is to meet the U.S. obligations under the Convention on International Civil Aviation ("Chicago Convention") by conforming to the International Civil Aviation Organization (ICAO) Standards and Recommended Practices (SARPs) to the maximum extent practicable. ICAO annexes contain the international SARPs for safety, regulation, and efficiency of air navigation. The Chicago Convention ensures that certificates of airworthiness, certificates of competency, and licenses are recognized by other Member States as long as the issuing States meet the minimum ICAO standards. The Member States' Civil Aviation Authorities (CAAs) each integrate the ICAO SARPs into their national legal frameworks and practices and are responsible for regulatory oversight. When unable to integrate the ICAO SARP into their national legal framework, each ICAO Member State CAA is obligated to file a difference to that ICAO SARP and update their CAA's Aeronautical Information Publication (AIP). When the FAA is notified that ICAO adopted a new standard which is impracticable to comply with in all respects of the standard or procedure, or to bring its own regulations or practices into full accord with any international standard, the FAA will notify ICAO of the differences between its own practice and that established by the international standard.

As these aircraft obtain type certification, the FAA will amend, as appropriate, operational rules and pilot training requirements to support the varied designs being proposed by the manufacturers. Longer term, the agency will continue to develop permanent powered-lift regulations to safely enable powered-lift operations by working with industry and international partners. This process is performed in parallel to the FAA's international partners' efforts and in alignment with international safety requirements. This is an ongoing project and relies on data-gathering processes to develop more permanent regulations.

A. Personnel Licensing

Part 61 prescribes the requirements for the issuance of pilot, flight instructor, and ground instructor certificates, as well as the privileges and limitations of such. Similarly, ICAO Annex 1 provides SARPs for personnel licensing, including those for powered-lift ratings. Specifically, ICAO included a permissive transitional measure in ICAO Annex 1, providing ICAO member States a temporary recommendation for the issuance of a powered-lift type rating. In the transitional measures, section 2.1.1.4 states that a licensing authority may endorse a type rating for a powered-lift category on an existing airplane or helicopter pilot license (*i.e.*, certificate). Should a licensing authority implement this endorsement, the endorsement must indicate the aircraft is part of the powered-lift category and must result from training during a course of approved training. Additionally, the training must consider previous experience in an airplane or helicopter, as appropriate, and incorporate all relevant operational aspects of a powered-lift.

The FAA has chosen not to implement this permissive transitional measure as written, but rather require a powered-lift category rating in addition to a type rating for each make/model of aircraft. This is due to the wide range of powered-lift being developed that have complex and varied design, flight, and handling characteristics, making the establishment of classes within powered-lift not practicable at this time. Therefore, pilots with an airplane category or rotorcraft category helicopter class rating may transition and/or add a powered-lift category rating, hence providing a substantial pool of qualified candidates to staff the initial cadre of powered-lift pilots and instructors. This meets the standards in ICAO Annex 1 and establishes a path toward pilot certification with an equivalent level of safety by providing pilots training on the unique designs of powered-lift while leveraging those pilots' prior experience and advanced training devices to create the first group of powered-lift pilots. These pilots will then go on to form the first instructors for subsequent applicants. Should the ICAO transitional measure become a standard in the future, the FAA will undertake measures to align with ICAO standards to the greatest extent practicable, which may include filing a difference.

EASA stated that the FAA's definition of "powered-lift" will not fit all innovative VTOL aircraft because they do not all have non-rotating airfoils to create lift during horizontal flight and

expressed concern regarding international harmonization efforts. The agency described its approach to certify innovative VTOL aircraft as a separate "VTOL-capable aircraft" category with a new, flexible regulatory framework for pilot licensing and operations of such aircraft. EASA invited the FAA to reconsider its own approach in the proposed SFAR, stating that European VTOL aircraft manufacturers view the powered-lift category rating requirement as an obstacle to achieving innovative VTOL aircraft operations. While EASA acknowledged that the FAA's approach to powered-lift pilot licensing is comparable to the agency's own approach in many respects, the principal difference is the powered-lift category rating requirement where, instead, EASA proposed alignment with § 2.1.1.4.⁴³⁷

The FAA received many comments on the decision to decline to implement ICAO's transitional measure. These comments are summarized and addressed in section V.A. of this preamble, Establish a Type Rating Requirement for Persons Seeking to Act as PIC of Powered-Lift, of this preamble. The FAA is actively engaged with international certification authorities to define and align the certification requirements for Advanced Air Mobility. In addition to alignment with the ICAO Annexes, the FAA also maintains bilateral agreements, which cover innovative projects such as eVTOL aircraft. The FAA will continue to work with other foreign regulators to validate their eVTOL aircraft under development and to develop a path for U.S. eVTOL aircraft to be validated by them, especially with EASA, where aircraft certification and airman certification pathways may diverge. The level of new and innovative technology in an eVTOL aircraft is of course very high, so early partnerships and cross-authority communication to harmonize our approach for these technology areas are critical to our success. International engagement, collaboration, and harmonization are integral parts of our mission given the global nature of this industry when it comes to aviation

⁴³⁷ Additionally, EASA described that in CM-FCD-001, EASA proposed requiring each applicant for a Type Certificate (TC) of VTOL-capable aircraft carry out a gap analysis, or Training Needs Analysis (TNA), to develop a customized syllabus to be approved as part of the Operational Suitability Data: Flight Crew (OSD FC). EASA described that the TNA, conducted in coordination with the agency, would identify the elements of pilot type rating training and checking based on the specific characteristics of the aircraft and will be the foundation of the training syllabi. NBAA also emphasized the proposal in CM-FCD-001 as a means to qualify FAA airmen.

safety. The FAA remains committed to improving the sharing of knowledge and information to advance global aviation safety—in other words, transparency.

B. Operations of Aircraft

Under parts 91 and 135, while operating outside the United States,⁴³⁸ the FAA requires U.S. operators to comply with ICAO Annex 2, Rules of the Air. As a result, powered-lift operators that are type-certificated with a standard airworthiness certificate and conduct their operations in accordance with the standards outlined in Annex 2 would be eligible to operate over the high seas. The FAA's approach to powered-lift operational requirements centered on determining which airplane-, helicopter-, or rotorcraft-specific rules apply to powered-lift and takes into account which flight mode, either vertical-lift or wing-borne flight mode, the aircraft will operate in during those operations. The FAA has determined this approach meets an equivalent level of safety with the current rules in parts 91 and 135 while allowing operational flexibility commensurate with the variable nature of powered-lift flight modes.

Several commenters contended that the proposed SFAR does not fully align with ICAO SARP.

Commenters recommended the FAA revise the NPRM to apply helicopter altitude and weather minima for approach, departure, and landing; and revise the existing fuel reserve requirement to a performance-based standard for powered-lift to maintain an equivalent level of safety.

Archer recommended clarifying the framework via ICAO Document 10103 "Guidance on the Implementation of ICAO Standards and Recommended Practices for Tilt-rotors."

A joint association letter from AIA, AUVSI, HAL, NATA, NBAA, and VFS encouraged the FAA to consider language in the Advanced Aviation Act⁴³⁹ when adjudicating comments as well as considering the guidance found in ICAO Document 10103.

To achieve better alignment with ICAO standards, Joby suggested the FAA reverse proposed §§ 194.302 and 194.303, add "unless otherwise specified" to those proposed sections to allow flexibility, or regulate all powered-lift operations according to helicopter rules.⁴⁴⁰ AWPC, ADS, and GAMA suggested conforming with ICAO SARPs by including performance-based operational rules that account for the diverse operational capabilities of powered-lift.

Commenters identified ICAO Document 10103⁴⁴¹ as providing a framework for harmonizing powered-lift standards. Joby, Supernal, AWPC, the NBAA, and L3Harris contended that the ICAO SARPs and ICAO Document 10103 were dismissed, misrepresented, or ignored by the FAA in the proposed SFAR. With regard to ICAO Document 10103, the NPRM acknowledged this document as providing "basic guidance relative to large turbine-powered tilt-rotors (a kind of powered-lift),"⁴⁴² but determined that it does not address electric-powered tilt-rotors or other types of powered-lift. Joby disagreed with this assessment and asserted that the document does not solely apply to large turbine-powered tilt-rotors as the NPRM stated. Supernal and the NBAA argued that the document's standards do not explicitly exclude electric propulsion and that there is no safety case made for the FAA's conclusion confirming ICAO intended to exclude electric propulsion. The NBAA stated that other National Aviation Authorities (NAAs) seem prepared to follow the concepts of ICAO Document 10103. EASA, for example, utilized ICAO Document 10103 in consideration of rulemaking efforts related to air mobility. The commenters believe the rationale in the preamble is insufficient to support dismissal of Document 10103.

AWPC argued that the FAA did not consider ICAO Standards and Recommended Practices in the proposed SFAR and its applicability to the AW609 Tiltrotor. AWPC noted throughout the SFAR that the FAA states it lacks sufficient operational data regarding powered-lift operations. The commenter disagreed because, with over

700,000 large turbine powered tiltrotor flight hours, AWPC believed sufficient operational data exists for the FAA to review when evaluating the rules and regulations that should apply to the AW609 tiltrotor operations.

CAE and NBAA stated that the NPRM's proposal to adopt airplane rules for powered-lift (except where helicopter rules are more conservative) endangers harmonization efforts with ICAO member states, and that manufacturers and operators in states closely aligned with ICAO have less costly regulatory burdens while achieving the same safety goals. As mentioned above, CAE and the NBAA believed the FAA should consider ICAO Document 10103. CAE and the NBAA further stated that powered-lift aircraft should utilize helicopter fuel reserves, weather minimums and most other helicopter operational rules in parts 91, 135, and 136; however, because the aircraft can glide farther than rotorcraft and some are capable of high altitudes, airplane rules should apply for overwater operations and high-altitude oxygen requirements.

Supernal recommended revision to the SFAR purporting that ICAO has adopted a helicopter-based requirement for vertical flight and aircraft for on-wing flight. The commenter believes this approach aligns powered-lift with helicopter requirements in FAA operational rules in parts 91, 135, and 136. The commenter stated that the FAA's proposal to align powered-lift more closely with airplane regulations creates unreasonable mandates for energy reserves, minimum safe altitudes, and weather minima. Supernal also stated that powered-lift perform with the same low speed and maneuverability as a helicopter and that the requirements should reflect these characteristics for takeoff and landing. Finally, Supernal commented that ICAO Guidance Document 10103 provides operational rule standards for powered-lift and that this guidance is the basis for the ICAO approach.

ADS placed heavy emphasis on the harmonization of regulations in aligning with international standards, including the United Kingdom. ADS is the trade association for the United Kingdom's aerospace, defense, security, and space industries. ADS asserted stakeholders will seek to export products to U.S. customers and therefore have a vested interest in the regulatory framework currently under review. ADS encourages the FAA to align with current guidance published in ICAO Doc 10103 because this would allow rules to be aligned with the aircraft type's capabilities, whether airplane or helicopter. Finally,

⁴³⁸ See § 91.703 for additional requirements for operations of civil aircraft of U.S. registry while conducting operations outside of the United States.

⁴³⁹ The Advanced Aviation Act "directs the DOT to redesignate the Office of NextGen as the Office of Advanced Aviation whose duties include the coordination of rulemaking and approval processes on manners relating to advanced aviation systems." The bill also seeks to promote a practical pathway for pilot qualifications and operations, aligning those pathways with section 2.1.1.4 of ICAO Annex 1, adoption of recommendations in Document 10103, applying performance-based requirements for energy reserves, and consulting with the U.S. Air Force Agility Prime Program. *Advanced Aviation Act*, H.R. 220, 118th Congress.

⁴⁴⁰ If applying helicopter rules to all powered-lift operations, Joby recommended addressing other relevant regulations with limitations in the Airplane Flight Manual (AFM).

⁴⁴¹ Guidance on the Implementation of ICAO Standards and Recommended Practices for Tilt-rotors (10103), International Civil Aviation Organization (2019).

⁴⁴² Integration of Powered-Lift: Pilot Certification and Operations; Miscellaneous Amendments Related to Rotorcraft and Airplanes NPRM, 88 FR 39068 (June 14, 2023).

ADS stated that the ICAO Guidance Document 10103 also supports the development of performance-based operational rules based on the specific performance characteristics of an aircraft.

Ferrovial Vertiports stated the FAA approach deviates from the international standards for powered-lift pilot qualification and operations. According to the commenter, to remain globally competitive, the United States should align with the standards developed by ICAO regarding powered-lift and tilt-rotor aircraft and seek harmonization with trusted allies such as the EASA. In addition, HAI maintained the SFAR does not address the requirements of our bilateral safety agreements, particularly with the European Union. That agreement requires discussions between the FAA and EASA when each is contemplating regulations affecting design, production, or maintenance.

L3Harris supported the FAA's intention to use the SFAR as a bridge to permanent rulemaking and gathering data for future adjustments. However, this commenter stated that the proposed SFAR does not provide the necessary conditions to enable initial operations and the collection and sharing of performance data. L3Harris believes that alignment with the ICAO Document 10103 framework in the final rule would enable operators to collect and share data about the suitability of rotorcraft operational rules for powered-lift, adjust current standards, and accommodate the diverse range of vehicle types and performance within the powered-lift category effectively. L3Harris further proposed the SFAR should be reexamined by a permanent rulemaking effort as soon as practicable.

The NBAA stated that using ICAO Document 10103 as a basis, powered-lift aircraft would utilize helicopter fuel reserves, weather minimums and most other helicopter operational rules in parts 91, 135, and 136; however, because the aircraft can glide farther than rotorcraft and some are capable of high altitudes, airplane rules would apply to overwater operations and high-altitude oxygen requirements. Supernal suggested revising existing fuel reserve requirements to a performance-based standard for powered-lift. In doing so, Supernal believes an equivalent level of safety can be maintained. Further, Supernal also requested the SFAR to apply helicopter altitude and weather minima for approach, departure, and landing.

In the past, when the FAA has found that it lacks sufficient experience regarding new operations, the use of an

SFAR has been an effective way to gain such experience while enabling some degree of limited operations. Such SFARs have typically temporarily enacted conservative safety approaches to enable operations, allowing both the FAA and industry to observe those operations and then incorporate additional efficiencies while maintaining safety in a later permanent change to the regulations.

The FAA acknowledges that AWPC has accomplished many flight hours while working toward the type certification of the AW609. However, there are many other powered-lift entering the market and the FAA notes that these rules are applicable to all powered-lift. Further, the FAA notes that ICAO Document 10103 sets forth basic guidance relative only to large turbine-powered tilt-rotors; however, this guidance does not address electric-powered tilt-rotors or other types of powered-lift. Additionally, the FAA reviews and evaluates training and operational suitability during an FSB in which AWPC will deliver its proposed type rating course to FAA FSB members for approval.

ICAO Document 10103 addresses the fact that tilt-rotor aircraft are a class of powered-lift. This document also makes a note that the manual does not address other aircraft within the powered-lift category such as vectored-thrust or ducted fan. The FAA is aware and fully understands the nature of this document in that the recommendation is to replace the terminology in regard to other regulations specific to helicopters with that of tilt-rotor. Although ICAO at the time anticipated the document would be used as a basis for other civil-powered aircraft as they approach design maturity, the FAA's position is that the tilt-rotor is a class of powered-lift, and a one-for-one swap of this terminology would not align in general terms with the intent in issuing a powered-lift category rating.

Notwithstanding, the FAA has evaluated each specific operating rule and the safety intent provided. Specifically, in response to comments received, the FAA determined that an equivalent level of safety may be maintained in some instances by applying performance-based criteria with certain parameters under parts 91 and 135. These new requirements allow the use of some helicopter rules as long as the operator complies with the appropriate risk mitigations that are detailed in the final rule. Therefore, there is no longer a distinct dividing line between airplane or helicopter rules being applicable to powered-lift. This approach more fully aligns with the

ICAO Document 10103. While the FAA notes that the Document 10103 is guidance material—rather than international standards—the FAA believes the final rule addresses these comments and may consider these comments again in the future as empirical evidence and data are obtained through initial operations. Specific performance-based operating rules are outlined in the SFAR tables to §§ 194.302 and 194.306.

C. Airworthiness of Aircraft

ICAO Annex 8 does not address powered-lift airworthiness standards. Because ICAO has declared Annex 8 as constituting the minimum standards for the purpose of Article 33 of the Chicago Convention, it is not clear whether the lack of ICAO standards would result in States not recognizing another State's airworthiness certificate for a powered-lift since no minimum international standards currently exist. Since publication of the NPRM, no revision of ICAO Annex 8 design standards for powered-lift has been initiated by ICAO. While ICAO Document 10103 provides basic guidance related to large turbine-powered tilt-rotors, the guidance does not address electric-powered tilt-rotors or other types of powered-lift at this time.

Powered-lift are special class aircraft for FAA type certification. The FAA will apply airworthiness criteria that meet an equivalent level of safety to the existing airworthiness standards in § 21.17(b), which would be eligible for a standard airworthiness certificate under § 21.183. The FAA continues to hold that leveraging its existing standards through the process in § 21.17(b) meets the intent of ICAO Annex 8 since design standards for these aircraft currently do not exist. The FAA received no comments on the airworthiness standards for powered-lift as it relates to ICAO and international standards.

IX. Advanced Air Mobility

The FAA noted in the NPRM that powered-lift will support future deployment of advanced air mobility (AAM) operations and this rulemaking is a key step in integrating AAM into the national airspace. The AAM Coordination and Leadership Act defines "advanced air mobility" as "a transportation system that transports people and property by air between two points in the United States using aircraft with advanced technologies, including electric aircraft or electric vertical take-off and landing aircraft, in both controlled and uncontrolled

airspace.”⁴⁴³ The FAA Reauthorization Act of 2024 updated the definition to mean “a transportation system that is comprised of urban air mobility and regional air mobility using manned or unmanned aircraft.”⁴⁴⁴ AAM includes transporting passengers in concentrated urban environments with electric Vertical Takeoff and Landing (eVTOL) aircraft.

Many commenters suggested there are potential benefits of AAM, including increased transportation efficiency and environmental benefits, among others. A4A expressed its enthusiasm for the potential advancements in air transportation that AAM will bring and noted safety should be the highest priority for AAM oversight and integration in the aviation environment. A4A urged the FAA to adopt A4A’s recommendations⁴⁴⁵ made in response to the DOT’s request for information on AAM strategy⁴⁴⁶ and expressed its support for the proposed SFAR for powered-lift pilots, noting that it expects “for hire” operations will be regulated and certificated as air carriers conducting operations under part 135.

The FAA’s research strategy is evolving to incorporate research needed to inform AAM integration, in alignment with the agency’s increasing focus on AAM. This AAM research strategy follows a crawl, walk, run approach. The crawl phase focuses on research to enable initial operations. The walk phase is characterized by research to support increased AAM operations and increased levels of automation. The run phase includes highly automated traffic management, remotely piloted and autonomous aircraft, and increased operational frequency.

The FAA envisions a safe and efficient aviation transportation system that will use highly automated aircraft to transport passengers and/or cargo within urban areas. As it relates to powered-lift, the FAA’s research priorities regarding AAM and Urban Air Mobility focus on Air Carrier Operations—investigating and identifying the key differences between current air carrier operations and future AAM transport operations.

As part of the powered-lift rulemaking effort, the FAA is modifying its

regulatory approach for certifying operation of powered-lift as well as certification requirements for the pilots operating these types of vehicles. The change is part of the agency’s efforts to integrate new types of aircraft safely and efficiently into the NAS, while providing a simpler pathway for applicants to obtain the necessary FAA approvals. The agency is type certificating powered-lift under its special class aircraft process in § 21.17(b), using performance-based airworthiness standards contained in part 23 for normal category airplanes. The special class process is designed to address the many novel features of unique aircraft such as these emerging powered-lift designs. The FAA’s first powered-lift rulemaking effort for a specific manufacturer was published on November 8, 2022, and made available for public comment in the **Federal Register**,⁴⁴⁷ with a final document published on March 8, 2024.

Using performance-based criteria enables the FAA to more effectively manage new concepts in new technology and innovation, including powered-lift. In addition, in this final rule, the FAA will implement certain performance-based regulations in parts 91 and 135 that will allow more operational flexibility for powered-lift.

Supernal expressed concern about AAM access to the National Airspace System (NAS). According to the commenter, the NPRM’s principle that AAM operations cannot disrupt existing operations would significantly limit AAM access to the NAS, thereby creating a barrier to AAM operations. Supernal urged the agency not to wait to initiate ATC support for AAM in the NAS given the lead times associated with developing and implementing NAS-wide ATC capabilities. Currently, the FAA’s Air Traffic Organization and Aviation Safety Organization are working together to modify JO 7110.65, which details air traffic separation standards. While the FAA may determine that future changes to JO 7110.65 are needed to efficiently and safely integrate AAM into the NAS, ATC will continue to use its existing standards for integration of new aircraft into air traffic operations.

An individual said that because eVTOLs are unprecedented in their level of connectivity within the aircraft in terms of linkages to controls and an electric powerplant, as well as the external environment, eVTOL pilots

should be certified for proficiency in cybersecurity. The commenter said areas for training should include preventing and detecting potential cyber incidents and cyber incident response management for all phases of flight. Another commenter stated that the FAA should consider cybersecurity issues, wireless communications issues, and regulatory challenges such as certification for autonomous systems and remote safety pilots.

The FAA agrees that new technology utilized by eVTOLs presents unique and novel challenges regarding linkages to controls and electric powerplants. However, the FAA disagrees with the commenter’s assertion that pilot training should include the prevention, detection, and response management principles because cybersecurity is addressed in the aircraft design during type certification. The FAA further notes that cybersecurity prevention, detection, and mitigation is not typically a flight crew responsibility and is not an element of pilot training. Rather, cybersecurity is accomplished when the aircraft is designed and certificated, ensuring aircraft system(s) security, integrity, and availability of the data networks are not compromised.

Several commenters suggested that alignment with ICAO standards and collaboration with the international community would enhance the FAA’s global leadership role in powered-lift and AAM more broadly. The FAA is actively engaged with international certification authorities to define and align the certification requirements for AAM. FAA bilateral agreements cover innovative projects such as eVTOL aircraft, and the FAA is working with other foreign regulators to validate their eVTOL aircraft under development and to develop a path for U.S. eVTOL aircraft to be validated by them. The level of new and innovative technology in an eVTOL aircraft is high, so early partnerships and cross-authority communication to harmonize the FAA’s approach for these technology areas are critical to the FAA’s success.

International engagement, collaboration, and harmonization are integral parts of the FAA’s mission given the global nature of this industry when it comes to aviation safety. The FAA remains committed to improving the sharing of knowledge and information to advance global aviation safety and to advance technological advancements. Additionally, the FAA co-leads the Asia-Pacific Bilateral Partners (APAC) AAM Working Group (WG). The APAC AAM WG endeavors to improve understanding and collaboration on the certification of

⁴⁴³ AAM Coordination and Leadership Act, Public Law 117–203 (Oct. 17, 2022).

⁴⁴⁴ FAA Reauthorization Act of 2024, Public Law 118–63 (May 16, 2024).

⁴⁴⁵ Airlines for America’s response to DOT–OST–2023–0079.

⁴⁴⁶ Request for Information on Advanced Air Mobility, 88 FR 31593 (May 17, 2023). The DOT’s RFI was published to inform the national strategy required by the AAM Coordination and Leadership Act.

⁴⁴⁷ Airworthiness Criteria: Special Class Airworthiness Criteria for the Joby Aero, Inc. Model JAS4–1 Powered-Lift, 89 FR 17230 (Mar. 8, 2024).

AAM. This includes promoting the use of a risk-based approach to ensure that the level of certification rigor reflects the level of safety risk presented by the design and operation of the product.

X. SFAR Framework and Duration

In the NPRM, the FAA proposed to enable powered-lift operations on a temporary basis⁴⁴⁸ through the adoption of an SFAR to supplement existing rules, create temporary alternatives for airman certification, remove operational barriers, and mitigate safety risks for powered-lift. The FAA proposed a duration of 10 years to facilitate industry's entrance into operations and provide the FAA an opportunity to assess operations and gather data to inform a future permanent comprehensive regulatory scheme.

Commenters generally supported the temporary adaptability of the SFAR. CAE and NBAA recommended the FAA either apply a shorter duration to the SFAR effective period or commit to revisiting on a more frequent basis of 2 or 3 years.

Supernal similarly stated that, while the industry lacks sufficient safety data today, data will become available in the next few years. Supernal requested that the FAA revise the proposed regulation by creating a mechanism to allow for periodic reviews every 2 years, allowing industry to provide new safety data to support alternative means of compliance. Supernal argued that waiting 10 years before proposing updated rules for powered-lift would limit the ability of the AAM industry to mature and would compromise the FAA's ability to maintain global leadership in this critical new sector of aviation. GAMA also suggested that the FAA revisit the proposed SFAR and take inventory of operational data at regular intervals, such as 2 years, in order to make the necessary refinements based on lessons learned during initial operations.

Lilium and BETA recommended applying a performance-based approach in the SFAR. Lilium contended that a "one-size-fits-all" approach to powered-lift inadvertently stifles innovation. It recommended allowing discretion to approve alternate requirements by adding language like "unless authorized by the Administrator." BETA said the SFAR should include provisions supporting performance-based requirements and provide a path for manufacturers and operators to share

aircraft or training device performance data with the FAA.

One commenter requested additional information pertaining to training and testing under requirements for powered-lift pilots, flight instructors, and examiners. Specifically, the commenter asked how the SFAR training and testing requirements would be different from existing airplane and helicopter pilots, flight instructors, and examiners. For example, the commenter seeks clarification on whether courses, modules, or hours of ground and flight training would be required, or whether certain written, oral, or practical tests would be required. The commenter suggested the FAA outline the specific content and format of training.

One pilot expressed concern about whether the proposed SFAR was premature, in terms of its ability to adequately anticipate future powered-lift designs, which the pilot said could risk developing overly restrictive rules.

As explained in the NPRM, the FAA considered several different factors when selecting 10 years as the appropriate duration for the SFAR. The FAA considered the time it will take to initiate operations after the adoption of a final rule, the number of powered-lift that will be type certificated and commercially viable when the final rule is effective, and the appropriate length of time to collect operational data and documentation to support permanent amendments to the FAA's regulations. To balance the time necessary to inform a permanent rulemaking, facilitate powered-lift operations, and ensure the SFAR maintains its temporary nature, the FAA is adopting the 10-year effectivity duration, as proposed. In response to the commenters who recommended a shorter duration for the SFAR, the FAA notes that the 10-year duration does not prevent the FAA from making interim changes to the SFAR in the interest of safety. Similarly, the 10-year duration does not preclude the FAA from amending the SFAR during the 10-year period by removing a regulatory burden on the powered-lift industry, provided the operational data collected demonstrates that safety is unaffected.⁴⁴⁹ As stated in § 194.107, the FAA may amend or rescind provisions of the SFAR as necessary.

In response to the commenters who recommended the FAA revisit the SFAR every 2 to 3 years, the FAA recognizes the benefits of routinely evaluating the temporary regulatory framework in light of the operational data the FAA will

receive from industry. The FAA agrees that periodic reviews will be beneficial and necessary to ensure the regulatory framework adapts as powered-lift operations progress. However, the FAA does not require rule language to enable its periodic review of the SFAR. Maintaining flexibility in its ability to review the SFAR is beneficial and necessary for the following reasons.

First, with such a nascent industry, it is unpredictable when formal reviews and subsequent revisions to the SFAR will be necessary, and codifying a review timeline diminishes the flexibility the FAA needs to ensure the regulations are appropriately adapting to changes in the powered-lift industry. The FAA may evaluate its regulations at any time it deems necessary or if an individual petitions for rulemaking or an exemption under 14 CFR part 11. FAA regulations at 14 CFR part 11.61 provide a mechanism for an individual or entity to petition for rulemaking or an exemption, thereby requiring the FAA to conduct a review of that request. Not codifying a review timeline allows the FAA to initiate its own internal review when it deems appropriate, and part 11 allows the public to request a rulemaking or exemption, requiring the FAA to further assess whether it should amend its regulations.

Second, FAA believes that the approach required by section 955 of the FAA Reauthorization Act of 2024, will enable FAA to obtain necessary real world operational data to inform future rulemaking, on a reasonable timeline. Section 955 mandates that the FAA establish an aviation rulemaking committee (ARC) no later than three years after the FAA issues the first powered-lift commercial operating certificate to provide the Administrator with specific findings and recommendations for, at a minimum, the creation of a standard pathway for the performance-based certification of powered-lift; the certification of airmen capable of serving as pilot-in-command of a powered-lift; and operation of powered-lift in commercial service and air transportation. In addition, section 955(d) requires the FAA to initiate a rulemaking no later than 270 days after the ARC submits its report to implement the findings and recommendations of the ARC, as determined appropriate by the Administrator.⁴⁵⁰ Not only does this language impose a timeline for establishing the ARC and subsequent rulemaking, it acknowledges that an ARC will first need real-world operational data from commercial powered-lift operations before it can

⁴⁴⁸ To enable a more comprehensive SFAR, the NPRM also proposed several limited permanent changes.

⁴⁴⁹ Similarly, the FAA may find it necessary to revise the SFAR to include additional requirements to mitigate an unanticipated safety risk.

⁴⁵⁰ See Public Law 118–63, § 955(c) and (d).

provide informed recommendations for a permanent rulemaking. The FAA finds it impractical to impose rigid, codified timelines mandating periodic regulatory review when it is unclear when operational data and information will be available.

Consequently, it is unnecessary to revise the proposed rule language, as Supernal requested, to create a mechanism to require the FAA to conduct periodic reviews every 2 years. As discussed above, the FAA intends to routinely revisit the SFAR as it gathers data from the powered-lift industry—and if it receives part 11 petitions—to evaluate whether adjustments to the SFAR are necessary. It is also committed to establishing an ARC in accordance with section 955(c) to determine what the permanent comprehensive regulatory framework should look like for powered-lift and to initiating a rulemaking in accordance with section 955(d).

In response to Supernal's assertion that waiting 10 years before proposing updated regulations for powered-lift would stifle the AAM industry and compromise the FAA's ability to maintain global leadership in this new sector of aviation, the FAA clarifies that the 10-year duration for the effectivity of the SFAR does not mean that the FAA will not propose any updated regulations in the interim. As previously stated, the FAA may amend or rescind provisions of the SFAR as necessary. Thus, the FAA is not precluded from proposing updating regulations prior to the expiration of the SFAR.

Additionally, the FAA intends to have permanent regulations in effect by the end of the 10-year SFAR duration, not simply begin the rulemaking process in 10 years (*i.e.*, publication of an NPRM).

However, the FAA maintains its position that it needs time to gather data from powered-lift in civilian operations to better inform permanent regulations for powered-lift. The FAA anticipates gathering data and information through (1) information collections; (2) regulatory requirements; (3) regular, formal, and informal interactions with the public, including conferences, data-sharing systems, and outreach initiatives; (4) the ARC to be established in accordance with section 955(c) of the FAA Reauthorization Act; and (5) informal anecdotal information and observations. The delay in proposing permanent regulations for powered-lift will not stifle AAM innovation or compromise the FAA's ability to maintain global leadership in this sector of aviation. Rather, the FAA is taking a regulatory approach that will enable the safe integration of powered-lift in the

NAS and allow industry to evolve and innovate under a temporary regulatory framework. The temporary nature of the SFAR will provide FAA an opportunity to gain experience with powered-lift and learn what the permanent regulatory framework should look like for these operations through assessment of powered-lift operations, training, and certification to determine the most appropriate permanent regulations for this new category of aircraft.⁴⁵¹

With regard to the potential prematurity of the SFAR, the FAA notes that the leading powered-lift manufacturers expect to receive initial type certification for their powered-lift in 2025. Thus, rulemaking is necessary to ensure the essential regulations are in place for the operation of these powered-lift. Further, when the FAA lacks sufficient experience regarding new operations, the use of an SFAR has been an effective way to gain such experience while enabling a degree of limited operations.⁴⁵² If the FAA determines during the term of the SFAR that the SFAR imposes overly restrictive or conservative requirements on powered-lift, the FAA may amend requirements in the SFAR as necessary.

A performance-based regulation is an “outcome-based” regulation that specifies the desired, measurable outcome to be achieved without prescribing the specific requirements to achieve that outcome. Thus, adding a provision that permits the FAA to authorize another means of complying with a prescriptive requirement does not make the underlying requirement “performance-based.” Because the FAA needs time to gain experience with powered-lift designs and operations, the FAA finds that it would be premature to develop a comprehensive performance-based regulatory scheme in the SFAR at this time. However, the FAA recognizes the importance of adopting requirements in the SFAR that allow for innovation and that enable the safe integration of powered-lift into the NAS. To that end, the FAA has evaluated its proposed requirements based on the comments received to determine where

it can add flexibility, performance-based elements, and alternate pathways, and it has added some performance-based criteria where appropriate. In response to the comments about providing a path for manufacturers and operators to share data with the FAA, the FAA finds that rule language is not necessary to enable this communication with industry. The FAA welcomes data from powered-lift manufacturers and operators during the course of the SFAR. For example, as OEMs continue to work through the type certification process in partnership with the FAA and interact with their certificate management teams, the FAA will naturally obtain data and information from the regulated community. To the extent commenters suggested applying performance-based regulations to specific sections of the SFAR (*e.g.*, airman certification), these comments are adjudicated in their respective section.

In response to the comment regarding outlining the content and format of training during the SFAR, the FAA notes that part 194, as adopted by this final rule, provides the training and testing requirements in tandem with the standing requirements in parts 61, 135, 141, and 142, as applicable. Specifically, an applicant for a certificate with powered-lift ratings will be required to comply with the basic training and testing requirements expected of, for instance, an applicant for a certificate with airplane ratings, with the exception of certain alternate requirements set forth by part 194. Course and module requirements were not specifically outlined in the SFAR, aside from the alternate experience requirements, because a training program would be required to comply with the part under which the training program is conducted (*i.e.*, part 135, 141, or 142). Similarly, part 61 and part 194 will set forth the expected number of ground and flight training hours. Section V. of this preamble comprehensively describes the training and testing expectations for powered-lift airman certification.⁴⁵³

XI. Autonomous Powered-Lift

As noted in the proposed rule, the FAA anticipates a variety of civilian powered-lift will come to the market with “varying degrees of

⁴⁵¹ The FAA further notes that other pathways remain available to industry to explore innovation. Powered-lift manufacturers and operators may petition for exemption if they develop new and novel approaches to address powered-lift issues. Any member of the public may also petition for rulemaking to request the FAA consider specific revisions or new regulations, as necessary.

⁴⁵² For example, SFAR No. 29 allowed the FAA to obtain rotorcraft IFR operational data before issuing permanent rotorcraft IFR regulations. See *FAA Study of Limited IFR Operations in Rotorcraft*, 40 FR 2420 (Jan. 13, 1975) (SFAR No. 29); see also *Limited IFR Operations of Rotorcraft*, 41 FR 1060 (Jan. 6, 1976) (SFAR No. 29–1).

⁴⁵³ The FAA further notes that other pathways remain available to industry to explore innovation. Powered-lift manufacturers and operators may petition for exemption if they develop new and novel approaches to address powered-lift issues. Any member of the public may also petition for rulemaking to request the FAA consider specific revisions or new regulations, as necessary.

automation.”⁴⁵⁴ Although the NPRM proposed requirements for pilot certification and operation of powered-lift, some commenters addressed autonomous powered-lift in response to the proposed SFAR.

Sabrewing Aircraft Company (SACO) approved the NPRM’s general approach to powered-lift certification as applicable to manned operations but proposed that remote pilots who operate powered-lift that use auto-flight control systems and no manual flight controls should be exempt from the proposed requirements of a powered-lift pilot certificate. The commenter argued that, because these aircraft have no manual flight controls, demonstrated manual pilot proficiency should not be required. SACO also stated these vehicles would be operated in auto-pilot mode for all phases of flight with remote pilots using “push buttons” to change flight modes (takeoff, cruise, descent, etc.). The commenter proposed that these remote pilots should instead be required to, first, be familiar with IFR rules and procedures for rotorcraft operations during arrivals and departures and, second, possess at least a commercial certificate with any category rating and the corresponding instrument rating.

One commenter suggested that waivers should be granted for autonomous cargo-only powered-lift flights conducted in remote offshore locations such as mining sites and offshore platforms. The commenter stated that operational risks are lower in these remote locations because there are few, if any, people or critical public infrastructure located in these areas, and the only conflicting air traffic is offshore helicopters at low altitudes. The commenter argued that relaxing regulatory requirements would—in addition to enhancing the efficiency of material transportation to remote locations—provide the FAA with early data to aid its decision-making processes and increase readiness for passenger flights on both crewed and uncrewed powered-lift. Lastly, the commenter noted issues requiring consideration before deploying autonomous powered-lift flights to these remote locations, including the need for some form of certification of safety pilots who would need to monitor and potentially take control of the aircraft.

While industry may manufacture an unmanned powered-lift, this rulemaking is not addressing aircraft certification, airman certification, or operational

requirements of such an aircraft and, thus, addressing pilot certification in this context is outside the scope of this rulemaking. Any UAS falling outside the requirements of part 107 would require exemptions and/or other FAA authorization to operate.

A pilot stated that the NPRM either misunderstands or ignores the latest automated technologies, from sensor-fusion to auto-flight, auto-landing, and auto-recovery systems that will render some of the SFAR requirements obsolete. The commenter recommended more thoroughly considering these automated technologies. Similarly, AUVSI expressed concern that an overly conservative application of legacy requirements to regulate fully electric highly autonomous aircraft will not promote safety or serve the AAM industry. Further, an individual stated that greater levels of autonomous controls and detection sensors will be necessary at some point to address saturation. The commenter emphasized that onboard and decentralized ground sources will initially be needed to augment controls, but that fixed routes and pilot or centralized ground control will not be necessary long term. The individual also raised the issue of cyber resiliency. The FAA did not propose any new or prescriptive aircraft certification procedures in relation to new technology because certifying powered-lift through the special class process allows the FAA to address the novel features of unique and nonconventional aircraft without the need for additional processes such as special conditions or exemptions that would be required if the FAA used the airworthiness standards already in place.

Other commenters expressed concern that the proposed rule did not adequately consider automation and emerging technologies. AUVSI noted this concern and encouraged the FAA to acknowledge the safety benefits that automated systems can provide for powered-lift operations and training. Similarly, L3Harris stated that Simplified Vehicle Operations concepts will facilitate the safe certification, training, and entry into service of these aircraft. SAE International contended the level of automation across the various VTOL-capable aircraft in process requires a more flexible, performance-based approach to certification. FlightSafety International, Inc. requested the FAA clarify certain statements in the NPRM regarding SVO, to recognize that many powered-lift in design have SVO and to more accurately characterize new VTOL AAM aircraft coming to the civilian market.

The FAA recognizes that autonomous powered-lift may be developed for the market in the future and that a subsequent rulemaking addressing autonomous aircraft and their operations could be necessary. Notwithstanding, the FAA’s scope in this powered-lift SFAR only addresses piloted powered-lift. Because the comments are outside the scope of this rulemaking, the FAA did not amend the proposed regulatory text. Additionally, concerns regarding SVO requiring a more flexible, performance-based approach to pilot certification are adjudicated by virtue of the approach taken to ensure waiver of a certain task is possible in circumstances where a powered-lift is not capable of performing a certain task during the aircraft certification process as outlined in section V.H.1. of this preamble.

Therefore, the FAA did not revise the proposed SFAR in response to these comments.

XII. Comments to Regulatory Impact Analysis

The FAA invited interested persons to participate in this rulemaking by submitting written comments, data, or views on the regulatory impact analysis for the proposal. Specifically, the FAA requested information and data that could be used to quantify the incremental benefits and costs of the finalized rule. The FAA also requested information on the assumptions and uncertainties discussed in the regulatory impact analysis. Presented below is a summary of those comments.

Many commenters stated that the costs of the proposal could be as much as four times greater than what was presented in the regulatory impact analysis. The FAA thanks the commenters for their input and acknowledges not all costs of the proposed SFAR were monetized due to a lack of information to develop informed estimates. The FAA stated in the proposal that individuals and entities choosing to operate powered-lift would incur incremental costs to do so, but on a scale no greater than the costs imposed on individuals and entities choosing to operate airplanes and rotorcraft under existing regulations. The FAA concedes that the analysis of the proposal could have better emphasized that not all costs were monetized. For the analysis of the final rule, the FAA has incorporated information received during the notice and comment period and as a result has revised the monetization of the rule’s costs.

A commenter stated it engaged NERA Economic Consulting to assist with

⁴⁵⁴ Integration of Powered-Lift: Pilot Certification and Operations; Miscellaneous Amendments Related to Rotorcraft and Airplanes NPRM, 88 FR 38947 (June 14, 2023).

estimating the total cost of the NPRM. The analysis concluded that the proposed rules would impose social costs of approximately \$961.9 million over the 10-year regulation period. The estimate included \$695.8 million attributable to the cost of full flight simulators (FFS) and associated infrastructure based on industry data indicating that each manufacturer would require six FFSs. The same analysis also concluded that the proposed 45-minute fuel reserve requirement would cost approximately \$127.8 million due to disruptions in optimized charging cycles, leading to reduced battery life and more frequent battery replacement. The same commenter also provided information estimating the cost for manufacturers to provide dual-control aircraft for the purpose of training (\$93.75 million over 10 years) and information for the number of individuals that would be required to operate the fleet of aircraft anticipated to enter the fleet over the 10-year period of the SFAR.

The FAA values the many comments submitted on the costs of the regulatory impact analysis for the proposed rule, and especially those comments containing information or data that can be used to monetize costs. Based on information received from one of the commenters the FAA has revised the regulatory impact analysis for the finalized rule to reflect the monetization of costs associated with the minimum fuel reserve requirement and the provision of dual-control aircraft for training. In addition, the forecast for pilots required to operate the powered-lift anticipated to enter the fleet has been revised upward.⁴⁵⁵ The same commenter also provided an estimate of costs for full flight simulators and the associated infrastructure to house them. The FAA notes the final rule provides three pathways for relief from costs for the provision of dual-control aircraft for the purpose of training. The costs for the alternative pathways are not included as this would create double-counting of costs for the SFAR and are not included in the costs of the final rule.

The first pathway provides relief by allowing for flight training in an aircraft with a single-control accessible to two pilot stations. Without this relief, the dual controls requirement of § 91.109 is aircraft generic and would require dual controls in powered-lift when used for

flight instruction. Furthermore, a manufacturer needs to determine what markets or operations they want their aircraft to be used for (*i.e.*, flight training for part 135 passenger carrying operations) and design their aircraft to meet the operational rule requirements for that operation or market. A single control accessible to two pilot stations would likely be less costly to design and build than a dual control configuration and therefore be a cost savings to an OEM. Furthermore, this provision relieves the manufacturer from the cost of developing and building an FFS to conduct flight training.

The second pathway for relief is the allowance for 100 percent use of FFSs for the provision of training. The use of FFS for training can be advantageous compared to flight training in aircraft. For example, FFSs can be used for executing flight scenarios that typically do not occur in aircraft or for practicing emergency procedures that are likely too dangerous to accomplish in an aircraft.⁴⁵⁶ As well, access to FFSs can be available for as many as 24-hours per day.

The third pathway for relief from the requirement that training be conducted in a dual-control aircraft is deviation authority. This pathway permits, based on future advancements in technology, the FAA to issue deviation authority to facilitate flight training in powered-lift with a single functioning flight control.

One commenter stated that applying a discount factor to future year training costs was unnecessary because the costs are already based on present-day costs.

The FAA notes that Federal agencies, including the FAA, follow guidance on the development of regulatory analysis provided by the Office of Management and Budget in Circular A-4.⁴⁵⁷ Circular A-4 requires estimated costs and benefits of rules to be presented in constant, undiscounted dollars, and using a present value discount rate.⁴⁵⁸ Discounting provides an accurate assessment of benefits and costs that

occur at different points in time or over different time horizons.

Some commenters stated the FAA did not accurately reflect the cost of flight time. One commenter stated the cost of the powered-lift category add-on for each pilot involved in the FSB should be included because this cost would be to meet a requirement in excess of the ICAO SARPs for pilot certification.

In response, the FAA notes that while an FSB is typically established for large jet and propeller aircraft, the requirement for an FSB is not exclusive to these kinds of aircraft. Accordingly, the costs for the FAA to establish an FSB are not included in the regulatory impact analysis for this final rule because the requirement existed prior to this rule. Additionally, the FAA has taken into consideration the guidance outlined in ICAO Document 10103, specifically Annex 1, Chapter 2, Section 2.1—Personnel Licensing. The FAA will ensure a sufficient level of safety while considering these recommendations; however, the FAA will not implement these measures at this time. The FAA will undertake measures to align with ICAO standards, as practicable, at such time when ICAO's recommendations become standards.

One commenter stated that accounting for 10 days of training to obtain a category add-on and type rating was not sufficient and that it would take several months.

The FAA appreciates the comment and understands why there may be confusion between what is already required by regulations versus new requirements because of this final rule. Prior to the final rule, regulations existed that prescribed the requirements for an individual to achieve a commercial pilot certificate with a powered-lift category rating. Since only the incremental costs of proposed rules are evaluated, only the cost of achieving the type rating is evaluated. Furthermore, the FAA further asserts that the SFAR provides relief to individuals seeking a powered-lift type rating by providing alternative pathways to certification. These alternative pathways allow for an airman that holds a commercial pilot certificate with either an airplane or rotorcraft rating to be eligible for a powered-lift type rating.

Commenters stated that the regulatory impact analysis did not properly account for the resources and timeline implications associated with its implementation, as well as the impact of potential entry into service delays due to an unprecedented use of aircraft for pilot certification. One commenter contended that if the FAA proceeds with the notice and comment

⁴⁵⁵ The pilot forecast provided in the NPRM failed to account for operational redundancy due to leave (*i.e.*, vacations, sick leave, training) and job turnover (*i.e.*, retirements and pilots changing jobs). Accordingly, the FAA adjusted the forecast for the number of pilots that would be required to operate the powered-lift upward.

⁴⁵⁶ Several eVTOL manufacturers have contracted with part 142 certificate holders for the provision of pilot training. CAE reports it is working with Joby, Vertical Aerospace and BETA Technologies, while Flight Safety International is working with Lilium. Sources: www.ainonline.com/aviation-news/business-aviation/2023-03-01/training-providers-gear-aam-market; lilium.com/newsroom-detail/lilium-flight-safety-international-partnership.

⁴⁵⁷ OMB Circular A-4 (whitehouse.gov). The link provided is to the current version of Circular A-4. The current version was released after the proposed SFAR was published. The analysis for the finalized powered-lift SFAR uses applies the present value discount rates used in the proposed SFAR in order more easily assess the change in costs between the proposed and finalized SFAR.

⁴⁵⁸ Circular A-4 has been revised since publication of the proposed SFAR.

rulemaking for each device's Qualification Performance Standards, the RIA should be updated to reflect associated costs including opportunity costs of delayed entry-into-service.

The FAA notes that, as discussed in section IV.C. of this preamble, this final rule will establish a streamlined process in accordance with new § 194.105(b) allowing an applicant of a powered-lift FSTD to forego the notice and comment period required for the proposed QPS if the FAA finds it is not in the public interest, or a prior opportunity to comment on a substantially identical proposed QPS has been provided. The FAA finds these regulatory exceptions will address commenters' concerns about resources and timeliness in proposed QPS publication. Additionally, the FAA anticipates working collaboratively with the FSTD sponsor and/or manufacturer to develop the proposed QPS to preemptively address any comments or concerns the public may raise during the open comment period. Should a notice and comment process be required, the FAA intends to mirror the period of time necessary for notice, comment, and comment adjudication with that timing typically provided for in the certification of special classes of aircraft process.

XIII. FAA Readiness

Several commenters emphasized the importance of the FAA's preparation in the implementation of this final rule. NATA stated that the FAA should ensure proper allocation of financial and human resources while maintaining adaptability without unnecessary delays. NATA recommended using a rulemaking committee that includes industry representatives, which it said could convene quickly and ensure powered-lift regulations achieve their objectives. Eve and GAMA expressed concerns about the FAA's resource limitations and the agency's ability to support the SFAR's framework in a timely manner, specifically concerning pilot certification and training. Eve recommended the FAA assess how proper resources and personnel will be assigned to successfully implement the SFAR framework.

Similarly, Supernal stated that the FAA must demonstrate that it has sufficient resources to oversee the airman qualifications and operations requirements. Supernal further stated that the effectiveness of the powered-lift rules would be greatly diminished if the FAA does not have the resources to support the airman qualifications and operations requirements for powered-lift operations. Supernal expressed

particular concern over the available pool of FAA pilots to support the number of AAM entities that will be completing the FSB approval process in the coming years.

A rulemaking committee is typically formulated prior to the commencement of rulemaking to ensure industry representatives can provide recommendations to the agency. Upon initial publication of an SFAR, the FAA does not view standing up a rulemaking committee as a beneficial use of resources because the main task of a rulemaking committee—recommendations for a rule—will be complete. Instead, as commenters asserted, the FAA must prioritize providing proper, timely training and qualifications of its workforce, which inherently includes dialogue and information sharing between industry and the FAA necessary to standup a qualified workforce. However, as the SFAR matures, the FAA does not foreclose the possibility of the formation of a rulemaking committee to gather information and properly inform the follow-on permanent rulemaking. Specific to powered-lift, this process will ensure the FAA can utilize the real-world experiences from operators of powered-lift. The information gathered via operator experience and industry input will further inform the FAA's subsequent rulemaking to codify powered-lift permanently in the rules.

The FAA agrees that the proper allocation of resources to this issue is critical to the success of this SFAR and the powered-lift industry and that rule effectivity is largely dependent on the Agency's ability to support implementation. AAM and powered-lift operations are part of the Administrator's foremost priorities; accordingly, the FAA is allocating resources to ensure that industry has the tools and regulatory structure necessary to successfully initiate powered-lift certification and operations. Additionally, as it pertains to FAA pilots, this final rule adds FAA test pilots and ASIs into the population of pilots that may utilize the alternate experience requirements as set forth by part 194 to further develop a pool of fully certificated and rated powered-lift pilots.

XIV. Definitions

In § 1.1, the FAA defines powered-lift as a heavier-than-air aircraft capable of vertical takeoff, vertical landing, and low speed flight that depends principally on engine-driven lift devices or engine thrust for lift during these flight regimes and on nonrotating

airfoil(s) for lift during horizontal flight.⁴⁵⁹

A. Definition of Powered-Lift

One commenter stated the existing powered-lift definition does not specify whether the engine-driven lift devices or engine thrust must be variable or fixed. The commenter said this distinction could impact classification of some types of aircraft, citing the example of a tiltrotor aircraft that can vary its engine thrust between vertical and horizontal flight modes. The individual suggested that the FAA clarify this point in its final rule and provide examples of types of aircraft that qualify (or do not qualify) as powered-lift.

Tiltrotors, as defined in § 36.1, are a subset of powered-lift. Aircraft that utilize fixed vertical rotors that provide the lift during hover and low speed flight combined with a wing and horizontally mounted propellers for cruise flight would also meet the definition of powered-lift. Additionally, aircraft with variable or vectored thrust, similar to the military AV-8 Harrier, would meet the definition of powered-lift. The FAA has no plans to change the part 1 powered-lift definition. See discussion on § 21.17(b) in this preamble.

One commenter stated that the phrase used to classify powered-lift⁴⁶⁰ was not fully vetted, resulting in other aircraft like the AV-8, F-35B, AW-609, and V-280 being "roped into" the powered-lift category. The commenter also stated that the fourth axis controllers were not sufficient to warrant a separate classification. The individual suggested that a better definition would incorporate the control strategy employed by a pilot to command a desired flight path in the powered-lift definition.

First, it is unclear what the commenter means by "classification;" although, the FAA interprets these comments to mean the FAA should reevaluate the powered-lift definition because of the noted characteristics of specific military or currently uncertificated aircraft. The commenter did not provide sufficient rationale for revising the definition. Furthermore, the FAA disagrees that the definition should include information pertaining to control strategies because aircraft

⁴⁵⁹ [www.ecfr.gov/current/title-14/part-1/section-1.1#p-1.1\(Powered-lift\)](http://www.ecfr.gov/current/title-14/part-1/section-1.1#p-1.1(Powered-lift)).

⁴⁶⁰ See 14 CFR 1.1: "A heavier-than-air aircraft capable of vertical takeoff, vertical landing, and low speed flight that depends principally on engine-driven lift devices or engine thrust for lift during these flight regimes and on nonrotating airfoil(s) for lift during horizontal flight."

definitions are based on how the aircraft creates lift and moves through the air. Creating an aircraft definition that is based on how the pilot interacts with the aircraft would create a disconnect with the existing definitions and likely create overlap where aircraft could fall under multiple definitions. The definitions in part 1 are used for complying with regulations dealing with pilots' qualification, operations, certification, and many others. Defining the aircraft types based on the piloting control aspects may make more sense for the pilot qualification requirements, but defining the aircraft in this way would not make sense for other aspects of operations, air traffic, and aircraft certification. Finally, the FAA believes the current definition of powered-lift (as stated in § 1.1) is specifically tailored to encompass the various types of aircraft envisioned as powered-lift, including some of the aircraft referenced by the above commenter, such as the AV-8, F-35B, and AW-609, should those aircraft enter the civilian market. In fact, the FAA references some of these aircraft as specific examples of powered-lift.⁴⁶¹

HAI stated that the definition of powered-lift does not consider current and future AAM aircraft like eVTOLs, which do not all depend upon "nonrotating airfoil(s) for lift during horizontal flight" and are therefore excluded. HAI said this is inconsistent with the NPRM's intent to cover "aircraft configuration changes such as tilt-wing, tiltrotor, or tilt-propeller; thrust vectoring; direct-lift; or other means,"⁴⁶² when thrust vectoring and direct lift do not depend upon nonrotating airfoils for horizontal flight.

The powered-lift definition does not exclude future AAM technology as it is agnostic to how propulsion is utilized to create lift, and the device that is used to generate the lift during vertical and horizontal flight is not prescribed. The definition does not exclude electric propulsion, vectored thrust, or other "non-conventional aircraft engines," therefore allowing flexibility. The only types of VTOL aircraft that it would exclude would be aircraft that never transition onto a wing (or non-rotating airfoil as the definition says). These aircraft types would qualify as rotorcraft and other novel VTOL aircraft, according to the existing § 1.1 rotorcraft definition, which are not covered in the SFAR.

One commenter in the process of developing a hybrid-electric multi-engine part 23 airplane supported categorizing electric vertical take-off and

landing (eVTOL) aircraft as "powered-lift" because it is consistent with the definitions in § 1.1 regarding powered-lift.

The FAA agrees with the commenter and the definition of "powered-lift" under § 1.1. In recent years, rapid technological advancements in powered-lift have progressed across the industry, particularly with eVTOL aircraft. And powered-lift will be used to support the deployment of AAM operations, which the FAA anticipates will include eVTOL aircraft.

B. Definition of Flight Modes

One commenter sought clarification regarding the criteria that will be used to evaluate the speed at which a powered-lift can transition between flight modes and the associated definitions. The commenter also requested clarification on how powered-lift with faster transition time between modes of flight would be accounted for in the rule.

The transitional speed between vertical-lift and wing-borne flight modes has no bearing on which class, as defined in § 1.1, will be assigned to a specific aircraft design during its certification process. The transition time between vertical-lift and wing-borne flight modes does not change the performance requirements established by the rules. An aircraft with greater performance capabilities is still required to meet the requirements stipulated in each applicable rule.

EASA requested clarification on the definition of "horizontal lift" in the context of powered-lift operations. In the NPRM, the FAA incorrectly referred to "horizontal lift" when it was discussing part 136 operations.⁴⁶³ Instead, the FAA intended to use the term "horizontal flight" because it was referring to "wing-borne flight mode," which the FAA defines as "a mode of flight . . . [that] depends exclusively or partially on nonrotating airfoil(s) for lift during takeoff, landing, or *horizontal flight*" (emphasis added).

In the NPRM, the FAA explained the differences between wing-borne and vertical-lift flight modes.⁴⁶⁴ Specifically, the FAA explained that "wing-borne flight mode" refers to powered-lift that are operating like traditional airplanes

and "vertical-lift flight mode" refers to powered-lift that are operating like traditional rotorcraft. Although the FAA did not receive specific comments on how it defines these two flight modes, it did receive comments seeking clarification on how certain flight characteristics, such as transitions, would be classified. In addition, as part of the final rule, the FAA is providing more flexibility than originally proposed by promulgating some performance-based regulations. Clearly defined flight modes will help ensure these performance-based standards are implemented safely and that operators have a clear understanding of when they are in vertical-lift flight mode and when they are in wing-borne flight mode.

Consequently, in order to provide additional clarity on these flight modes, the FAA has determined that codifying the flight modes language into definitions under § 194.103 is necessary. "Vertical-lift flight mode" is defined as "a mode of flight where a powered-lift: (1) is in a configuration that allows vertical takeoff, vertical landing, and low-speed flight; and (2) depends principally on engine-driven lift devices or engine thrust for lift." As explained in the NPRM, this flight mode resembles the characteristics of rotorcraft operations. In addition, "wing-borne flight mode" is defined as "a mode of flight where a powered-lift is not operating in the vertical-lift flight mode as defined and depends exclusively or partially on nonrotating airfoil(s) for lift during takeoff, landing, or horizontal flight." As explained in the NPRM, this flight mode largely resembles the characteristics of airplane operations.

C. Definition of Heliport

In the NPRM, the FAA proposed to update the definition of Heliport by adding the term "powered-lift" to ensure that powered-lift could utilize a heliport for takeoff and landing operations. In the NPRM, the FAA requested comments on the viability of powered-lift using heliports for takeoff and landing operations. The FAA did not receive any comments on this proposed change to the definition or on the viability of powered-lift using heliports. However, the FAA would like to clarify that adding the term "powered-lift" to the definition of heliport does not imply that all powered-lift would be capable of using heliports. In order for a powered-lift to use a heliport, that powered-lift must be capable of meeting or exceeding the performance requirements for helicopters with respect to their controllability and maneuverability. Additionally, the powered-lift cannot

⁴⁶¹ See sections V.A, V.B, and V.J.3.

⁴⁶² 88 FR 38952, June 14, 2023.

⁴⁶³ See 88 FR 38949 (June 14, 2023) ("[T]he FAA applies operational requirements specific to helicopter operations within part 136 to powered-lift operations because the FAA expects powered-lift will hover . . . similarly to helicopters when conducting air tours, except when relying on horizontal lift.").

⁴⁶⁴ See *Integration of Powered-Lift: Pilot Certification and Operations; Miscellaneous Amendments Related to Rotorcraft and Airplanes*, NPRM, 88 FR 38946, 39026 (June 14, 2023).

exceed the size and weight limitations established for a particular helicopter.

Ferrovial Vertiports requested the powered-lift final rule align its terminology and attributes for eVTOL landing facilities with the FAA's Office of Airports. Ferrovial stated that while the FAA conducts and gathers research to develop its performance-based Vertiport Advisory Circular, the FAA can adjust the SFAR to reflect the agency's guidance documents on this subject. This will provide consistency across FAA documents and offer clarity to industry and government and community leaders as they seek direction in integrating vertiports into future projects.

A vertiport is defined in the current FAA Vertiport Engineering Brief as an *area of land, or a structure, used or intended to be used, for electric, hydrogen, and hybrid VTOL aircraft landings and takeoffs and includes associated buildings and facilities.*⁴⁶⁵ In the future, the FAA may include this definition, or a definition consistent with it, in the SFAR or in the permanent powered-lift rule if it determines it is prudent to do so. Currently, there are varying powered-lift design concepts and performance characteristics, as well as diverse locations potentially needing vertiports. As a result, the FAA is conducting research in order to develop a performance-based standard for vertiports that will include performance classes for vertiport infrastructure with different design criteria. The performance classes will be based on the design characteristics and performance capabilities of differing VTOL aircraft groups. That standard is expected to be published in late 2025 in accordance with the results from the ongoing operational testing.

D. Definition of Autorotation

An individual commenter noted that the NPRM stated some powered-lift could be capable of autorotation.⁴⁶⁶ The commenter asked if this was correct, given that autorotation is defined in § 1.1 as a rotorcraft flight condition. In response to the commenter, the FAA has determined that adding "powered-lift" to the definition of "autorotation" is appropriate to ensure that when a regulation mentions autorotation, powered-lift that are capable of that maneuver are included in the intent of the regulation. Therefore, the FAA has revised the definition of autorotation making it applicable to powered-lift.

XV. Other Comments Related to Powered-Lift

A. Other Comments Related to Language or Definitions in the Powered-Lift NPRM

HAI commented that the FAA's approach to certifying powered-lift, as the FAA wrote in the NPRM, assumes "complex and unique design, flight, and handling characteristics." However, HAI implied this assertion contradicts other comments because the NPRM also cited the benefits of powered-lift as being "easier to design, simpler to construct, [and] less complicated to maneuver." Additionally, HAI cautioned that permanent changes to powered-lift made through the SFAR could make it difficult to remove or undo rules in the future.

First, the FAA asserts the comments regarding design and operation are not mutually exclusive; rather, they offer commentary regarding the current state of the powered-lift industry and its potential. The special class aircraft certification process under § 21.17(b) allows for the full range of design and construction complexity and ensures each aircraft will include all relevant 14 CFR Subchapter C (Aircraft) criteria, as well as other equivalent criteria if appropriate, when it is certificated. Second, the FAA has remained committed to re-evaluating the SFAR when appropriate. The FAA will routinely revisit the powered-lift SFAR regulatory framework within the ten-year period as it obtains operational data to ensure it remains as effective as possible.

An anonymous commenter asked what type of rating they would need to fly a Volocopter.⁴⁶⁷ The commenter opined that a Volocopter does not seem to meet the powered-lift definition under part 1 and that a pilot would not require anything beyond a helicopter rating because the Volocopter likely qualifies as a helicopter. The Volocopter is currently being worked as a concurrent certification project with the FAA and EASA. While specific questions about the type certification of the Volocopter are beyond the scope of this rulemaking, the FAA notes that, at this time, the Volocopter does not meet the definition of a powered-lift and, therefore, a pilot would not be required to hold powered-lift ratings on their certificate. Rather, a multicopter is considered a rotorcraft⁴⁶⁸ and would

⁴⁶⁷ A Volocopter is an electric multirotor helicopter manufactured by a company of the same name.

⁴⁶⁸ A multicopter is a rotorcraft that can have more than one rotor providing lift. Although multicopters are helicopters by definition, multicopters differ from the conventional helicopter

require the applicable rotorcraft category and helicopter class ratings, with any additional training requirements determined during the FSB phase.

B. Safety Systems or Procedures Not Addressed in the NPRM

A commenter expressed concern that the proposal did not contain any information regarding an emergency in a total failure situation. The commenter urged implementation of a safety system for powered-lift vehicles that lack the ability to glide or auto-rotate in a total system failure scenario. The commenter attached a previously submitted request to update parachute type ratings in § 65.121 and emphasized the importance of aircraft mounted parachute systems for eVTOL vehicles.

The FAA acknowledges that some powered-lift may lack an ability to glide or autorotate; however, during the aircraft certification process, as discussed in section IV.A. of this preamble, each aircraft will be evaluated against the existing airworthiness criteria to determine which rules will be applicable to that particular aircraft. The FAA is not requiring powered-lift to have a specific safety design feature, like a ballistic parachute, but instead will require the capability of a controlled emergency landing or an equivalent means to address the risks associated with certain failures like loss of power or thrust. In addition, it must be shown that any failure or combination of failures not shown to be extremely improbable must not result in a catastrophic event.

Airbus Helicopters stated that in § 194.302(y)(2) the FAA proposed to apply requirements applicable to transport category airplanes to large powered-lift in the absence of a uniform transport category standard for powered-lift. The proposed rule includes the following text: "The lifeline required by § 91.509(b)(5) must be stored in accordance with § 25.1411(g) of this chapter or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter." Airbus contends that an alternate path for compliance, similar to what is offered in § 91.509(b)(5), should also be available whenever a requirement that was developed for airplanes or helicopters of the normal or transport category is referred to in this SFAR.

models originally considered during the 2004 rulemaking because the takeoff and landing are intended to be automated and not require extensive pilot training and skill.

⁴⁶⁵ FAA Engineering Brief No. 105, *Vertiport Design* at 11 (Sept. 21, 2022).

⁴⁶⁶ 88 FR 39027 (June 14, 2023).

Although Airbus did not specifically identify regulations in which equivalent airworthiness standards should be considered, the FAA agrees that, in many cases, equivalent airworthiness criteria may be required to address unique features on powered-lift. As indicated throughout the NPRM, the FAA identified areas where specific airworthiness requirements required by operating rules may be met by other airworthiness criteria that the FAA has determined provide for an equivalent level of safety in accordance with § 21.17(b).

One commenter inquired whether the FAA considers specific standards for the implementation of congested area data bases for the HTAWS requirements in the context of powered-lift integration. The obstacle and terrain databases include data for congested areas and will be the same for HTAWS. In addition, this subject is covered in TSO-C194 and Section 2 of RTCA DO-309, which are incorporated by reference in this SFAR. These two documents will apply to HTAWS the same way they apply to helicopters. The SFAR sections addressing HTAWS are finalized at § 194.302(y) and (bbb) and § 194.306(s) and (ooo).

C. Other Comments Related to Powered-Lift Design

One commenter sought clarification on the expected proportional increase in surface area that some powered-lift or eVTOL aircraft may require to conduct a landing as compared to a helicopter when comparing similar passenger capacities.

Given the current number of powered-lift/eVTOL aircraft configurations under consideration, there could be an increase in surface area of the landing facility required for certain powered-lift. The need for an increase in surface area of a given landing facility will be driven by the unique performance characteristics and design features of the controlling powered-lift that will utilize that facility. As mentioned in the “heliports” discussion in section XIV.C. of this preamble, in order for a powered-lift to use a heliport, that powered-lift must be capable of meeting or exceeding the performance requirements for helicopters with respect to their controllability and maneuverability. Additionally, the powered-lift cannot exceed the size and weight limitations established for a particular heliport.

EASA said the SFAR’s approach lacks a cohesive link that explains how the aircraft certification approach is accounted for in operational limitations and airspace integration.

Part 1 includes definitions for different kinds of aircraft based on characteristics such as propulsion, flight, or landing. These aircraft definitions are then used for the purposes of determining the appropriate requirements for aircraft certification, pilot certification, and operational rule applicability.⁴⁶⁹ For instance, if an aircraft meets the definition of airplane, it must meet the airworthiness criteria set forth in parts 23 or 25 as applicable to airplanes. Powered-lift are type certificated as a special class aircraft, and the FAA will designate airworthiness requirements that match the safety levels of existing standards. Throughout the rules, the classification dictates how an aircraft is certificated, how a pilot is trained on operating that aircraft, how it is handled by air traffic control (ATC), how it is maintained, and how the FAA applies operating rules based on the aircraft in question.

Currently, powered-lift are able to proceed through type certification and conduct limited operations in the NAS—they already do this for flight testing and primarily under experimental designations. Notwithstanding, the SFAR creates a clear pathway for pilot certification and for a wider range of powered-lift operations, including commercial operations. Finally, the SFAR clarifies how certain airworthiness criteria required under the operating rules apply in the powered-lift context. Specifically, if an operating regulation requires a specific airworthiness criterion under part 23, 25, 27, or 29, the FAA may determine that an alternate airworthiness criterion applies to a certain powered-lift in accordance with the process under § 21.17(b).

Joby recommended the FAA include final rule preamble discussion clarifying that the FAA will consider detailed review of the aircraft, capabilities, existing systems and equipment, and operational use cases when making a determination about “unless otherwise authorized in the certificate holder’s approved minimum equipment list.”

Powered-Lift MMELs will be treated no differently than any other aircraft with regard to MMELs. The current process takes into account all of Joby’s concerns. Proposed MMEL relief normally comes from manufacturers or operators. The entity that requests the relief is responsible for “submitting an evaluation plan to the FOEB Chair for acceptance. The evaluation plan should

⁴⁶⁹ *Airplane* means an engine-driven fixed-wing aircraft heavier than air, that is supported in flight by the dynamic reaction of the air against its wings. See 14 CFR 1.1.

consider all phases of flight operation and demonstrate that flight operations with the proposed item inoperative have an equivalent level of safety to flight with the item operative and considering the next most critical failure.”⁴⁷⁰

Additionally, FAA Order 8900.1, Volume 8, Chapter 2, Section 3, Paragraph 8–67(C)(3) lists the justification information required to evaluate whether relief should be granted for an inoperative item. In addition to reviewing the justification items, the FOEB incorporates FAA MMEL policy letters and ensures the relief would not be contrary to § 91.213(b), which provides instruments and equipment excepted from a Minimum Equipment List. The equipment excepted from this requirement may not be instruments and equipment required by the airworthiness requirements under which the aircraft was type certificated for safe operations, instruments, and equipment required to be operational by an airworthiness directive pertaining to that particular aircraft, or any other instruments and equipment required by part 91.

EASA, when considering the use of High Voltage for many of the new entrants, requested information on whether the FAA considers particular operational and/or design provisions to cater for the risk posed by electric hazards during and after an emergency entry into water.

From the certification standpoint, the FAA is in the process of developing guidance pertaining to airworthiness criteria for ditching or emergency flotation for eVTOL powered-lift. Through the established process for type certification in accordance with § 21.17(b), applicants requesting a ditching or emergency flotation approval, the FAA would consider the risks associated with a water landing in an aircraft with a high voltage system when establishing the certification basis for that aircraft. The specific method on how a specific applicant complies with these requirements would then be documented in the means of compliance for each specific design approval.

EASA also sought clarification on the expected buoyancy and demonstrated sea states that will apply to those powered-lift opting to install floats in order to mitigate for the inability to meet § 135.183 (a) or (c). Buoyancy and sea states are defined within aircraft certification (combination of regulation and guidance material) if a ditching

⁴⁷⁰ FAA Order 8900.1 Volume 8, Chapter 2, Section 3 Flight Operations Evaluation Board, D. The Formal FOEB Meeting (3) (a).

approval is sought. If a powered-lift requested this approval, then the FAA would apply the appropriate airworthiness criteria from the existing airworthiness standards to meet the equivalent level of safety as required under § 21.17(b).

D. Congressional Comments

A U.S. Congressman said they sponsored a bipartisan amendment, which was unanimously passed by the House Transportation and Infrastructure Committee and incorporated into the 2023 FAA Reauthorization that passed the House of Representatives in July 2023. The Congressman suggested that the FAA consider this amendment and consult with the Department of Defense (DoD) on pilot qualifications before finalizing the SFAR.

A joint association letter also recommended consulting the Secretary of Defense regarding the U.S. Air Force Agility Prime Program and powered-lift deployed for military purposes such as the F-35B.

The FAA appreciates Congressional interest in the integration of powered-lift in the NAS. As discussed in section II of this preamble, the FAA has addressed requirements of section 955 of the FAA Reauthorization Act of 2024 into this final rule, including the provisions regarding pilot certification and performance-based energy reserve requirements.

As discussed in section V.D.2. of this preamble, during this rulemaking, the FAA carefully considered DoD's approach to pilot training and simulation. The FAA will continue to work with the DoD as powered-lift are integrated into the NAS and in future rulemaking activities. In addition to this rulemaking, the FAA has been engaged in a broader effort with the Department of Transportation as part of the AAM Interagency Working Group. The AAM IWG is a broad group of Federal departments and agencies, including DoD, whose mission is to foster leadership and interagency collaboration in the adoption and deployment of AAM. The FAA looks forward to continuing to learn from the Department of Defense about the use of, and research regarding, powered-lift.

XVI. Related Rulemakings

To integrate powered-lift into the NAS, the FAA is engaging in a multistep process to update the regulations applicable to powered-lift. These rulemakings include: the Update to Air Carrier Definitions, Airman Certification Standards and Practical Test Standards for Airmen: Incorporation by Reference,

and Modernization of Special Airworthiness Certification.

First, in the final rule *Update to Air Carrier Definitions*,⁴⁷¹ the FAA added powered-lift to the definitions of five kinds of air carrier operations: commuter, domestic, flag, on-demand, and supplemental to the part 110 regulatory definitions. Specifically, the definitions in part 110 apply to all operations under 14 CFR chapter I, subchapter G, which includes parts 135 and 136, as well as to the part 119 air carrier and commercial operator certification requirements. Therefore, the rules and applicability sections in 14 CFR chapter 1, subchapter G, would include use of powered-lift in those kinds of operations. Amending these definitions along with other provisions of part 119 enables powered-lift to engage in operations consistent with the applicable statutory framework that applies to air carrier and commercial operations.

Next, the Airman Certification Standards and Practical Test Standards for Airmen; Incorporation by Reference (ACS IBR)⁴⁷² revised certain part 61 regulations to incorporate the pilot certification testing standards by reference into the requirements for powered-lift pilot and flight instructor certification. As it pertains to powered-lift, the ACS IBR rule incorporated six powered-lift ACSs into part 61: (1) ATP and Type Rating for Powered-Lift Category, (2) Commercial Pilot for Powered-Lift Category, (3) Private Pilot for Powered-Lift Category, (4) Instrument Rating—Powered-Lift, (5) Flight Instructor for Powered-Lift Category, and (6) Flight Instructor Instrument Powered-Lift. Most of the Powered-Lift ACSs were drafted based on input from industry and the ACS Working Group and align with the areas of operation promulgated by the regulations for the respective certificates and/or ratings.

Finally, in the Modernization of Special Airworthiness Certification (MOSAIC) NPRM,⁴⁷³ the FAA proposed to amend rules for the manufacture, certification, operation, maintenance, and alteration of light-sport aircraft. Specifically, the current § 1.1 definition of light-sport aircraft excludes helicopters and powered-lift from being considered as light-sport aircraft. The FAA proposed to allow the airworthiness certification of rotorcraft

and powered-lift as light-sport category aircraft under § 21.190, provided these aircraft are certificated in accordance with the proposed performance-based requirements in part 22 using an FAA-accepted consensus standard as a means of compliance.

SAE International, CAE, AOPA, and L3Harris Commercial Aviation cited the MOSAIC NPRM as a notable related rulemaking. These commenters suggested the FAA should align the powered-lift SFAR with the MOSAIC NPRM, which they said describes and accommodates the enhanced safety of simplified flight controls and the benefits of a performance-based approach to certification. The MOSAIC rulemaking is in the proposal phase, working toward final rule publication. Notwithstanding, the FAA is internally coordinating to ensure that the powered-lift SFAR and the MOSAIC rule do not conflict. Specific discussion pertaining to how this rule has coordinated with the MOSAIC rule can be found in section V.A. of this preamble, regarding type rating requirements, and section VI.B.1. of this preamble, regarding § 91.113, the right-of-way rules.

CAE and NBAA referenced the Updating Manual Requirements to Accommodate Technology final rule which modernized regulations that require manuals to reflect improvements in technology. They recommended that the FAA revise the regulatory text regarding access to manuals to align with this final rule.

The *Updating Manual Requirements to Accommodate Technology* final rule creates flexibility in allowing electronic display of manuals without a rigid form and formatting. The FAA's position is that an operator may use Electronic Flight Bag (EFB) technology to meet the requirement for carrying the appropriate manuals while away from base.⁴⁷⁴ The powered-lift SFAR does not contravene the *Manual Requirements* final rule. In fact, an operator could apply for an authorization to use an EFB.⁴⁷⁵ Moreover, the powered-lift SFAR applies the current regulations to powered-lift operations. So, changes made within the regulations regarding manual requirements would also apply for powered-lift operators.

XVII. Severability

As discussed in section II. of this preamble, Congress authorized the FAA by statute to promote safe flight of civil aircraft in air commerce by prescribing,

⁴⁷¹ Final rule, *Update to Air Carrier Definitions*, 88 FR 48072 (July 28, 2023).

⁴⁷² Final rule, *Airman Certification Standards and Practical Test Standards for Airmen; Incorporation by Reference*, 89 FR 22482 (April 1, 2024).

⁴⁷³ *Modernization of Special Airworthiness Certification NPRM*, 88 FR 47650 (July 24, 2023).

⁴⁷⁴ See AC-120-76D *Authorization for Use of Electronic Flight Bags*.

⁴⁷⁵ 88 FR 34437 (May 30, 2023).

among other things, regulations and minimum standards for practices, methods, and procedures the Administrator finds necessary for safety in air commerce.⁴⁷⁶ Consistent with that mandate, the FAA promulgates the regulations described herein to facilitate the certification of powered-lift pilots and operation of powered-lift. However, the FAA recognized that certain provisions of this final rule approach operations and airman certification in unique ways due to the novel challenges presented with the integration of a new category of aircraft into the NAS. Therefore, the FAA has determined that various provisions of this SFAR are capable of operating independently of one another, are severable, and are able to operate functionally if severed from each other. In the event a court were to invalidate one or more of this final rule's unique provisions, the remaining provisions should remain unaffected and in force to the extent those provisions maintain their intended effect without the severed provisions, thereby allowing the FAA to integrate the operation of powered-lift within its Congressionally authorized role of

promoting safe flight of civil aircraft in air commerce.

XVIII. Regulatory Notices and Analyses

Federal agencies consider impacts of regulatory actions under a variety of executive orders and other requirements. First, Executive Order 12866, Executive Order 13563, and Executive Order 14094 ("Modernizing Regulatory Review"), direct that each Federal agency shall propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify the costs. Second, the Regulatory Flexibility Act of 1980 (Pub. L. 96–354) requires agencies to analyze the economic impact of regulatory changes on small entities. Third, the Trade Agreements Act (Pub. L. 96–39) prohibits agencies from setting standards that create unnecessary obstacles to the foreign commerce of the United States. Fourth, the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4) requires agencies to prepare a written assessment of the costs, benefits, and other effects of proposed or final rules that include a Federal mandate that may result in the 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 any one year. The current threshold after adjustment for inflation is \$183 million using the most current (2023) Implicit Price Deflator for the Gross Domestic Product. This portion of the preamble summarizes the FAA's analysis of the economic impacts of this rule. The FAA has provided a detailed Regulatory Impact Analysis (RIA) in the docket for this rulemaking.

In conducting these analyses, the FAA has determined that this rule: (1) will result in benefits that justify costs; (2) is a "significant regulatory action" as defined in section 3(f)(1) of Executive Order 12866 (as amended by Executive Order 14094); (3) will not create unnecessary obstacles to the foreign commerce of the United States; and (4) will not impose an unfunded mandate on State, local, or Tribal governments, or on the private sector.

In accordance with OMB Circular A–4 (at www.whitehouse.gov/omb/circulars/), an accounting statement showing the classification of impacts associated with the rule is provided below.

TABLE 10—OMB A–4 ACCOUNTING STATEMENT

Category	OMB A–4 Accounting Statement						Notes
	Primary estimate	Low estimate	High estimate	Dollar year	Discount rate (%)	Time horizon (years)	
Benefits							
Annualized monetized benefits.	Not Estimated	Not Estimated	Not Estimated	N/A	N/A	N/A	
Annualized quantified, but non-monetized, benefits.	N/A	N/A	N/A	N/A	N/A	N/A	
Unquantified benefits	<i>Mitigates Risk and Narrows Safety Gap</i>—The SFAR establishes a regulatory structure that leverages airplane, helicopter, and rotorcraft rules to narrow a safety gap that would otherwise exist absent the rule. <i>Data Collection</i>—For the duration of the SFAR, the FAA will gather data and information to evaluate the temporary requirements to determine the most appropriate permanent rulemaking path for powered-lift. The FAA anticipates gathering data and information through: (1) formal information collections; (2) regulatory requirements; (3) regular, formal and informal interactions with the public, including conferences, data-sharing systems, and outreach initiatives; and (4) informal anecdotal information and observations. <i>Alternate Pathway to Pilot Certification</i>—The SFAR introduces an alternate pathway for pilots to obtain powered-lift ratings on the commercial pilot certificates.						The powered-lift industry is nascent, and the timeframe in which commercial operations will become viable is unknown. A certain degree of operational growth is dependent on industry readiness once the regulatory framework is in place.

⁴⁷⁶ 49 U.S.C. Subtitle VII, Part A, Subpart i, Section 40113, Administrative, and Subpart iii, Section 44701, General Requirements; Section 44702, Issuance of Certificates; Section 44703,

Airman Certificates; Section 44704, Type Certificates, Production Certificates, Airworthiness Certificates, and Design and Production Organization Certificates; Section 44705, Air Carrier

Operating Certificates; and Section 44707, Examination and Rating of Air Agencies.

TABLE 10—OMB A-4 ACCOUNTING STATEMENT—Continued

Category	OMB A–4 Accounting Statement						Notes
	Primary estimate	Low estimate	High estimate	Dollar year	Discount rate (%)	Time horizon (years)	
	Relief from the provision of dual-control a/c for training—The SFAR provides for three alternatives to accomplish training for aircraft that are not equipped with dual-controls, which are: (1) accomplishing training in a powered-lift equipped with a single functioning flight control accessible by both the student and instructor; (2) accomplishing 100% of training in a full flight simulator that is combined with in-aircraft solo aeronautical experience; and (3) FAA can issue deviation authority to facilitate flight training in powered-lift with a single functioning flight control based on future advancements in technology.						
Costs							
Annualized monetized costs: 2% PV.	\$101.8	\$96.4	\$107.6	2022	2	10	Costs are incurred as powered-lift enter the fleet. For the high estimate, it is determined powered-lift deliveries start during the year of the SFAR's publication. For the primary estimate and the low estimate, it is determined powered-lift enter the fleet in year 2 and 3, respectively.
Annualized monetized costs: 3% PV.	103.7	97.4	110.3	2022	3	10	
Annualized monetized costs: 7% PV.	110.9	101.1	121.70	2022	7	10	
Annualized quantified, but non-monetized, costs.	N/A	N/A	N/A	N/A	N/A	N/A	
Unquantified costs	Equipment Requirements—The SFAR imposes equipment requirements which would add costs for entities manufacturing and/or operating powered-lift. These costs could include, but are not necessarily limited to, the purchase and installation of equipment, the decrease of aircraft performance due to added weight of required equipment, and the cost to perform required maintenance and repairs of equipment. The equipment requirements being imposed generally affect powered-lift with 6 or more seats for which 2 pilots are required, or for powered-lift with 10 or more seats. At present, there is only one powered-lift undergoing type certification that meets these requirements. Advanced Qualification Program—The FAA determined that the same safety standard imposed in § 135.3(b) for commuter operations involving airplanes for which two pilots are required by type certification should apply to powered-lift requiring two pilots by type certification. The safety standard requires these kinds of operations to comply with subparts N and O of part 121, which are multiengine specific. At this time, the FAA is not revising part 121 to accommodate powered-lift as part 121 operations are not anticipated during the period of the SFAR. Thus, for these operations, the FAA will require certificate holders to comply with subpart Y of part 121. At present, there is only one powered-lift undergoing type certification that meets these requirements.						The costs imposed by the finalized rule provide for the integration of powered-lift into the NAS expeditiously without compromising safety. Generally, the rule mirrors requirements that are applicable to operators of airplanes and rotorcraft.
Transfers							
Annualized transfers From whom to whom?	Not Applicable.						
Miscellaneous							
Effects on State, local, or Tribal Govt.	None.						
Effects on small businesses.	Generally, entities affected by the rule are small, and the FAA does not anticipate that they will be negatively impacted by this rule. The introduction of powered-lift operations into the NAS is an emerging market, and the number of entities that will be impacted by this rule is uncertain.						
Effects on wages	None.						
Effects on growth	The rule puts a regulatory framework in place for the safe integration of powered-lift in the National Airspace System. A certain degree of operational growth is dependent on industry readiness.						

A. Summary of the Regulatory Impact Analysis

1. Data and Assumptions

This Special Federal Aviation Regulation finalizes alternate eligibility requirements to safely certificate initial groups of powered-lift pilots, as well as determine which operating rules to apply to powered-lift on a temporary basis. This will enable the FAA to gather additional information to determine the most appropriate permanent rulemaking path for these aircraft. The analysis for the regulatory evaluation is based on the following assumptions and data sources.

- The FAA uses a 10-year time period of analysis.⁴⁷⁷ The analysis uses 2022 constant dollars. Year 1 of the period of analysis, which would correlate with the effective date of the final, is used as the base year.
- The analysis provides a range of costs from low to high. The FAA considers the primary estimate of costs to be the base scenario.
- It is estimated that it would cost an individual approximately \$22,124 to accomplish the training and testing required for a type rating.⁴⁷⁸ The FAA believes that in many circumstances this training and testing would be at the expense of entities utilizing powered-lift in its operations.
- To forecast the number of pilots required to operate the powered-lift fleet, the FAA used a model published by the NBAA. The model estimates the number of pilots required to operate a fleet of aircraft.⁴⁷⁹ To account for pilot turnover, a rate of 8.9 percent, annually, is used.⁴⁸⁰

- The estimated battery life for an eVTOL is 1,600 hours.⁴⁸¹ The cost per battery is \$60,000.⁴⁸²
- It is estimated that 20 dual-control aircraft and 60 full flight simulators will be required for the provision of training at a cost of \$3.9 million per dual-control aircraft and \$10 million per full flight simulator.⁴⁸³
- Operational and maintenance rules under parts 43, 91, 97, 135, and 136 that are applicable to aircraft continue to be applicable to powered-lift because powered-lift meet the definition of an aircraft in § 1.1. Unless otherwise stipulated in this final rule, either the more conservative airplane-specific operational rules or those for rotorcraft/helicopters will apply to powered-lift. Additionally, in some instances, performance-based alternatives and deviation provisions provide additional flexibility in the operational rules for powered-lift.
- The FAA uses a two percent, three percent, and seven percent discount rate to quantify present value costs and cost savings.⁴⁸⁴

2. Summary of Individual Proposed and Finalized Regulatory Impacts

The powered-lift currently undergoing the type certification process are comparatively different compared to the powered-lift proposed during the 1990s. Currently, manufacturers are proposing aircraft and operations that were not conceptualized in the 1997 rulemaking that introduced the powered-lift category of aircraft into the airmen certification rules. When airmen certification rules were introduced, it

was the FAA’s intention to initiate further rulemakings to develop operational rules for powered-lift. However, these intentions never came to fruition. Without this rulemaking, civilian pilots will be unable to obtain powered-lift ratings necessary for industry to scale operations intended for these new and novel aircraft. Should type-certificated powered-lift become available before this rule is finalized, individuals holding an airman certificate with a powered-lift category rating would be permitted to act as PIC of powered-lift operations.

Furthermore, if powered-lift were available for civil operations today, they would not be subject to operating rules that are specific to an aircraft category or class. Instead, the only rules that would apply are the part 91 and 135 rules that are specific to “aircraft.” Through this SFAR, the FAA provides operating rules applicable to powered-lift and a pathway for pilots to obtain powered-lift ratings through alternate aeronautical experience requirements and expanded logging provisions. The regulatory evaluation portion of this SFAR evaluates the economic impact of the amendments.

The tables below provide an evaluation of the economic impact of the proposed rule and the final rule. The first table of the two replicates the amendments as proposed, and the second table summarizes only those amendments that have either been added or revised for the final rule. The tables are designed to quickly inform the reader of the changes and their resulting impacts.

TABLE 11—SFAR—PROPOSED AMENDMENTS

Section	Proposed amendment	Impact
Part 43—Maintenance, Preventive Maintenance, Rebuilding, & Alterations.	§ 43.3(h) <i>Persons authorized to perform maintenance, preventive maintenance, rebuilding, and alterations.</i>	Provides relief to operators of powered-lift on a scale that is equivalent to the relief provided to operators of rotorcraft.
	§ 43.15(b) <i>Additional performance rules for inspections.</i>	Imposes a regulatory burden on operators conducting powered-lift operations on a scale no greater than that imposed on like operators conducting operations with rotorcraft.
Part 91—General Operating and Flight Rules.	§ 91.9(a)(b) <i>Civil Aircraft Flight Manual.</i>	Imposes costs on operators of powered-lift on a scale equivalent to costs imposed on operators of airplanes or rotorcraft.
	§ 91.103(b)(1) <i>Preflight action.</i>	
	§ 91.109 <i>Flight instruction; Simulated instrument flight.</i>	
	§ 91.151 <i>Fuel requirements for flight in VFR conditions.</i>	

⁴⁷⁷ In addition, the FAA acknowledges uncertainty in estimating incremental impacts of this proposed rule since the FAA has yet to type certificate a powered-lift.

⁴⁷⁸ The estimated cost for this provision is detailed in the regulatory impact analysis prepared for this SFAR.

⁴⁷⁹ 2016–01–nbba–management–guide PDF (nbba.org). See Figure 1.5 on page 1–18.

⁴⁸⁰ www.nts.gov/news/events/Documents/aviation_pro-Lovelace-NTSB-Professionalism-Forum.pdf.

⁴⁸¹ www.sciencedirect.com/science/article/pii/S2542435121002051.

⁴⁸² aerospaceamerica.aiaa.org/features/faith-in-batteries/.

⁴⁸³ Source: NERA Economic Consulting—Expert Report of Christian M. Dippon, Ph.D. on behalf of

Supernal. August 14, 2023. This report estimates 50 dual-control aircraft will be required for the provision of training over the ten-year period of the SFAR www.regulations.gov/comment/FAA-2023-1275-0062.

⁴⁸⁴ OMB Circular A–4, Regulatory Analysis (2003), www.whitehouse.gov/wp-content/uploads/legacy_drupal_files/omb/circulars/A4/a-4.pdf.

TABLE 11—SFAR—PROPOSED AMENDMENTS—Continued

Section	Proposed amendment	Impact
	§ 91.167 <i>Fuel requirements for flight in IFR conditions.</i> § 91.205(b)(11) <i>Anti-collision lights.</i> § 91.205(b)(14) <i>Shoulder harness, restraint system.</i> § 91.207 <i>Emergency locator transmitters.</i> § 91.215 <i>ATC transponder and altitude reporting equipment and use.</i> § 91.219 <i>Altitude alerting system or device.</i> § 91.223 <i>Terrain awareness and warning.</i> § 91.313 <i>Shoulder harness, restraint system.</i> § 91.409 <i>Inspection programs.</i> § 91.411 <i>Altimeter system and altitude reporting.</i> § 91.501 <i>Applicability.</i> § 91.503 <i>Flying equipment and operating information.</i> § 91.505 <i>Aircraft Flight Manual.</i> § 91.507 <i>Equipment required for over-the-top or night VFR ops.</i> § 91.509 <i>Survival equipment.</i> § 91.511 <i>Communications and navigation.</i> § 91.513 <i>Emergency equipment.</i> § 91.517 <i>Passenger information, seatbelts/non-smoking.</i> § 91.519 <i>Oral briefing.</i> § 91.521 <i>Safety equipment requirements.</i> § 91.523 <i>Requirements for storage of carry-on baggage.</i> § 91.525 <i>Requirements for storage of cargo.</i> § 91.527 <i>Requirements for operating in icing conditions.</i> § 91.529 <i>Flight engineer requirements.</i> § 91.531 <i>Second-in-command requirements.</i> § 91.533 <i>Flight attendant requirements.</i> § 91.603 <i>Aural speed warning device.</i> § 91.605 <i>Transport category civil airplane weight limitations.</i> § 91.609 <i>Flight data recorders and cockpit voice recorders.</i> § 91.613 <i>Materials for compartment interiors.</i> § 91.1041 <i>Proving and validation tests.</i> § 91.1045 <i>HTAWS and thunderstorm detection equipment.</i> § 91.1065 <i>Initial and recurrent pilot testing requirements.</i> § 91.107(a)(3) <i>Use of restraint systems.</i> § 91.205(d)(3) <i>U.S. airworthiness certificates: Instrument and equipment requirements.</i> § 91.213 <i>Inoperative instruments and equipment.</i> § 91.113(d)(2) and (3) <i>Right-of-way rules.</i> § 91.126(b)(1) and (2) <i>Operating in Class G: Direction of turns.</i> § 91.129 <i>Operations in Class D airspace—approaches.</i> § 91.131 <i>Operations in Class B airspace.</i> § 91.155 <i>Basic VFR weather minimums.</i> § 91.157 <i>Special VFR weather minimums.</i> § 91.169 <i>IFR flight plan: Information required.</i> § 91.175 <i>Takeoff and landing under IFR.</i> § 91.515 <i>Rules for appropriate flight altitudes.</i> § 91.611 <i>Authorization for ferry flight with one engine—not allowed by SFAR.</i> § 91.1037 <i>Limitations; destination and alternate airports.</i> § 91.1039 <i>IFR takeoff, approach, and landing minimums.</i> § 91.1055 <i>Pilot operating limitations and pairing requirement.</i> § 91.126(c) <i>Operating in Class G airspace—flap settings.</i> § 91.129 <i>Operations in Class D airspace—minimum altitudes.</i> § 91.129 <i>Operations in Class D airspace—departures.</i> § 91.129 <i>Operations in Class D airspace—noise abatement.</i> § 97.3. <i>Copter procedures.</i>	Provides relief to operators of powered-lift on a scale equivalent to the relief provided to operators of airplanes or rotorcraft. Imposes costs on operators of powered-lift on a scale equivalent to costs imposed on operators of airplanes or rotorcraft. Imposes a regulatory burden on operators conducting powered-lift operations on a scale no greater than that imposed on like operators conducting operations with airplanes or rotorcraft. Enabling. Imposes a regulatory burden on operators conducting powered-lift operations on a scale no greater than that imposed on like operators conducting operations with airplanes or rotorcraft.
Part 91—General Operating and Flight Rules.		
Part 91—General Operating and Flight Rules.		
Part 91—General Operating and Flight Rules.		
Part 97—Standard Instrument Procedures.		
Part 135—Operating Requirements Commuter and On-Demand Operations and Rules Governing Persons on Board Such Aircraft.	§ 135.4 <i>Applicability of rules for eligible on-demand operations.</i> § 135.23(r)(7) <i>Manual contents.</i> § 135.93 <i>Minimum altitudes for use of autopilot.</i> § 135.100 <i>Flight crewmember cuties.</i> § 135.159(a)(2)(3) <i>Helicopter exceptions are not allowed.</i> § 135.181 <i>Aircraft operated over-the-top or in IFR conditions.</i> § 135.183 <i>Land aircraft operated over water.</i> § 135.203 <i>VFR: Minimum altitudes.</i> § 135.205 <i>VFR: Visibility requirements.</i> § 135.207 <i>VFR: Helicopter surface reference requirements.</i> § 135.221 <i>Alternate airport weather minimums.</i> § 135.361 <i>Applicability.</i> § 135.363 <i>General.</i> § 135.379 <i>Large transport category airplanes. Turbine engine powered: Takeoff limitations.</i> § 135.381 <i>Large transport category airplanes. Turbine engine powered: En-route limitations: One engine inoperative.</i>	

TABLE 11—SFAR—PROPOSED AMENDMENTS—Continued

Section	Proposed amendment	Impact
Part 135—Operating Requirements Commuter and On-Demand Operations and Rules Governing Persons on Board Such Aircraft.	§ 135.383 <i>Large transport category airplanes. Turbine engine powered: En-route limitations: Two engines inoperative.</i>	Imposes costs on operators of powered-lift on a scale equivalent to costs imposed on operators of airplanes or rotorcraft.
	§ 135.385 <i>Large transport category airplanes. Turbine engine powered: En-route limitations: Landing limitations.</i>	
	§ 135.387 <i>Large transport category airplanes. Turbine engine powered: En-route limitations: Landing limitations: Alternate airports.</i>	
	§ 135.389 <i>Large non-transport category airplanes: Takeoff limitations.</i>	
	§ 135.391 <i>Large non-transport category airplanes. En-route limitations: One engine inoperative.</i>	
	§ 135.393 <i>Large non-transport category airplanes. Landing limitations: En-route limitations: Destination airports.</i>	
	§ 135.395 <i>Large non-transport category airplanes. Landing limitations: En-route limitations: Alternate airports.</i>	
	§ 135.397 <i>Small transport category airplanes performance operating limitations.</i>	
	§ 135.1(a)(9) <i>Conducting operations in accordance with subpart L (Helicopter Air Ambulance Equipment, Operations, and Training Requirements).</i>	
	§ 135.117(a)(9) <i>Briefing of passengers before flight.</i>	
	§ 135.145 <i>Aircraft proving and validation tests.</i>	
	§ 135.150 <i>Public address and crewmember interphone systems.</i>	
	§ 135.151 <i>Cockpit voice Recorders.</i>	
	§ 135.152 <i>Flight data recorders.</i>	
	§ 135.154 <i>Terrain awareness warning systems.</i>	
	§ 135.158 <i>Pitot heat indication systems.</i>	
	§ 135.160 <i>Radio altimeters for rotorcraft operations.</i>	
	§ 135.165 <i>Communication and navigation equipment.</i>	
	§ 135.168 <i>Emergency equipment.</i>	
	§ 135.169 <i>Additional airworthiness requirements.</i>	
	§ 135.170 <i>Materials for compartment interiors.</i>	
	§ 135.173 <i>Airborne thunderstorm equipment requirements.</i>	
	§ 135.178 <i>Additional emergency equipment.</i>	
Part 135—Operating Requirements Commuter and On-Demand Operations and Rules Governing Persons on Board Such Aircraft.	§ 135.180 <i>Traffic alert and collision avoidance system.</i>	Provides flexibility or relief to operators of powered-lift on a scale equivalent to the flexibility or relief provided to operators of airplanes or rotorcraft.
	§ 135.209 <i>VFR: Fuel supply.</i>	
	§ 135.223 <i>IFR: Alternate airport requirements.</i>	
	§ 135.227 <i>Icing conditions: Operating limitations.</i>	
	§ 135.271 <i>Helicopter hospital emergency medical evacuation services (HEMES).</i>	
Part 61—Certification: Pilots, Flight Instructors, and Ground Instructors.	§ 135.128 <i>Use of safety belts, child restraint systems.</i>	Imposes a regulatory burden on individuals seeking airmen certification in powered-lift on a scale no greater than that imposed on individuals accomplishing airmen certification in other aircraft categories.
	§ 135.159(a)(1) <i>Gyroscopic rate of turn indicator.</i>	
	§ 135.163(g) <i>Exception for helicopters is allowed.</i>	
	§ 135.229 <i>Airport requirements.</i>	
	§ 135.429(d) <i>Required inspection personnel.</i>	
Part 61—Certification: Pilots, Flight Instructors, and Ground Instructors.	§ 61.31(a) <i>Type rating requirements, additional training, and authorization reqts.</i>	Relieving. No additional regulatory costs.
	§ 61.109(e)(5) <i>Aeronautical experience.</i>	
	Addressing:	
	§ 61.1(b) <i>Applicability and definitions: Cross-country time definition (paragraph (ii)).</i>	
	§ 61.3 <i>Req't for certificates, ratings, and authorizations: Flt instructor certificate.</i>	
	§ 61.45 <i>Requirement for certificates, ratings, and authorizations: Practical tests: Required aircraft and equipment.</i>	
	§ 61.51 <i>Requirement for certificates, ratings, and authorizations: Pilot logbooks.</i>	
	§ 61.55 <i>Requirement for certificates, ratings, and authorizations: SIC.</i>	
	§ 61.63(d)(3) <i>Additional aircraft ratings (other than for ratings at the airline transport pilot certification level). Proposed eligibility requirements</i>	
	§ 61.65 <i>Instrument rating requirements.</i>	
	§ 61.107 <i>Flight proficiency.</i>	
	§ 61.109(e)(2)(i), (e)(5)(ii) <i>Aeronautical experience.</i>	
	§ 61.127 <i>Flight proficiency (commercial pilots).</i>	
	§ 61.129 <i>Aeronautical experience: Alternate experience and logging reqts.</i>	
	§ 61.167 <i>Airline transport pilot privileges and limitations.</i>	
Part 61—Certification: Pilots, Flight Instructors, and Ground Instructors.	§ 61.195 <i>Flight instructor limitations and qualifications.</i>	Imposes a regulatory burden on individuals accomplishing a powered-lift type rating in an FFS on a scale no greater than that imposed on individuals accomplishing a type rating in an FFS for airplanes or helicopters.
	Addressing:	
	§ 61.64 <i>Use of a flight simulator and flight training device—SFAR—removes three of four available alternative requirements that enable a person to accomplish a practical test for a powered-lift type rating in a simulator.</i>	
Part 135—Operating Requirements Commuter and On-Demand Operations and Rules Governing Persons on Board Such Aircraft.	SFAR temporarily allow the completion of certain part 135 tests and checks to meet the flight proficiency requirements for the addition of a powered-lift category rating, an instrument-powered-lift rating, and powered-lift type rating to a commercial certificate.	Relieving.

TABLE 11—SFAR—PROPOSED AMENDMENTS—Continued

Section	Proposed amendment	Impact
Part 135—Operating Requirements Commuter and On-Demand Operations and Rules Governing Persons on Board Such Aircraft.	§ 135.3 Rules applicable to operations subject to this part—FAA proposes certificate holders comply with subpart Y of part 121 (Advanced Qualification Program (AQP)). § 135.243 Pilot in command qualifications. § 135.244 Operating experience. § 135.245 Second in command qualifications. § 135.293 Initial and recurrent pilot testing requirements. § 135.297 Pilot in command: Instrument proficiency check requirements. § 135.340 Initial and transition training and checking: Check airmen (aircraft), check airmen (simulator). § 135.345(b)(6)(iv) Pilots: Initial, transition, and upgrade ground training.	Imposes costs on operators of powered-lift on a scale equivalent to costs imposed on operators of airplanes or rotorcraft.
Part 111—Pilot Records Database	§ 111.1 Applicability.	Imposes costs on operators of powered-lift on a scale equivalent to costs imposed on operators of airplanes or rotorcraft.
Part 136—Commercial Air Tours and National Parks Air Tour Management.	§ 136.1 Suitable landing area for helicopters. § 136.9 Life preservers for over water. § 136.11(c) Helicopter floats for over water. § 136.13(a) Helicopter performance plan and operations Appendix A Special Operating Rules for Air Tour Operators in the State of Hawaii.	Imposes costs on operators of powered-lift on the same scale as costs imposed on operators of airplanes or rotorcraft.
Part 141—Flight Schools	§ 141.35 Chief instructor qualifications. § 141.36 Assistant chief instructor qualifications. § 141.37 Check instructor qualifications.	Relieving—no additional regulatory costs.
Part 142—Training Centers	§ 142.47(a), (c) Training center instructor eligibility requirements. § 142.53 Training center instructor training and testing requirements.	Imposes a regulatory burden on part 142 training centers conducting powered-lift training on a scale no greater than that imposed on like training centers conducting training with airplanes or rotorcraft.
Part 142—Training Centers	§ 142.11 Application for issuance or amendment.	Provides relief to part 142 training centers conducting powered-lift training to allow instructors to meet the experience requirements of part 61 or hold the certificate. This allows lower hours to obtain certificate through the SFAR.
Part 142—Training Centers	§ 142.57 Aircraft requirements.	Enabling. No additional regulatory costs unless a part 142 training center chooses conduct training with powered-lift flight simulators and flight training devices.
Part 142—Training Centers		Provides relief to part 142 training centers conducting powered-lift training on a scale equivalent to that provided to training centers conducting training with airplanes or rotorcraft.

The table below identifies only those amendments added or changed from the proposed SFAR to the final SFAR. The first column of the table identifies the affected part; the second column provides the section affected and a description of the change from the proposed rule to the final rule; lastly,

the third column identifies the economic impact of the change. If a provision from the proposal is not listed in the table below, then the provision was finalized as proposed.

In many instances, the finalized SFAR applies operating rules for helicopters in place of the more conservative airplane

rules proposed by the SFAR for powered-lift as long as the powered-lift can meet the performance-based criteria outlined in the rule. This largely means that amendments as finalized by the SFAR still impose a burden to the various entities affected; however, the burden will be to a lesser degree.

TABLE 12—SFAR—TABLE OF AMENDMENTS CHANGED FROM PROPOSED RULE TO FINAL RULE

Section	Changes to provisions as proposed	Impact
Part 1—Definitions and Abbreviations	§ 1.1 General definitions. Revises the definition of autorotation to include powered-lift. Definition is as follows: Autorotation means a rotorcraft or powered-lift flight condition in which the lifting rotor is driven entirely by action of the air when the rotorcraft or powered-lift is in motion.	No economic impact.
Part 91—General Operating and Flight Rules.	§ 91.113 Right-of-way-rules: Except water operations. Permanent amendment that was originally proposed as a temporary change for the duration of the SFAR. The language is updated to change the term “engine-driven aircraft” to “powered aircraft.” Powered-lift to use right-of-way rules designated for other powered aircraft (e.g., airplanes and rotorcraft).	Imposes a regulatory burden on operators of powered-lift on a scale equivalent to costs imposed on operators of airplanes or rotorcraft.
Part 91—General Operating and Flight Rules.	§ 91.903 Policy and procedures. Adds any rule listed subpart J of part 91 as modified by subpart C of part 194 to those that the Administrator may issue a certificate of waiver authorizing the operation of aircraft in deviation from those rules	Provides relief from provisions proposed by SFAR.
Part 135—Operating Requirements: Commuter and on Demand Operations and Rules Governing Persons on Board Such Aircraft.	§ 135.100 Flight crewmember duties. Permanent technical amendment to provide the definition of “taxi” for purposes of § 135.100.	No economic impact.

TABLE 12—SFAR—TABLE OF AMENDMENTS CHANGED FROM PROPOSED RULE TO FINAL RULE—Continued

Section	Changes to provisions as proposed	Impact
Part 135—Operating Requirements: Commuter and on Demand Operations and Rules Governing Persons on Board Such Aircraft.	§ 135.165(d) <i>Communication and navigation equipment: Extended over-water or IFR operations.</i> Permanent amendment to reflect the current location of the definition for “commuter operation” (reference to the definition is updated from part 119 to part 110). ⁴⁸⁵	No economic impact.
Part 135—Operating Requirements: Commuter and on Demand Operations and Rules Governing Persons on Board Such Aircraft.	§ 135.339(e) <i>Initial and transition training and checking: Check airmen (aircraft), check airmen (simulator).</i> § 135.340(e) <i>Initial and transition training and checking: Flight instructors (aircraft), flight instructors (simulator).</i> Permanent amendment to allow for training in powered-lift that are not equipped with dual controls.	Provides relief from proposed SFAR.
Part 136—Commercial Air Tours and National Pairs Air Tour Management.	§ 136.75(a) <i>Equipment and requirements.</i> Permanent technical amendment to add the term “single-engine” in front of “rotorcraft.” FAA did not intend for this rule to apply to all rotorcraft.	In the Update to Air Carrier Definitions rule, when appendix A was moved to subpart D “single-engine” was inadvertently omitted. As a result, the applicability of required flotation equipment was mistakenly expanded to all rotorcraft, instead of only single-engine rotorcraft.
Part 142—Training Centers	§ 142.47 <i>Training center instructor eligibility requirements.</i> Certain provisions of § 142.47(a)(5) requires an instructor to meet specific aeronautical experience set forth in § 61.129 or §§ 61.159, 61.161, 61.163, as applicable. This final rule adds the qualification option of simply holding a commercial pilot certificate with the appropriate ratings or an unrestricted ATP with the appropriate ratings to account for those pilots who hold a certificate but may not meet the specific aeronautical experience requirements of part 61 due to decreased minimum experience requirements in part 141 and part 194. The FAA emphasizes that meeting the aeronautical experience requirements as currently required remains an option without holding the certificate itself, as well. Additionally, the final SFAR designates that the aeronautical experience requirements are applicable only to powered-lift weighing greater than 12,500 pounds or turbojet powered. (In the proposed SFAR, the aeronautical experience requirements were applicable powered-lift of all weight classes.	Provides relief from existing regulations allowing aeronautical experience or a commercial certificate in place of aeronautical experience set forth in § 61.129 or §§ 61.159, 61.161, 61.163.
Part 194	§ 194.103 <i>Definitions.</i> Amends § 194.103 to add the following definitions: Aviation safety inspector; FAA test pilot; vertical-lift flight mode, and wing-borne flight mode.	No economic impact.
Part 194	§ 194.203 <i>Alternate qualification requirements for certain flight instructors.</i> Amended to add FAA safety inspectors and FAA test pilots to the initial cadre of individuals eligible to receive training from an instructor pilot at a powered-lift manufacturer that does not hold a flight instructor certificate under part 61.	Provides relief from provisions proposed by SFAR.
Part 194	§ 194.209 <i>Additional qualification requirements for certain pilots serving as second-in-command.</i> Amended to allow for an applicant receiving training under §§ 194.221, 194.223, 194.229, and 194.231 to serve as second-in-command in a powered-lift type certificated for more than one required pilot flight crewmember while not otherwise meeting the requirements of § 61.55(a)(1) (a)(2) and (b)(2). (e.g., airplanes and rotorcraft).	Provides relief from provisions proposed by SFAR.
Part 194	§ 194.213 <i>Alternate endorsement requirements for certain persons seeking a powered-lift rating.</i> Adds instructor pilots for manufacturers of experimental powered-lift, FAA test pilots, and FAA aviation safety inspectors to those persons that may provide the required logbook or training record endorsements under parts 61 and 194 for a commercial pilot certificate with a powered-lift category, instrument, or type rating, or for a flight instructor certificate with powered-lift rating.	Provides relief from provisions proposed by SFAR.
Part 194	New § 194.216 <i>Alternate aeronautical experience pilot-in-command flight time in a powered-lift for a commercial pilot certificate with a powered-lift category rating.</i> This new amendment allows all pilots to use the FFS credit (not just those pilots training under an approved training program) as provided for in the proposal for this rulemaking.	Provides relief from provisions proposed by SFAR.
Part 194	§ 194.217 <i>Test pilots, FAA test pilots, or aviation safety inspectors: Alternate aeronautical experience and logging requirements for a commercial pilot certificate with a powered-lift category rating.</i> Adds FAA test pilots and FAA aviation safety inspectors to those applicants that may use alternate aeronautical experience and logging requirements for a commercial pilot certificate with a powered-lift ratings.	Provides relief from provisions proposed by SFAR.
Part 194	§ 194.219 <i>Instructor pilots: Alternate aeronautical experience and logging requirements for a commercial pilot certificate with a powered-lift category rating.</i> Adds FAA test pilots and FAA safety inspectors to those persons that can receive the manufacturer’s training curriculum from instructor pilots for experimental powered-lift manufacturers. Adds FAA test pilots and FAA safety inspectors to the group of individuals that allow an instructor pilot to log PIC time in an experimental powered-lift.	Provides relief from provisions proposed by SFAR.

TABLE 12—SFAR—TABLE OF AMENDMENTS CHANGED FROM PROPOSED RULE TO FINAL RULE—Continued

Section	Changes to provisions as proposed	Impact
Part 194	<i>§ 194.221 Initial cadre of instructors: Alternate aeronautical experience and logging requirements for a commercial pilot certificate with a powered-lift category rating.</i> Reduces the number of hours an applicant for a commercial pilot certificate with a powered-lift category rating is required to log as pilot-in-command for the purpose of satisfying aeronautical experience requirements from 40 hours to 25 hours when the pilot is the sole manipulator of the controls of a powered-lift for which the pilot is not rated, provided: (1) The applicant is manipulating the controls of the powered-lift with a person onboard who serves as an instructor pilot for the manufacturer; (2) The applicant is performing the duties of pilot-in-command; and (3) The flight is conducted in accordance with the manufacturer's powered-lift training curriculum.	Provides relief from provisions proposed by SFAR.
Part 194	<i>§ 194.223 Pilots receiving training under an approved training program: Alternate requirements for a commercial pilot certificate with a powered-lift category rating.</i> Reduces the number of hours an applicant for a commercial pilot certificate with a powered-lift category rating is required to log as pilot-in-command time toward § 61.129(e)(2)(i) from 40 hours to 25 hours when the applicant is the sole manipulator of the controls of a powered-lift for which the pilot is not rated.	Provides relief from provisions proposed by SFAR. Also, a technical Amendment. Inadvertent missing word. (Changes powered-lift category to powered-lift category rating.). No impact.
Part 194	<i>§ 194.225 Test pilots, FAA test pilots, and aviation safety inspectors: Alternate aeronautical experience and logging requirements for an instrument powered-lift rating.</i> Adds FAA test pilots and FAA aviation safety inspectors to those eligible for relief with regard to alternate aeronautical experience and logging requirements for an instrument powered-lift rating.	Provides relief from provisions proposed by SFAR.
Part 194	<i>New § 194.238 Alternate aeronautical experience: Airline transport pilot certificate with a powered-lift category rating.</i> Provides for alternative aeronautical experience requirements for an airline transport pilot certificate with a powered-lift category rating given certain conditions.	Provides relief from provisions proposed by SFAR.
Part 194	<i>New § 194.243 Pilot certification through completion of training, testing, and checking part 135 of this chapter.</i> Provides retraining and endorsement requirements for instances when a pilot fails a part 135 competency or proficiency check (.293/.297) also being to add commercial/instrument/ATP/Type certification concurrently with the check.	Technical amendment. No economic impact.
Part 194	<i>New § 194.253 Alternate requirements for powered-lift without fully functional dual controls used in flight training.</i> Allows powered-lift without fully functional dual controls to be used for flight training provided the primary flight controls are instantly accessible by both the applicant and the instructor. Additionally, a person may apply for a powered-lift category rating, type rating, and instrument powered-lift rating for a powered-lift with single controls under an approved part 135, 141, or 142 training program by meeting the part 61 requirements or corresponding alternate requirement set forth by part 194.	Provides relief from provisions proposed by SFAR.
Part 194	<i>§ 194.301 Applicability.</i> Provides clarification that sections or paragraphs within sections under parts 91 and 135 that refer to specific categories of aircraft, and that are not referenced in the SFAR tables to § 194.302 or § 194.306, do not apply to powered-lift.	Technical amendment. No economic impact.
§ 194.302 (con't)—Provisions under part 91 of this chapter applicable to powered-lift.	<i>§ 91.119 Minimum safe altitudes: General.</i> Provides for a performance-based rule allowing powered-lift to operate at an altitude lower than airplanes.	Provides relief from provisions proposed by SFAR.
194.302 (con't)—Provisions under part 91 of this chapter applicable to powered-lift.	<i>Adds § 91.151(b).</i> Allows for powered-lift operating in a vertical-lift flight mode to adhere to a less restrictive fuel requirement when flying VFR.	Provides relief from provisions proposed by SFAR.
194.302 (con't)—Provisions under part 91 of this chapter applicable to powered-lift.	<i>§ 91.155.</i> Allows for powered-lift to use helicopter flight visibility requirements when being operated in the vertical-lift flight mode of flight.	Provides relief from provisions proposed by SFAR.
194.302 (con't)—Provisions under part 91 of this chapter applicable to powered-lift.	<i>Adds § 91.157(b)(3), (b)(4), and (c).</i> Allows helicopter exceptions to be applied to powered-lift operating in vertical-lift flight mode when those aircraft are operated at a speed that allows the pilot to see any other traffic or obstructions in time to avoid a collision.	Provides relief from provisions proposed by SFAR.
194.302 (con't)—Provisions under part 91 of this chapter applicable to powered-lift.	<i>Adds §§ 91.167(a)(3) and (b)(2)(i), and 91.169(b)(2)(ii) and (c)(1)(ii).</i> Allows powered-lift authorized to conduct copter procedures and can land in the vertical-lift flight mode to use fuel (§ 91.167) or weather minimums (§ 91.169) established for helicopters.	Provides relief from provisions proposed by SFAR.
194.302 (con't)—Provisions under part 91 of this chapter applicable to powered-lift.	<i>Adds § 91.175(f)(2)(iii).</i> Allows powered-lift authorized to use copter procedures and can land in the vertical-lift flight mode to use takeoff minimums established for helicopters.	Provides relief from provisions proposed by SFAR.
194.306—Provisions under part 135 of this chapter applicable to powered-lift.	<i>Amends § 135.93(c)(1).</i> Provides a performance-based alternative to enroute requirements specified in § 135.93.	Provides relief from provisions proposed by SFAR.

TABLE 12—SFAR—TABLE OF AMENDMENTS CHANGED FROM PROPOSED RULE TO FINAL RULE—Continued

Section	Changes to provisions as proposed	Impact
194.306 (con't)—Provisions under part 135 of this chapter applicable to powered-lift.	<i>§ 135.158 Amending the proposed regulatory text for § 194.307(r).</i> Allows for the indication system in powered-lift to be something other than an amber light when a pitot system is not operating.	Provides relief from provisions proposed by SFAR.
194.306 (con't)—Provisions under part 135 of this chapter applicable to powered-lift.	<i>Adds § 135.168(b)(1).</i> For the final rule, the life preserver required by § 135.168(b)(1) need not be worn but must be readily available for its intended use and easily accessible to each occupant when the powered-lift is a multiengine aircraft operated at a weight that will allow it to climb, with the critical engine inoperative or while experiencing a critical change of thrust, at least 50 feet a minute, at an altitude of 1,000 feet above the surface.	Provides relief from provisions proposed by SFAR.
194.306 (con't)—Provisions under part 135 of this chapter applicable to powered-lift.	<i>Added § 135.181(a)(2) and § 135.181(b).</i> Provides clarification that performance requirements for aircraft operated over-the-top or in IFR conditions applies to those powered-lift that do not have a critical engine but can experience a critical change of thrust.	Clarifying amendment. No economic impact.
194.306 (con't)—Provisions under part 135 of this chapter applicable to powered-lift.	<i>Amends § 135.183(c).</i> Revised to add the term “critical change of thrust” to the performance requirements for multiengine land aircraft carrying passengers as follows: aircraft operated at a weight that will allow it to climb with the critical engine inoperative, or while experiencing a critical change of thrust, at least 50 feet a minute, at an altitude of 1,000 feet above the surface.	Clarifying amendment. No economic impact.
194.306 (con't)—Provisions under part 135 of this chapter applicable to powered-lift.	<i>Amends § 135.203(a) and (b).</i> Amended to create a performance-based rule allowing powered-lift to use an altitude lower than specified for airplanes. This provision is adopted when operating in the vertical-lift flight mode. Or, when operating in the wing-borne mode. Also, incorporates helicopter minimums contained in § 135.203(b).	Provides relief from provisions proposed by SFAR.
194.306 (con't)—Provisions under part 135 of this chapter applicable to powered-lift.	<i>Amends § 135.205(b) and</i> Creates a performance-based rule allowing powered-lift to use visibility requirements lower than specified for airplanes. This provision is adopted when operating in the vertical-lift flight mode.	Provides relief from provisions proposed by SFAR.
194.306 (con't)—Provisions under part 135 of this chapter applicable to powered-lift.	<i>Amends § 135.209(a).</i> Allows for deviations from VFR Fuel Supply for specific routes with one or more predetermined suitable landing areas if the FAA finds the operation can be conducted safely. <i>Adds § 135.209(b).</i> Makes 20-minute minimum for VFR fuel requirement applicable to powered-lift with the performance capability, as provided in the Aircraft Flight Manual. (Deviations allowed).	Provides relief from provisions proposed by SFAR.
194.306 (con't)—Provisions under part 135 of this chapter applicable to powered-lift.	<i>Amends § 135.221(b).</i> The alternate airport weather minimums authorized for helicopters may be used by powered-lift if they are authorized to conduct copter procedures and can land in the vertical-lift flight mode.	Provides relief from provisions proposed by SFAR.
194.306 (con't)—Provisions under part 135 of this chapter applicable to powered-lift.	<i>Applies § 135.223(a)(3) IFR Alternate airport requirements.</i> Powered-lift may use the 30-minute fuel requirements specified for helicopters in § 135.223(a)(3) if the powered-lift is authorized to conduct copter procedures and can conduct a landing in the vertical-lift flight mode for the entire flight.	Provides relief from provisions proposed by SFAR.
194.306 (con't)—Provisions under part 135 of this chapter applicable to powered-lift.	<i>Applies § 135.227(d).</i> The FAA corrected cross-references pertaining to this SFAR section and removed a reference to “critical surfaces” because it is no longer required.	Technical Amendment.
194.306 (con't)—Provisions under part 135 of this chapter applicable to powered-lift.	<i>Adds § 135.229(b)(2)(ii).</i> Allows powered-lift taking off or landing in vertical-lift flight mode and equipped with landing lights oriented in a direction that enables the pilot to see an area to be used for landing or takeoff marked by reflective material. Otherwise powered-lift must take off or land at an airport with boundary or runway marker lights. The FAA clarified that the intent of this section is to apply in both the takeoff and landing context.	Technical Amendment.
194.306 (con't)—Provisions under part 135 of this chapter applicable to powered-lift.	<i>Revises § 135.609 VFR ceiling and visibility minimums for Class G Airspace when conducting VFR helicopter air ambulance.</i> Airplane minimums will be applied when the powered-lift is operated in wing-borne flight mode. Helicopter minimums will be applied when the powered-lift is operating in vertical-lift flight mode.	Provides relief from provisions proposed by SFAR.
194.306 (con't)—Provisions under part 135 of this chapter applicable to powered-lift.	<i>Revises § 135.613 Approach/departure IFR transitions.</i> § 135.613(a)(2) revised and § 135.613(b) added to allow powered-lift that are operating in the vertical-lift flight mode to use helicopter minimums.	Provides relief from provisions proposed by SFAR.
194.306 (con't)—Provisions under part 135 of this chapter applicable to powered-lift.	Relieving. <i>Adds § 135.615(b) VFR flight planning.</i> Allow powered-lift operated in the vertical-lift flight mode during enroute operations to use the terrain and obstacle clearance requirements minimums described in § 135.615(b).	Provides relief from provisions proposed by SFAR.
194.308—Applicability of national air tour safety standards under part 136 of this chapter to powered-lift.	<i>Amends §§ 136.9(b)(3), 136.11(a)(2), and 136.75(c).</i> Adds the term “critical change of thrust” to ensure those novel aircraft that may not have a critical engine be required to demonstrate the same performance requirements as those stipulated for aircraft with a critical engine.	Clarifying amendment. No economic impact.

TABLE 12—SFAR—TABLE OF AMENDMENTS CHANGED FROM PROPOSED RULE TO FINAL RULE—Continued

Section	Changes to provisions as proposed	Impact
194.308— <i>Applicability of national air tour safety standards under part 136 of this chapter to powered-lift.</i>	<i>Adds § 136.11(a)(1).</i> Requires floats for single-engine powered-lift. <i>Revises § 136.11(b)(2).</i> Requires flotation system to be armed when the powered-lift is over water beyond the shoreline whether operating in vertical-lift flight mode or wing-borne flight mode.	Imposes a burden on operators of powered-lift on a scale no greater than the burden placed on operators of helicopters.
194—New Appendix A	<i>New Appendix A.</i> Prescribes the minimum requirements to apply for a pilot training program leading to a powered-lift category rating; a powered-lift type rating; and an instrument powered-lift rating using powered-lift with one set of controls.	Provides relief from provisions proposed by SFAR.

3. Benefits Summary

Operations with powered-lift are anticipated to offer benefits over traditional airplanes and rotorcraft. A report published by the U.S. Government Accountability Office stated that many of these newer category of aircraft may be easier to design, simpler to construct, less complicated to maneuver, quieter to fly, and more economical to operate compared to traditional aircraft.⁴⁸⁶ Many use cases for these aircraft are anticipated. Below is a description of just a few of the use cases.

It is envisioned smaller versions of these aircraft may reduce travel times in congested areas for passengers by allowing for more efficient transportation compared to existing ground transportation methods. To do so, these aircraft would use vertiports located on top of buildings, at parking facilities, or in other open areas.⁴⁸⁷ Such transportation could occur from these locations and then proceed at speeds and ranges similar to turboprops. Some powered-lift could also be capable of transporting heavier loads at higher altitudes and faster cruise speeds than a traditional rotorcraft. Such capability may increase efficiency in transporting crew and material to remote locations such as offshore oilrigs. Other use cases may involve medical response, disaster relief, rescue operations, border patrol, and last-mile logistics.

This final rule is a step toward enabling the ecosystem for this industry to develop. It applies the appropriate set of rules for a range of certificate-holder operations conducted with powered-lift, and for certification of the pilots that

would fly them. It was deliberated with the intent of mitigating risk to the NAS while maintaining its current level of safety.

4. Costs Summary

While operators choosing to conduct operations with powered-lift would incur costs to comply with regulations in this SFAR, these costs would be on a scale incurred by operators choosing to conduct operations with airplanes or rotorcraft under similar regulations. Likewise, costs imposed on individuals that choose to accomplish the required training and testing required to hold an airman's certificate with a type rating in the powered-lift category would be on a scale no greater than those incurred by individuals accomplishing training and testing to hold an airman's certificate with a type rating in the airplane or rotorcraft category. In other words, the costs imposed on operators and individuals that choose to comply with regulations in this rule would be no more burdensome than the costs incurred by entities and individuals complying with analogous airplane and rotorcraft regulations.

However, to address the significant operational differences between each powered-lift, the FAA is amending regulations to require the PIC of a powered-lift to hold a type rating for the aircraft flown. The FAA has determined that requiring persons to hold type ratings for powered-lift establishes the appropriate level of safety. This ensures persons receive adequate training and are tested on the unique design and operating characteristics of each powered-lift flown. As a result, airmen choosing to operate powered-lift and manufacturers providing dual-control aircraft and full flight simulators for training will incur incremental costs. Airmen will incur the incremental costs to achieve a type rating for each powered-lift flown.

In the preliminary regulatory impact analysis for the SFAR, the FAA solicited comments for data to update the final analysis. The FAA received comments

to the analysis including supporting data related to costs. Consequently, the final regulatory impact analysis has been revised to incorporate some of the information received during the comment period. As a result, the number of individuals required to operate the fleet of aircraft anticipated to enter the fleet over the period of the SFAR has been adjusted upward. Additionally, the analysis is updated to include a cost for the provision of dual-control aircraft and full flight simulators for training, and a cost for decreased battery life due to a minimum fuel reserve requirement.

The following table presents a summary of the primary estimates of the monetized costs of this rule, as well as estimates for the pessimistic and optimistic scenarios. The monetized costs include those that would require individuals to hold an airman's certificate with a type rating for the powered-lift flown, costs for the provision of dual-control aircraft and full flight simulators for training, and incremental costs for the minimum fuel reserve requirement. For the primary estimate, over a 10-year period of analysis, this rule would result in present value costs of about \$914.2 million at a two percent discount rate with annualized costs of about \$101.8 million. At a three percent present value discount rate, present value costs are about \$884.2 million with annualized costs of about \$103.7million. At a seven percent discount rate, the present value costs are about \$779.2 million with annualized costs of \$110.9 million.⁴⁸⁸

⁴⁸⁸ The appendix to the RIA presents tables of monetized costs on an annual basis for years 1–10, the time horizon for which costs for the rule are estimated. Monetized costs for the rule stem from the cadence of aircraft deliveries. In the optimistic scenario, aircraft deliveries are forecast to begin in year 1 and continue through year 10. Aircraft deliveries for the base scenario are forecast to occur during years 2–10, and in the pessimistic scenario during years 3–10. As a result, costs for the optimistic scenario accumulate over a period of 10 years versus the base and pessimistic scenarios, over which costs accumulate for a period of 9 years and 8 years, respectively.

⁴⁸⁵ 76 FR 7482 (Feb. 10, 2011).

⁴⁸⁶ Transforming Aviation: Stakeholders Identified Issues to Address for 'Advanced Air Mobility' √ U.S. GAO.

⁴⁸⁷ Vertiport Assessment and Mobility Operations System (VAMOS!) | T2 Portal ([nasa.gov](https://www.nasa.gov)) A vertiport refers to a physical structure for the departure, arrival, and parking/storage of advanced air mobility vehicles. Evaluation factors for vertiports include zoning, land use, transit stations, fire stations, noise, and time-varying factors like congestion and demand.

TABLE 13—MONETIZED COSTS OF FINAL SFAR
[Millions \$]*

Forecast scenario	10-Year present value (2%)	Annualized (2%)
Base—Primary Estimate	\$914.2	\$101.8
Pessimistic	865.5	96.4
Optimistic	966.1	107.6

* **Table notes:** Columns may not sum to total due to rounding. Discount rates are provided per Office of Management and Budget (OMB) guidance.

Please see the regulatory impact analysis for this SFAR available in the docket for more details.

B. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) of 1980, (5 U.S.C. 601–612), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (Pub. L. 104–121) and the Small Business Jobs Act of 2010 (Pub. L. 111–240), requires Federal agencies to consider the effects of the regulatory action on small business and other small entities and to minimize any significant economic impact. The term “small entities” comprises small businesses and not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations of less than 50,000.

The FAA published an Initial Regulatory Flexibility Analysis (IRFA) in the proposed rule to aid the public in commenting on the potential impacts to small entities. The FAA considered the public comments in developing the final rule and this Final Regulatory Flexibility Analysis (FRFA). A FRFA must contain the following:

- (1) A statement of the need for, and objectives of, the rule;
- (2) A statement of the significant issues raised by the public comments in response to the IRFA, a statement of the assessment of the agency of such issues, and a statement of any changes made in the proposed rule as a result of such comments;
- (3) The response of the agency to any comments filed by the Chief Counsel for Advocacy of the Small Business Administration (SBA) in response to the proposed rule, and a detailed statement of any change made to the proposed rule in the final rule as a result of the comments;
- (4) A description of and an estimate of the number of small entities to which the rule will apply or an explanation of why no such estimate is available;
- (5) A description of the projected reporting, recordkeeping, and other compliance requirements of the

- proposed rule, including an estimate of the classes of small entities which will be subject to the requirement and the type of professional skills necessary for preparation of the report or record;
- (6) A description of the steps the agency has taken to minimize the significant economic impact on small entities consistent with the stated objectives of applicable statutes, including a statement of the factual, policy, and legal reasons for selecting the alternative adopted in the final rule and why each of the other significant alternatives to the rule considered by the agency which affect the impact on small entities was rejected.
- 1. A Statement of the Need for, and Objectives of, the Rule
- This rule establishes the requirements for the certification and operation of powered-lift. Powered-lift is defined in 14 CFR part 1 as a heavier-than-air aircraft capable of vertical takeoff, vertical landing, and low speed flight that depends principally on engine-driven lift devices or engine thrust for lift during these flight regimes and on nonrotating airfoil(s) for lift during horizontal flight.
- The powered-lift that are coming to the civilian market have unique design, flight, and handling characteristics with varying degrees of automation. The FAA does not anticipate that the initial powered-lift that obtain type certification will be broadly available for basic airman certification and training at the private pilot level. Rather, manufacturers intend to produce powered-lift for commercial purposes, meaning the initial pilots will be required to hold at least commercial pilot certificates to act as required flightcrew members (*i.e.*, PIC or SIC) for compensation or hire.
- The FAA lacks sufficient information at this time regarding emerging operations to implement permanent regulations. The FAA has found the use of an SFAR has been an effective way to gain such experience while enabling some degree of operations. The SFAR will establish a regulatory structure that

- leverages existing rules, removes operational barriers, and mitigates safety risks for powered-lift. Utilizing the SFAR will allow the FAA to observe operations and subsequently make any requisite safety improvements in a later permanent change to the regulations.
- 2. Significant Issues Raised in Public Comments in Response to the Initial Regulatory Flexibility Act
- The FAA did not receive public comments in response to the Initial Regulatory Flexibility Act for the proposed SFAR.
- 3. A Response to SBA Comments
- The FAA did not receive comments from the SBA in response to the Initial Regulatory Flexibility Act provided in the proposed SFAR.
- 4. Small Entities to Which the Rule Will Apply
- The rule affects operators of powered-lift under parts 91, 135, and 136, as well as part 141 flight schools and part 142 training centers. Part 91 operators conduct operations for non-commercial purposes. Part 135 operators conduct on-demand operations, which may include a limited number of scheduled operations, or commuter operations, and allows an unlimited number of scheduled operations as well as on-demand operations.⁴⁸⁹ There are specific limitations associated with these operations depending on whether they are on-demand or commuter. These limitations include the number of passenger seats installed on the aircraft, maximum payload limits, and whether turbo-jet aircraft can be used in the operation. Part 136 operators conduct commercial air tours.
- There are five North American Industry Classification System (NAICS) codes for air transportation services based on by type of activity conducted. Four of these codes identify a small entity as one with 1,500 or fewer employees. The exception is NAICS code 481219, which includes “other

⁴⁸⁹ www.faa.gov/licenses_certificates/airline_certification/135_certification/general_info.

nonscheduled air transportation.” Entities falling within this code are identified as small if revenues are \$22 million or less.⁴⁹⁰ At the time of this rule, there were approximately 1,700 part 135 operators, and 900 part 91 operators. A vast majority of these operators are small, and the FAA does not anticipate that they will be impacted by this rule. Due to this being an emerging market, the number of entities that will be impacted by this rule is uncertain.

Flight training is available through part 141 flight schools or part 142 flight centers. Part 141 flight schools train with actual aircraft while part 142 flight centers train with flight simulators. The FAA notes that NAICS code for flight training is in Sector 61—Education Services. Specifically, flight training schools are identified by code 611512. The Small Business Administration identifies entities in this code as small based on revenues of \$30 million or less.

There are currently 525 part 141 flight schools and 45 part 142 training centers. FAA conducted research on the internet to determine revenues for these entities. While some of the part 141 flight schools are part of a curriculum offered at an institution of higher learning, most appear to be private entities, and thus revenues were not publicly available. Of the 45 part 142 training centers, 10 have revenues greater than \$30 million and 22 were identified as having revenues less than \$30 million. Revenue information for the remaining 13 part 142 training centers was not readily available. Based on this information, it is believed that a majority of flight schools under parts 141 and 142 are small entities.

5. Projected Reporting, Recordkeeping, and Other Compliance Requirements

Powered-lift manufacturers, air carriers, pilots, and instructors have important roles in the development of this sector of the aviation industry. The FAA prescribes regulations and minimum standards for practices, methods, and procedures necessary for safety in air commerce, including airman certificates, type certificates, and air operating certificates, as well as the authority to examine and rate civilian schools and prescribe regulations to ensure the competency of instructors.

The reporting and recordkeeping requirements imposed by this SFAR

already exist for manufacturers and operators of airplanes and rotorcraft. These requirements will now be applicable to like entities that choose to operate powered-lift. These requirements are described below.

First, each operator which seeks to obtain, or is in possession of, an air carrier or FAA operating certificate is mandated to comply with the requirements of part 135 to determine if the carrier is operating in accordance with minimum safety standards. This burden results in reporting, recordkeeping, and disclosure requirements. All reporting provisions and approval processes can be accomplished electronically, including operations and maintenance manuals, crewmember and aircraft dispatcher records, maintenance records, and minimum equipment lists. However, certain documents, such as passenger briefing cards, must be available in paper form for safety reasons. The burden imposed on operators by this reporting requirement is proportionate to the size of its operation.⁴⁹¹

Next, repair stations certificated under part 145 and passenger-carrying operators certificated under part 135 are required to submit Malfunction or Defect Reports, or Service Difficulty Reports. This data identifies mechanical failures, malfunctions, and defects that may be a hazard to the operation of an aircraft. When defects are reported that are likely to exist on other products of the same or similar design, the FAA may disseminate safety information to a particular section of the aviation community. These reports are submitted occasionally. The submission of information for this requirement is accomplished electronically. The FAA has found that this submission of data does not have a significant impact on a substantial number of small businesses.

Lastly, the *Application for Pilot School Certification* is necessary for the FAA to collect information to ensure flight schools will meet the minimum acceptable training standards as prescribed by part 141. The FAA approves course curricula, training facilities, the chief instructor, and any assistant chief instructors, if applicable, for each course, and ensures oversight of flight instructors that provide training under part 141. Completion of the

required items is of minimal burden to the respondent due to the simplistic format of the document.

6. Significant Alternatives Considered

One alternative the FAA considered was to engage in a permanent rulemaking to address the introduction of powered-lift in civilian operations. However, to date, the FAA lacks sufficient information regarding emerging operations to implement permanent regulations. Instead, the FAA finds the use of a SFAR to be the most viable option. Utilizing the SFAR will allow the FAA to observe operations and subsequently make any requisite safety improvements in a later permanent change to the regulations.

Another alternative considered was the number of years the SFAR would remain in effect. After contemplating several options, the FAA determined ten years to be an appropriate length of time. In selecting ten years as the appropriate duration for this SFAR, the FAA considered a number of factors, including the length of time it will take to initiate operations after the adoption of this rule considering the type certification status of the powered-lift that are commercially viable. The FAA also considered ten years to be the appropriate length of time to collect operational data necessary to complete a subsequent rulemaking to implement permanent regulations.

C. International Trade Impact Assessment

The Trade Agreements Act of 1979 (Pub. L. 96–39), as amended by the Uruguay Round Agreements Act (Pub. L. 103–465), prohibits Federal agencies from establishing standards or engaging in related activities that create unnecessary obstacles to the foreign commerce of the United States. Pursuant to these Acts, the establishment of standards is not considered an unnecessary obstacle to the foreign commerce of the United States, so long as the standard has a legitimate domestic objective, such as the protection of safety and does not operate in a manner that excludes imports that meet this objective. The statute also requires consideration of international standards and, where appropriate, that they be the basis for U.S. standards. The FAA has assessed the potential effect of this final SFAR and determined that it ensures the safety of the American public and does not exclude imports that meet this objective. As a result, the FAA does not consider this rule as creating an unnecessary obstacle to foreign commerce.

⁴⁹⁰ NAICS code 481111—Scheduled Passenger Air Transportation; 481112—Scheduled Freight Air Transportation; 481211—Nonscheduled Passenger Air Transportation; 481212—Nonscheduled Freight Air Transportation; 481219—Other Nonscheduled Air Transportation.

⁴⁹¹ For example, single pilot operations are not required to prepare an operations manual or training program which significantly reduces the burden. The number of records and required reports are proportional to the number of pilots and aircraft used by the operator. Further, in several cases, such as for passenger briefings or aircraft checklists, commercially produced products are available from the aircraft manufacturer.

D. Unfunded Mandates Assessment

The Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1531–1538) governs the issuance of Federal regulations that require unfunded mandates. An unfunded mandate is a regulation that requires a State, local, or Tribal government or the private sector to incur direct costs in excess of the inflation-adjusted statutory threshold of \$183 million without the Federal Government having first provided the funds to pay those costs. The FAA determined that this rule will not result in the expenditure of \$183 million or more by State, local, or Tribal governments, in the aggregate, or the private sector, in any one year.

E. Paperwork Reduction Act

The Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)) requires that the FAA consider the impact of paperwork and other information collection burdens imposed on the public. According to the 1995 amendments to the Paperwork Reduction Act (5 CFR 1320.8(b)(2)(vi)), an agency may not collect or sponsor the collection of information, nor may it impose an information collection requirement unless it displays a currently valid Office of Management and Budget (OMB) control number.

This action contains the following amendments to the existing information

collection requirements previously approved under OMB Control Numbers 2120–0009, 2120–0021, 2120–0039, 2120–0600, 2120–0607, and 2120–0663. In the Powered-lift NPRM, the FAA included the AQP burden in a revision to information collection 2120–0039, Part 135—Operating Requirements: Commuter and On-Demand Operations and Rules Governing Persons on Board such Aircraft, and the FAA discussed the use of AQP throughout the NPRM. However, in publishing the NPRM, the FAA failed to include those revisions to information collection 2120–0701, Advanced Qualification Program (AQP) Subpart Y to part 121. However, given the extensive discussion of the use of AQP and the fact that the burden had been discussed in the context of information collection 2120–0039, the FAA believes that the public had sufficient notice of this burden revision, and therefore the FAA is revising the burden for information collection 2120–0701 in this final rule. As required by the Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)), the FAA has submitted these information collection amendments to OMB for its review.

1. Revision of Existing Information Collection 2120–0701: Advanced Qualification Program (AQP) Subpart Y of 14 CFR 121

Abstract: Certificated air carriers, as well as training centers they employ

may voluntarily respond to this collection in order obtain the benefit of a regulatory alternative for training, checking, qualifying, and certifying crewmembers subject to the requirements of parts 121 and 135. However, for those part 135 operators conducting powered-lift operations with aircraft requiring two pilots by type certification the information collection is mandatory.

Air carriers submit de-identified performance and proficiency data that represents the results of an individual’s ability to successfully demonstrate the performance objectives of each curriculum. This information is captured during validation and evaluation gates as a crewmember progresses through an AQP curriculum. In general, the information is used to provide an improved basis for curriculum approval and monitoring, as well as agency decisions concerning air carrier training regulation and policy. This collection has reporting elements and is reported to the FAA monthly. The FAA has estimated the increase in the existing burden for this collection based on one part 135 operator being required to adhere to an AQP curriculum.

Summary (annual)	Reporting	Total cost (\$99.93/hour)
# of Respondents	1	.....
# of Responses per respondent	12	.....
Time per Response	7 Hours	.....
Total burden	84 Hours	\$8,394

2. Revision of Existing Information Collection 2120–0039: Operating Requirements: Commuter and On-Demand Operation ⁴⁹²

Abstract: Each operator which seeks to obtain, or is in possession of, an air carrier or FAA operating certificate is mandated to comply with the requirements of part 135 to maintain

data which is used to determine if the carrier is operating in accordance with minimum safety standards. Air carrier and commercial operator certification is completed in accordance with part 119. Part 135 contains operations and maintenance requirements. The burden associated with part 135 is associated with reporting, record keeping and disclosure.

The FAA has estimated the increase in the existing burden for this collection based on four part 119 certificate holders beginning powered-lift operations by the end of the third year following finalization of this SFAR. Note that not all information collection requirements have a burden increase as a result of revisions to this information collection.

⁴⁹² Official FAA forecasts related to the operation of powered-lift in the NAS have yet to be developed. Thus, forecasts for operators of part 135 aircraft and fleet were prepared solely for the

purpose of estimating the cost of the information collections affiliated with this rule and developed using publicly available data related to orders and options for powered-lift. Using the fleet forecast and

an assumption for utilization (*i.e.*, hours flown), forecasts for airmen and departures were also developed to estimate incremental costs of the paperwork burden.

TABLE 14—THREE-YEAR INCREMENTAL BURDEN FOR 2120–0039 OPERATING REQUIREMENTS: COMMUTER AND ON-DEMAND OPERATIONS

Section	Section title	Number of respondents	Number of responses	Total responses	Hours-JobCat (1)	Hours-JobCat (2)	Hours-JobCat (3)	Hours-JobCat (4)	Hours-JobCat (5)	Total burden (hours)	Total burden (cost)
135.21	Manual requirements	4	5	20	0.5	.....	2.0	.....	.....	50.0	\$2,097
135.63	Recordkeeping requirements—aircraft available for use.	2	2	4	.....	.....	1.0	.....	.....	4.0	185
	Pilot records	259	4	1,036	0.1	.....	.....	.....	.....	103.6	2,539
	Pilot flight & duty	259	200	51,800	0.1	.....	.....	.....	.....	5,180	126,962
	Load manifest	292,273	1	292,273	0.1	.....	.....	.....	.....	29,227	716,36
135.64	Retention of contracts and amendments written.	6	13	78	.....	0.5	.....	.....	.....	39.0	1,514
	Retention of contracts and amendments oral.	6	2	12	0.5	.....	.....	.....	.....	6.0	147
135.65	Reporting manual irregularities	6	75	450	.....	.....	.....	.....	0.3	112.5	7,611
135.79	Flight locating requirements	2	1	2	.....	.....	0.5	.....	.....	1.0	46
135.117	Briefing of passengers before flight.	292,273	1	292,273	.....	.....	.....	.....	0.03	8,768.2	593,16
135.179	Inoperable instruments and equipment.	6	1	6	3.0	.....	20.0	.....	.....	138.0	5,996
135.227	Icing limitations	6	1	6	5.0	.....	20.0	.....	.....	150.0	6,290
135.325	Training program and revision	6	1	6	5.0	.....	15.0	.....	.....	120.0	4,901
135.415	Mechanical reliability reports	131	1	131	.....	.....	.....	1.0	.....	131.0	6,119
135.417	Mechanical interruption summary report.	6	12	72	.....	.....	.....	1.0	.....	72.0	3,363
135.419	Approved aircraft inspection program.	6	1	6	0.5	.....	.....	1.0	.....	9.0	354
135.431	Continuing analysis and surveillance.	6	1	6	.....	.....	.....	70.0	.....	420.0	19,618
	Incremental burden .....	.....	.....	.....	.....	.....	.....	.....	.....	44,531	1,497,27

Note: Row and column totals may not sum due to rounding.

3. Revision of Existing Information Collection 2120–0600: Training and Qualification Requirements for Check Airmen and Flight Instructors ⁴⁹³

Abstract: The reporting requirements are to ensure the check pilots and instructors are adequately trained and checked/evaluated to ensure they are capable and competent to perform the duties and responsibilities required by the air carrier to meet the regulations. Experienced pilots who would otherwise qualify as flight instructors or

check airmen, but who are not medically eligible to hold the requisite medical certificate are mandated to keep records that may be inspected by the FAA to certify eligibility to perform flight instructor or check airmen functions. This information is inspected on occasion and will be used by the FAA to determine and to assure that check airmen and instructors maintain the high qualification standards (training and experience) required to perform their safety functions.

The FAA has estimated the increase in the existing burden for this collection based on the percentage of instructors that are not medically eligible to hold the requisite medical certificate and are mandated to keep records that may be inspected by the FAA to certify eligibility to perform flight instructor or check airmen functions. The table below shows the incremental burden by the end of the third year following finalization of the SFAR for this recordkeeping requirement.

TABLE 15—THREE-YEAR BURDEN ESTIMATE FOR INFORMATION COLLECTION 2120–0600 ⁴⁹⁴ TRAINING AND QUALIFICATION REQUIREMENTS FOR CHECK AIRMEN AND FLIGHT INSTRUCTORS

	Total burden
Respondents	66
Responses per Respondent	1
Time per response—15 seconds (in minutes)	0.25
Total incremental time (in minutes)	16.44
Total incremental time (in hours)	0.27
Cost per hour (Check airman wage plus benefits—per hour)	\$87.63
Total incremental cost	\$24.54

Note: Row and column totals may not sum due to rounding.

⁴⁹³ See footnote for Revision of Existing Information Collection 2120–0039: Operating Requirements: Commuter and On-Demand Operation.

⁴⁹⁴ The current collection identifies 15,925 respondents performing recordkeeping

requirements. The 2021 Civil Airmen Statistics (source: www.faa.gov/data_research/aviation_data_statistics/civil_airmen_statistics) shows there are 121,270 active flight instructors, thus 13.1 percent of the flight instructor population (15,925 ÷ 121,270 = .131) perform this recordkeeping requirement.

Additionally, FAA records show 251 active airmen holding a flight instructor certificate with a powered-lift rating; thus, it is estimated that 13.1 percent of these airmen are affected by the recordkeeping requirement (for a total of 33 airmen).

4. Revision of Existing Information Collection 2120–0663: Service Difficulty Report ⁴⁹⁵

Abstract: Service Difficulty Reports (SDRs) may be used by the air carrier industry and repair stations to submit mandated reporting of occurrences or detection of failures, malfunctions, or defects and can be submitted in an electronic format. Repair stations certificated under part 145 and passenger-carrying operators certificated under part 135 are required to submit

Malfunction or Defect Reports, or Service Difficulty Reports. Report information is collected and collated by the FAA and used to determine service performance of aeronautical products. When defects are reported which are likely to exist on other products of the same or similar design, the FAA may disseminate safety information to a particular section of the aviation community. The FAA also may adopt new regulations or issue Airworthiness Directives (ADs) to address a specific problem.⁴⁹⁶ The regulations enhance air

carrier safety by collecting additional and timelier data pertinent to critical aircraft components. This data identifies mechanical failures, malfunctions, and defects that may be a hazard to the operation of an aircraft. Reports are submitted on occasion.
The FAA has estimated the increase in the existing burden for this collection based on four part 119 certificate holders beginning powered-lift operations under part 135 by the end of the third year following finalization of this SFAR.

TABLE 16—THREE-YEAR BURDEN ESTIMATE FOR INFORMATION COLLECTION 2120–0663 SERVICE DIFFICULTY REPORT

Summary (three years)	Reporting	Recordkeeping	Disclosure
Number of Respondents	4	.....	.....
Number of Responses per respondent	1	.....	.....
Time per Response	0.667	.....	.....
Total Number of responses	4	.....	.....
Total Burden (hours)	2.7	.....	.....
Total Burden (cost) ⁴⁹⁷	\$95.8	.....	.....

Note: Row and column totals may not sum due to rounding.

5. Revision of Existing Information Collection 2120–0009: Application for Pilot School Certification

Abstract: This information is reported and recorded by part 141 certificated pilot schools seeking to maintain their Air Agency Certification. Uncertificated pilot schools seeking certification as a part 141 pilot school are also required

by part 141 to report information to the FAA and keep specific records. Part 141 pilot schools train private, commercial, flight instructor, and ATPs, along with training for associated ratings in various types of aircraft. The information collected becomes a part of the FAA’s official records and is only used by the FAA for certification, compliance, enforcement, and for accidents,

incidents, reports of noncompliance, safety programs, or other circumstances requiring reference to records. The requirements of part 141 include reporting and recordkeeping. The FAA has estimated the increase in the existing burden for this collection based on one new applicant per year for part 141 certification and one renewal.

TABLE 17—THREE-YEAR BURDEN ESTIMATE FOR INFORMATION COLLECTION 2120–0009 ⁴⁹⁸ APPLICATION FOR PILOT SCHOOL CERTIFICATION

Section	Burden type	Time/response (hours)	Responses	Total time (hours)	Labor cost (\$35.84/hr)
§ 141.13, Application	Reporting	0.5	4	2.0	\$72
§ 141.53, Training course outline	Reporting	25.0	3	75.0	2,688
§ 141.63, Application for examining authority.	Reporting	20.0	3	60.0	2,150
§ 141.87, Change of chief instructor	Reporting	0.1	3	0.3	11
§ 141.110, Training records	Record-keeping	50	3	150	5,376
Total .....	.....	.....	.....	287.3	10,297

Note: Row and column totals may not sum due to rounding.

6. Revision of Existing Information Collection 2120–0021: Airman Certificate and/or Rating Application

Abstract: The Airman certificate and/or Rating Application form and the

required records, logbooks and statements required by part 61 are submitted to Federal Aviation Administration (FAA) Flight Standards District Offices or its representatives to determine qualifications of the

applicant for issuance of a pilot or instructor certificate, or rating or authorization. If the information collection was not conducted, the FAA would be unable to issue the appropriate certificates and ratings. The

⁴⁹⁵ See footnote for Revision of Existing Information Collection 2120–0039: Operating Requirements: Commuter and On-Demand Operation.
⁴⁹⁶ ADs are mandatory repair or modifications essential for the prevention of accidents.

⁴⁹⁷ Costs are based upon a private industry hourly wage of \$25.18. The fully-burdened wage is \$35.90 and includes employee compensation related to benefits that is estimated to be 30.0 percent of the fully-burdened wage. (Source: Bureau of Labor Statistics, Employer Costs for Employee Compensation www.bls.gov/news.release/pdf/ecec.pdf by month).

⁴⁹⁸ The FAA believes that the responses to this information collection will be performed by flight instructors and similar personnel at certificated pilot schools. The median hourly wage for these occupations is \$27.38. The FAA multiplied this base hourly rate by 1.309, representing a load factor of 30.9%, and a fully loaded wage of \$35.84.

information collected becomes a part of the FAA's official records and is only used by the FAA for certification,

compliance, enforcement, and for accidents, incidents, reports of noncompliance, safety programs, or

other circumstances requiring reference to records. The requirements of part 61 include reporting and recordkeeping.

TABLE 18—THREE-YEAR BURDEN ESTIMATE FOR INFORMATION COLLECTION 2120–0021 ⁴⁹⁹ AIRMAN CERTIFICATE AND/OR RATING APPLICATION

Section	Time per response (hours)	Responses	Reporting (hours)	Recordkeeping (hours)	Total cost (15.40/hr)
61.13	0.10	171	17.1	.....	\$263
61.39	0.05	171	8.6	.....	132
61.49	0.05	1	0.1	.....	1
61.51	1.00	44	.....	44.4	684
61.56(a)	0.10	44	4.4	.....	68
61.57	0.10	171	.....	17.1	263
61.87	0.05	171	.....	8.6	132
61.93	0.10	171	.....	17.1	263
61.185	0.10	29	.....	2.9	44
61.189	1.00	29	.....	28.8	443
61.197	0.10	29	2.9	.....	44
Totals .....	.....	1,031	33	119	2,339

F. International Compatibility

In keeping with U.S. obligations under the Convention on International Civil Aviation, it is FAA policy to conform to International Civil Aviation Organization (ICAO) Standards and Recommended Practices to the maximum extent practicable. As discussed in the preamble of this SFAR, the FAA intends to follow ICAO standards for powered-lift where practicable. However, the FAA's initial approach has differences to the ICAO published Standards and Recommended Practices, including the transitional measures outlined by ICAO in Annex 1, Section 2.1.1.4. As documented throughout the preamble, the SFAR provides an equivalent level of safety which meets or exceeds the ICAO Standards. Any identified differences to current or future ICAO standards will be documented and published in accordance with the FAA ICAO Difference procedures.

G. Environmental Analysis

FAA Order 1050.1F identifies FAA actions that are categorically excluded

⁴⁹⁹ To calculate the economic burden on respondents, the FAA uses an hourly rate of \$15.40. This is an all-purpose travel-time rate, which is appropriate for this ICR because respondents represent a wide array of occupations and are often performing their reporting or recordkeeping activities on their own time. The travel-time rate is derived from Department of Transportation guidance (www.faa.gov/regulations_policies/policy_guidance/benefit_cost/), modified by a Consumer Price Index for all Urban Consumers (CPI-U) value calculated by the Minneapolis Fed (www.faa.gov/regulations_policies/policy_guidance/benefit_cost/). The FAA is not applying a load factor for overhead or benefits, because, as noted, these activities are typically not performed as part of a respondent's job or occupation.

from preparation of an environmental assessment or environmental impact statement under the National Environmental Policy Act (NEPA) in the absence of extraordinary circumstances. The FAA has determined this rulemaking action qualifies for the categorical exclusion identified in paragraph 5–6.6f for regulations and involves no extraordinary circumstances.

H. Regulations Affecting Intrastate Aviation in Alaska

Section 1205 of the FAA Reauthorization Act of 1996 (110 Stat. 3213) requires the Administrator, when modifying 14 CFR regulations in a manner affecting intrastate aviation in Alaska, to consider the extent to which Alaska is not served by transportation modes other than aviation, and to establish appropriate regulatory distinctions. Because this final rule will apply to operations of powered-lift that could occur throughout the territorial airspace of the United States, it could, if adopted, affect intrastate aviation in Alaska.

I. Congressional Review Act

As required by 5 U.S.C. 801, FAA will report to Congress on the promulgation of this rule prior to its effective date. The report will state that it has been determined that the rule is a “major rule” as defined by 5 U.S.C. 804(2).

XIX. Executive Order Determinations

A. Executive Order 14036, Promoting Competition in the United States Economy

The FAA has analyzed this rule under the principles and criteria of Executive

Order 14036, Promoting Competition in the United States Economy. The FAA finds that this action promotes competition by enabling powered-lift to enter the market. The FAA anticipates that powered-lift will compete with surface transportation modes in congested intra-city areas for those passengers that want the benefits of convenient and shorter travel times compared to traditional intra-city travel modes that are currently available.

Additionally, the integration of powered-lift into the NAS will foster competition between powered-lift, airplanes, and helicopters with respect to passenger-carrying operations and cargo operations, which will benefit American travelers, consumers, and businesses. By enabling the safe integration of powered-lift into the NAS, the rule facilitates innovations that foster United States market leadership and airspace access to promote competition and economic opportunity, while also ensuring safety and safety oversight.

B. Executive Order 13985, Advancing Racial Equity and Support for Underserved Communities Through the Federal Government

The FAA has analyzed this rule under the principles and criteria of Executive Order 13985, Advancing Racial Equity and Support for Underserved Communities Through the Federal Government. The FAA sought comment on advancing equity and supporting underserved communities. A number of comments related to such underserved communities benefiting from AAM more broadly, with powered-lift being mentioned as potentially providing

greater opportunities for air transportation to rural, remote, and underserved communities. These commenters supported the integration of powered-lift as they believe powered-lift would enhance connectivity, increase the coverage of affordable and efficient transportation, provide economic stimulation, and improve access to emergency services for these communities and regions. Additionally, commenters supported allowing military pilots to obtain a rating for a powered-lift they have operated in the military. Commenters said this provision will support diversity in the workforce and increase the share of powered-lift operations to which the civilian market has access. Consistent with Executive Order 13985, the FAA has analyzed this rule to assess whether, and to what extent, it may perpetuate systemic barriers to opportunities and benefits for underserved communities and their members. The FAA finds that the rule to enable the certification of powered-lift pilots and safe powered-lift operations could advance equity for historically disadvantaged communities by expanding their access to goods and services.

C. Executive Order 13132, Federalism

The FAA has analyzed this final rule under the principles and criteria of Executive Order 13132, Federalism. The FAA has determined that this action will not have a substantial direct effect on the States, or the relationship between the Federal Government and the States, or on the distribution of power and responsibilities among the various levels of government, and, therefore, will not have federalism implications.

D. Executive Order 13175, Consultation and Coordination With Indian Tribal Governments

Consistent with Executive Order 13175, Consultation and Coordination with Indian Tribal Governments,⁵⁰⁰ and FAA Order 1210.20, American Indian and Alaska Native Tribal Consultation Policy and Procedures,⁵⁰¹ the FAA ensures that Federally Recognized Tribes (Tribes) are given the opportunity to provide meaningful and timely input regarding proposed Federal actions that have the potential to have substantial direct effects on one or more Indian Tribes, on the relationship between the Federal government and Indian Tribes, or on the distribution of power and

responsibilities between the Federal government and Indian Tribes; or to affect uniquely or significantly their respective Tribes. The FAA has not identified any unique or significant effects, environmental or otherwise, on Tribes resulting from this final rule.

E. Executive Order 13211, Regulations That Significantly Affect Energy Supply, Distribution, or Use

The FAA analyzed this final rule under Executive Order 13211, Actions Concerning Regulations that Significantly Affect Energy Supply, Distribution, or Use. The FAA has determined that it is not a “significant energy action” under the executive order and is not likely to have a significant adverse effect on the supply, distribution, or use of energy.

F. Executive Order 13609, Promoting International Regulatory Cooperation

Executive Order 13609, Promoting International Regulatory Cooperation, promotes international regulatory cooperation to meet shared challenges involving health, safety, labor, security, environmental, and other issues and to reduce, eliminate, or prevent unnecessary differences in regulatory requirements. The FAA has analyzed this action under the policies and agency responsibilities of Executive Order 13609 and has determined that this action would have no effect on international regulatory cooperation.

XX. Additional Information

A. Electronic Access and Filing

A copy of the NPRM, all comments received, this final rule, and all background material may be viewed online at www.regulations.gov using the docket number listed above. A copy of this final rule will be placed in the docket. Electronic retrieval help and guidelines are available on the website. It is available 24 hours each day, 365 days each year. An electronic copy of this document may also be downloaded from the Office of the Federal Register’s website at www.federalregister.gov and the Government Publishing Office’s website at www.govinfo.gov. A copy may also be found at the FAA’s Regulations and Policies website at www.faa.gov/regulations_policies.

Copies may also be obtained by sending a request to the Federal Aviation Administration, Office of Rulemaking, ARM-1, 800 Independence Avenue SW, Washington, DC 20591, or by calling (202) 267-9677. Commenters must identify the docket or notice number of this rulemaking.

All documents the FAA considered in developing this final rule, including

economic analyses and technical reports, may be accessed in the electronic docket for this rulemaking.

B. Small Business Regulatory Enforcement Fairness Act

The Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996 requires the FAA to comply with small entity requests for information or advice about compliance with statutes and regulations within its jurisdiction. A small entity with questions regarding this document may contact its local FAA official, or the person listed under the **FOR FURTHER INFORMATION CONTACT** heading at the beginning of the preamble. To find out more about SBREFA on the internet, visit www.faa.gov/regulations_policies/rulemaking/sbre_act/.

List of Subjects

14 CFR Part 1

Air transportation.

14 CFR Part 11

Administrative practice and procedure, Reporting and recordkeeping requirements.

14 CFR Part 43

Aircraft, Aviation safety, Reporting and recordkeeping requirements.

14 CFR Part 60

Airmen, Aviation safety, Reporting and recordkeeping requirements.

14 CFR Part 61

Aircraft, Airmen, Aviation safety, Recreation and recreation areas, Reporting and recordkeeping requirements, Security measures, Teachers.

14 CFR Part 91

Agriculture, Air carriers, Air taxi, Air traffic control, Air transportation, Aircraft, Airmen, Airports, Aviation safety, Charter flights, Freight, Reporting and recordkeeping requirements, Security measures, Transportation.

14 CFR Part 97

Air traffic control, Airports, Navigation (air), Weather.

14 CFR Part 111

Administrative practice and procedure, Air carriers, Air transportation, Air taxi, Aircraft, Airmen, Alcohol abuse, Aviation safety, Charter flights, Drug abuse, Reporting and recordkeeping requirements.

14 CFR Part 135

Air carriers, Air taxi, Air transportation, Aircraft, Airmen,

⁵⁰⁰ 65 FR 67249 (Nov. 6, 2000).

⁵⁰¹ FAA Order No. 1210.20 (Jan. 28, 2004), available at www.faa.gov/documentLibrary/media/1210.pdf.

Aviation safety, Reporting and recordkeeping requirements.

14 CFR Part 136

Air transportation, Aircraft, Aviation safety, National parks, Recreation and recreation areas, Reporting and recordkeeping requirements.

14 CFR Part 141

Airmen, Educational facilities, Reporting and recordkeeping requirements, Schools.

14 CFR Part 142

Airmen, Educational facilities, Reporting and recordkeeping requirements, Schools, Teachers.

14 CFR Part 194

Air carriers, Air traffic control, Air transportation, Aircraft, Airmen, Airports, Aviation safety, Charter flights, Freight, Incorporation by reference, Navigation (air), Recreation and recreation areas, Reporting and recordkeeping requirements, Teachers, Schools.

The Amendment

For the reasons discussed in the preamble, the Federal Aviation

Administration amends 14 CFR chapter I of title 14, Code of Federal Regulations as follows:

PART 1—DEFINITIONS AND ABBREVIATIONS

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

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

- 2. Amend § 1.1 by revising the introductory text and the definition of “Autorotation” to read as follows:

§ 1.1 General definitions.

As used in this chapter, unless the context requires otherwise:

* * * * *

Autorotation means a rotorcraft or powered-lift flight condition in which the lifting rotor is driven entirely by action of the air when the rotorcraft or powered-lift is in motion.

* * * * *

- 3. Amend § 1.2 by revising the introductory text to read as follows:

§ 1.2 Abbreviations and symbols.

In this chapter:

* * * * *

- 4. Amend § 1.3 by revising paragraphs (a) introductory text and (b) introductory text to read as follows:

§ 1.3 Rules of construction.

(a) In this chapter, unless the context requires otherwise:

* * * * *

(b) In this chapter, the word:

* * * * *

PART 11—GENERAL RULEMAKING PROCEDURES

- 5. The authority citation for part 11 continues to read as follows:

Authority: 49 U.S.C. 106(f), 40101, 40103, 40105, 40109, 40113, 44110, 44502, 44701–44702, 44711, 46102, and 51 U.S.C. 50901–50923.

- 6. In § 11.201 amend the table in paragraph (b) by adding the entry “Part 194” in numerical order to read as follows:

§ 11.201 Office of Management and Budget (OMB) control numbers assigned under the Paperwork Reduction Act.

* * * * *

(b) * * *

14 CFR part or section identified and described	Current OMB control No.
Part 194	2120–0009, 2120–0021, 2120–0039, 2120–0600, 2120–0607, 2120–0663, 2120–0701.

PART 43—MAINTENANCE, PREVENTIVE MAINTENANCE, REBUILDING, AND ALTERATION

- 7. The authority citation for part 43 continues to read as follows:

Authority: 42 U.S.C. 7572; 49 U.S.C. 106(f), 106(g), 40105, 40113, 44701–44702, 44704, 44707, 44709, 44711, 44713, 44715, 45303.

- 8. Amend § 43.1 by adding paragraph (e) to read as follows:

§ 43.1 Applicability.

* * * * *

(e) Additional applicability of maintenance provisions for powered-lift is set forth in part 194 of this chapter.

PART 60—FLIGHT SIMULATION TRAINING DEVICE INITIAL AND CONTINUING QUALIFICATION AND USE

- 9. The authority citation for part 60 continues to read as follows:

Authority: 49 U.S.C. 106(f), 106(g), 40113, and 44701; Pub. L. 111–216, 124 Stat. 2348 (49 U.S.C. 44701 note).

- 10. Amend § 60.1 by revising paragraph (a) to read as follows:

§ 60.1 Applicability.

(a) This part prescribes the rules governing the initial and continuing qualification and use of all aircraft flight simulation training devices (FSTD) used for meeting training, evaluation, or flight experience requirements of this chapter for flight crewmember certification or qualification. Additional requirements for FSTD representing powered-lift are set forth in part 194 of this chapter.

* * * * *

PART 61—CERTIFICATION: PILOTS, FLIGHT INSTRUCTORS, AND GROUND INSTRUCTORS

- 11. The authority citation for part 61 continues to read as follows:

Authority: 49 U.S.C. 106(f), 40113, 44701–44703, 44707, 44709–44711, 44729, 44903,

45102–45103, 45301–45302; sec. 2307, Pub. L. 114–190, 130 Stat. 615 (49 U.S.C. 44703 note); and sec. 318, Pub. L. 115–254, 132 Stat. 3186 (49 U.S.C. 44703 note).

PART 61 [AMENDED]

- 12. In part 61, revise all references to “cross-country flight time” to read “cross-country time”.

- 13. Amend § 61.1 by:

■ a. Revising paragraph (a); and

■ b. In paragraph (b) in the definition of “Cross-country time”, revising paragraph (i) introductory text.

The revisions read as follows:

§ 61.1 Applicability and definitions.

(a) Except as provided in parts 107 and 194 of this chapter, this part prescribes:

(1) The requirements for issuing pilot, flight instructor, and ground instructor certificates and ratings; the conditions under which those certificates and ratings are necessary; and the privileges and limitations of those certificates and ratings.

(2) The requirements for issuing pilot, flight instructor, and ground instructor authorizations; the conditions under which those authorizations are necessary; and the privileges and limitations of those authorizations.

(3) The requirements for issuing pilot, flight instructor, and ground instructor certificates and ratings for persons who have taken courses approved by the Administrator under other parts of this chapter.

(b) * * *

Cross-country time * * *

(i) Except as provided in paragraphs (ii) through (vii) of this definition, time acquired during flight—

* * * * *

■ 14. Amend § 61.3 by revising paragraphs (e)(1) and (2), (f)(2)(i) and (ii), and (g)(2)(i) and (ii) to read as follows:

§ 61.3 Requirement for certificates, ratings, and authorizations.

* * * * *

(e) * * *

(1) The appropriate aircraft category, class, type (if a class or type rating is required), and instrument rating on that person's pilot certificate for any airplane, helicopter, or powered-lift being flown;

(2) An airline transport pilot certificate with the appropriate aircraft category, class, and type rating (if a class or type rating is required) for the aircraft being flown;

* * * * *

(f) * * *

(2) * * *

(i) Holds a pilot certificate with category and class ratings (if a class rating is required) for that aircraft and an instrument rating for that category aircraft;

(ii) Holds an airline transport pilot certificate with category and class ratings (if a class rating is required) for that aircraft; or

* * * * *

(g) * * *

(2) * * *

(i) Holds a pilot certificate with category and class ratings (if a class rating is required) for that aircraft and an instrument rating for that category aircraft;

(ii) Holds an airline transport pilot certificate with category and class ratings (if a class rating is required) for that aircraft; or

* * * * *

■ 15. Amend § 61.5 by:

■ a. Redesignating paragraphs (b)(7)(iii) and (iv) as paragraphs (b)(7)(iv) and (b)(9), respectively; and

■ b. Adding new paragraph (b)(7)(iii).

The addition reads as follows:

§ 61.5 Certificates and ratings issued under this part.

* * * * *

(b) * * *

(7) * * *

(iii) Powered-lift.

* * * * *

■ 16. Amend § 61.31 by:

■ a. Redesignating paragraph (a)(3) as paragraph (a)(4);

■ b. Adding new paragraph (a)(3); and

■ c. Revising paragraph (l)(1).

The revisions and addition read as follows:

§ 61.31 Type rating requirements, additional training, and authorization requirements.

(a) * * *

(3) Powered-lift.

* * * * *

(l) * * *

(1) This section does not require a pilot to hold category and class ratings for an aircraft that is not identified by category or class under § 61.5(b).

* * * * *

■ 17. Amend § 61.39 by revising paragraph (a)(3) to read as follows:

§ 61.39 Prerequisites for practical tests.

(a) * * *

(3) Have satisfactorily accomplished the required training and obtained the aeronautical experience prescribed by this part for the certificate or rating sought, and:

(i) If applying for the practical test with flight time accomplished under § 61.159(c), present a copy of the records required by § 135.63(a)(4)(vi) and (x) of this chapter; or

(ii) If applying for a practical test for the issuance of an initial category and class rating (if a class rating is required) at the private, commercial, or airline transport pilot certificate level in an aircraft that requires a type rating or a flight simulator or flight training device that represents an aircraft that requires a type rating, meet the eligibility requirements for the type rating or already hold the type rating on their pilot certificate;

* * * * *

■ 18. Amend § 61.43 by adding paragraph (g) to read as follows:

§ 61.43 Practical tests: General procedures.

* * * * *

(g) A practical test for an airline transport pilot certificate with category and class rating (if a class rating is required) in an aircraft that requires a type rating or in a flight simulation

training device that represents an aircraft that requires a type rating includes the same tasks and maneuvers as a practical test for a type rating.

■ 19. Amend § 61.45 by revising paragraphs (a)(1)(i) and (a)(2)(ii) to read as follows:

§ 61.45 Practical tests: Required aircraft and equipment.

(a) * * *

(1) * * *

(i) Is of the category, class, and type (if a class or type rating is required) for which the applicant is applying for a certificate or rating; and

* * * * *

(2) * * *

(ii) An aircraft of the same category, class, and type (if a class or type rating is required) of foreign registry that is properly certificated by the country of registry; or

* * * * *

■ 20. Amend § 61.47 by revising the section heading and adding paragraph (d) to read as follows:

§ 61.47 Status and responsibilities of an examiner who is authorized by the Administrator to conduct practical tests.

* * * * *

(d) An examiner may not conduct a practical test for the issuance of an initial category and class rating (if a class rating is required) at the private, commercial, or airline transport pilot certificate level in an aircraft that requires a type rating or a flight simulator or flight training device that represents an aircraft that requires a type rating unless:

(1) The applicant meets the eligibility requirements for a type rating in that aircraft or already holds that type rating on their certificate; and

(2) The practical test contains the tasks and maneuvers for a type rating specified in the areas of operation at the airline transport pilot certification level.

■ 21. Amend § 61.51 by revising paragraph (f)(2) to read as follows:

§ 61.51 Pilot logbooks.

* * * * *

(f) * * *

(2) Holds the appropriate category, class, and instrument rating (if a class or instrument rating is required for the flight) for the aircraft being flown, and more than one pilot is required under the type certification of the aircraft or the regulations under which the flight is being conducted; or

* * * * *

■ 22. Amend § 61.55 by revising paragraph (a) to read as follows:

§ 61.55 Second-in-command qualifications.

(a) A person may serve as a second-in-command of an aircraft type certificated for more than one required pilot flight crewmember or in operations requiring a second-in-command pilot flight crewmember only if that person meets the following requirements:

(1) Holds at least a private pilot certificate with the appropriate category and class rating;

(2) Holds an instrument rating or privilege that applies to the aircraft being flown if the flight is under IFR;

(3) Holds at least a pilot type rating for the aircraft being flown unless the flight will be conducted as domestic flight operations within the United States airspace; and

(4) If serving as second-in-command of a powered-lift, satisfies the requirements specified in § 194.209 of this chapter.

* * * *

■ 23. Amend § 61.57 by revising paragraphs (a)(1)(ii), (b)(1)(ii), and (g)(1) and (4) to read as follows:

§ 61.57 Recent flight experience: Pilot in command.

(a) * * *

(1) * * *

(ii) The required takeoffs and landings were performed in an aircraft of the same category, class, and type (if a class or type rating is required), and, if the aircraft to be flown is an airplane with a tailwheel, the takeoffs and landings must have been made to a full stop in an airplane with a tailwheel.

* * * *

(b) * * *

(1) * * *

(ii) The required takeoffs and landings were performed in an aircraft of the same category, class, and type (if a class or type rating is required).

* * * *

(g) * * *

(1) An Examiner who is qualified to perform night vision goggle operations in that same aircraft category and class (if a class rating is required);

* * * *

(4) An authorized flight instructor who is qualified to perform night vision goggle operations in that same aircraft category and class (if a class rating is required);

* * * *

§ 61.63 [Amended]

■ 24. Amend § 61.63 by removing and reserving paragraph (h).

■ 25. Amend § 61.64 by revising paragraphs (a)(1) and (e), (f) introductory text, and (g)(1) to read as follows:

§ 61.64 Use of a flight simulator and flight training device.

(a) * * *

(1) Must represent the category, class, and type (if a class or type rating is applicable) for the rating sought; and

* * * *

(e) Except as provided in paragraph (f) of this section, if a powered-lift is not used during the practical test for a type rating in a powered-lift (except for preflight inspection), an applicant must accomplish the entire practical test in a Level C or higher flight simulator and have 500 hours of flight time in the type of powered-lift for which the rating is sought.

(f) If the applicant does not meet one of the experience requirements of paragraphs (b)(1) through (5), paragraphs (c)(1) through (5), paragraphs (d)(1) through (4), or paragraph (e) of this section, as appropriate to the type rating sought, then—

* * * *

(g) * * *

(1) Performs 25 hours of flight time in an aircraft of the appropriate category, class (if a class rating is required), and type for which the limitation applies under the direct observation of the pilot in command who holds a category, class (if a class rating is required), and type rating, without limitations, for the aircraft;

* * * *

■ 26. Amend § 61.109 by revising paragraph (e)(5) introductory text to read as follows:

§ 61.109 Aeronautical experience.

* * * *

(e) * * *

(5) 10 hours of solo flight time in a powered-lift consisting of at least—

* * * *

■ 27. Amend § 61.163 by adding paragraphs (c), (d), and (e) to read as follows:

§ 61.163 Aeronautical experience: Powered-lift category rating.

* * * *

(c) Flight time logged under § 61.159(c) may be counted toward the 1,500 hours of total time as a pilot required by paragraph (a) of this section and the flight time requirements of paragraphs (a)(1), (2), and (4) of this section.

(d) An applicant who credits time under paragraph (c) of this section is issued an airline transport pilot certificate with the limitation “Holder does not meet the pilot in command aeronautical experience requirements of ICAO,” as prescribed under Article 39

of the Convention on International Civil Aviation.

(e) An applicant is entitled to an airline transport pilot certificate without the ICAO limitation specified under paragraph (d) of this section when the applicant presents satisfactory evidence of having met the ICAO requirements under paragraph (d) of this section and otherwise meets the aeronautical experience requirements of this section.

§ 61.165 [Amended]

■ 28. Amend § 61.165 by removing paragraph (g).

■ 29. Amend § 61.167 by revising the introductory text of paragraph (a)(2) to read as follows:

§ 61.167 Airline transport pilot privileges and limitations.

(a) * * *

(2) A person who holds an airline transport pilot certificate and has met the aeronautical experience requirements of § 61.159, 61.161, or 61.163, and the age requirements of § 61.153(a)(1) may instruct—

* * * *

PART 91—GENERAL OPERATING AND FLIGHT RULES

■ 30. The authority citation for part 91 continues to read as follows:

Authority: 49 U.S.C. 106(f), 40101, 40103, 40105, 40113, 40120, 44101, 44111, 44701, 44704, 44709, 44711, 44712, 44715, 44716, 44717, 44722, 46306, 46315, 46316, 46504, 46506–46507, 47122, 47508, 47528–47531, 47534, Pub. L. 114–190, 130 Stat. 615 (49 U.S.C. 44703 note); articles 12 and 29 of the Convention on International Civil Aviation (61 Stat. 1180), (126 Stat. 11).

■ 31. Amend § 91.1 by revising paragraph (d) and adding paragraph (g) to read as follows:

§ 91.1 Applicability.

* * * *

(d) This part also establishes requirements for operators to take actions to support the continued airworthiness of each aircraft.

* * * *

(g) Additional requirements for powered-lift operations are set forth in part 194 of this chapter.

■ 32. Amend § 91.113 by revising paragraph (d) to read as follows:

§ 91.113 Right-of-way rules: Except water operations.

* * * *

(d) Converging. When aircraft of the same category are converging at approximately the same altitude (except head-on, or nearly so), the aircraft to the other's right has the right-of-way. If the aircraft are of different categories—

(1) A balloon has the right-of-way over any other category of aircraft;

(2) A glider has the right-of-way over an airship, powered parachute, weight-shift-control aircraft, airplane, powered-lift, or rotorcraft.

(3) An airship has the right-of-way over a powered parachute, weight-shift-control aircraft, airplane, powered-lift, or rotorcraft.

(4) An aircraft towing or refueling other aircraft has the right-of-way over all other engine-driven aircraft.

* * * * *

§ 91.205 [Amended]

■ 33. Amend § 91.205 in the section headings and paragraph (a) by removing the phrase “standard category” and adding in its place the word “standard”.

■ 34. Amend § 91.903 by revising paragraph (a) to read as follows:

§ 91.903 Policy and procedures.

(a) The Administrator may issue a certificate of waiver authorizing the operation of aircraft in deviation from any rule listed in this subpart or any rule listed in this subpart as modified by subpart C of part 194 of this chapter if the Administrator finds that the proposed operation can be safely conducted under the terms of that certificate of waiver.

* * * * *

■ 35. Amend § 91.1053 by revising paragraph (a)(2)(i) to read as follows:

§ 91.1053 Crewmember experience.

(a) * * *

(2) * * *

(i) Pilot in command—Airline transport pilot and applicable type ratings not limited to VFR only.

* * * * *

§ 91.1115 [Amended]

■ 36. Amend § 91.1115(b)(1) by removing the word “airplane” and adding in its place the word “aircraft”.

PART 97—STANDARD INSTRUMENT PROCEDURES

■ 37. 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, and 44721–44722.

■ 38. Amend § 97.1 by adding paragraph (c) to read as follows:

§ 97.1 Applicability.

* * * * *

(c) Additional applicability of copter procedures for powered-lift is set forth in part 194 of this chapter.

PART 111—PILOT RECORDS DATABASE

■ 39. The authority citation for part 111 continues to read as follows:

Authority: 49 U.S.C. 106(f), 106(g), 40101, 40113, 44701, 44703, 44711, 46105, 46301.

■ 40. Amend § 111.1 by revising paragraph (b)(4) introductory text and adding paragraph (b)(4)(iii) to read as follows:

§ 111.1 Applicability.

* * * * *

(b) * * *

(4) Each operator that operates two or more aircraft described in paragraph (b)(4)(i), (ii), or (iii) of this section, in furtherance of or incidental to a business, solely pursuant to the general operating and flight rules in part 91 of this chapter, or that operates aircraft pursuant to a Letter of Deviation Authority issued under § 125.3 of this chapter.

* * * * *

(iii) Large powered-lift.

* * * * *

PART 135—OPERATING REQUIREMENTS: COMMUTER AND ON DEMAND OPERATIONS AND RULES GOVERNING PERSONS ON BOARD SUCH AIRCRAFT

■ 41. The authority citation for part 135 continues to read as follows:

Authority: 49 U.S.C. 106(f), 40113, 41706, 44701–44702, 44705, 44709, 44711–44713, 44715–44717, 44722, 44730, 45101–45105; Pub. L. 112–95, 126 Stat. 58 (49 U.S.C. 44730).

■ 42. Amend § 135.1 by adding paragraph (d) to read as follows:

§ 135.1 Applicability.

* * * * *

(d) Additional requirements for powered-lift operations, training, checking, and testing, are set forth in part 194 of this chapter.

■ 43. Amend § 135.100 by:

■ a. Adding paragraph (d); and

■ b. Removing the note at the end of the section.

The addition reads as follows:

§ 135.100 Flight crewmember duties.

* * * * *

(d) For the purposes of this section, taxi is defined as movement of an aircraft under its own power on the surface of an airport and includes hover taxi which is movement of a helicopter or any vertical takeoff and landing aircraft conducted above the surface and in ground effect at airspeeds less than approximately 20 knots, and air taxi which is movement of a helicopter or

any vertical takeoff and landing aircraft conducted above the surface but normally not above 100 feet AGL.

■ 44. Amend § 135.152 by revising paragraph (j) to read as follows:

§ 135.152 Flight data recorders.

* * * * *

(j) For all turbine-engine-powered airplanes with a seating configuration, excluding any required crewmember seat, of 10 to 30 passenger seats, that are manufactured after August 19, 2002, the parameters listed in paragraphs (h)(1) through (88) of this section must be recorded within the ranges, accuracies, resolutions, and recording intervals specified in appendix F to this part.

* * * * *

§ 135.165 [Amended]

■ 45. Amend § 135.165 by removing the reference “part 119” in the introductory text of paragraph (d) and adding in its place the reference “part 110”.

■ 46. Amend § 135.179 by revising paragraph (b)(1) to read as follows:

§ 135.179 Inoperable instruments and equipment.

* * * * *

(b) * * *

(1) Instruments and equipment that are either specifically or otherwise required by the airworthiness requirements under which the aircraft is type certificated and which are essential for safe operations under all operating conditions.

* * * * *

■ 47. Amend § 135.243 by revising and republishing paragraphs (a) through (c) to read as follows:

§ 135.243 Pilot in command qualifications.

(a) No certificate holder may use a person, nor may any person serve, as pilot in command in passenger-carrying operations—

(1) Of a turbojet airplane, of an airplane having a passenger-seat configuration, excluding each crewmember seat, of 10 seats or more, or of a multiengine airplane in a commuter operation as defined in part 110 of this chapter, unless that person holds an airline transport pilot certificate with appropriate category and class ratings and, if required, an appropriate type rating for that airplane.

(2) Of a helicopter in a scheduled interstate air transportation operation by an air carrier within the 48 contiguous states unless that person holds an airline transport pilot certificate, appropriate type ratings, and an instrument rating.

(3) Of a turbojet-powered powered-lift, of a powered-lift having a

passenger-seat configuration, excluding each crewmember seat, of 10 seats or more, or of a powered-lift in a commuter operation as defined in part 110 of this chapter, unless that person holds an airline transport pilot certificate with appropriate category rating, and appropriate type rating not limited to VFR for that powered-lift.

(b) Except as provided in paragraph (a) of this section, no certificate holder may use a person, nor may any person serve, as pilot in command of an aircraft under VFR unless that person—

(1) Holds at least a commercial pilot certificate with appropriate category and class ratings; an appropriate type rating for that aircraft, if required; and for a powered-lift, a type rating for that aircraft not limited to VFR; and

(2) Has had at least 500 hours' time as a pilot, including at least 100 hours of cross-country flight time, at least 25 hours of which were at night; and

(3) For an airplane, holds an instrument rating or an airline transport pilot certificate with an airplane category rating; or

(4) For helicopter operations conducted VFR over-the-top, holds a helicopter instrument rating, or an airline transport pilot certificate with a category and class rating for that aircraft, not limited to VFR; or

(5) For a powered-lift, holds an instrument-powered-lift rating or an airline transport pilot certificate with a powered-lift category rating.

(c) Except as provided in paragraph (a) of this section, no certificate holder may use a person, nor may any person serve, as pilot in command of an aircraft under IFR unless that person—

(1) Holds at least a commercial pilot certificate with appropriate category and class ratings, and if required, an appropriate type rating for that aircraft (the type rating for powered-lift may not be limited to VFR); and

(2) Has had at least 1,200 hours of flight time as a pilot, including 500 hours of cross country flight time, 100 hours of night flight time, and 75 hours of actual or simulated instrument time at least 50 hours of which were in actual flight; and

(3) For an airplane, holds an instrument rating or an airline transport pilot certificate with an airplane category rating; or

(4) For a helicopter, holds a helicopter instrument rating, or an airline transport pilot certificate with a category and class rating for that aircraft, not limited to VFR; or

(5) For a powered-lift, holds an instrument-powered-lift rating or an

airline transport pilot certificate with a powered-lift category rating.

* * * * *

§ 135.244 [Amended]

■ 48. Amend § 135.244 by removing the reference “part 119” in the introductory text of paragraph (a) and adding in its place the reference “part 110”.

■ 49. Amend § 135.245 by revising the introductory text of paragraph (c)(1) to read as follows:

§ 135.245 Second in command qualifications.

* * * * *

(c) * * *

(1) *Use of an airplane, powered-lift, or helicopter for maintaining instrument experience.* Within the 6 calendar months preceding the month of the flight, that person performed and logged at least the following tasks and iterations in-flight in an airplane, powered-lift, or helicopter, as appropriate, in actual weather conditions, or under simulated instrument conditions using a view-limiting device:

* * * * *

■ 50. Amend § 135.293 by:

■ a. Revising paragraphs (a)(9), (b), and (c); and

■ b. Removing and reserving paragraph (h).

The revisions read as follows:

§ 135.293 Initial and recurrent pilot testing requirements.

(a) * * *

(9) For rotorcraft and powered-lift pilots, procedures for aircraft handling in flat-light, whiteout, and brownout conditions, including methods for recognizing and avoiding those conditions.

(b) No certificate holder may use a pilot, nor may any person serve as a pilot, in any aircraft unless, since the beginning of the 12th calendar month before that service, that pilot has passed a competency check given by the Administrator or an authorized check pilot in that class of aircraft, if single-engine airplane other than turbojet, or that type of aircraft, if helicopter, multiengine airplane, turbojet airplane, or powered-lift to determine the pilot's competence in practical skills and techniques in that aircraft or class of aircraft. The extent of the competency check shall be determined by the Administrator or authorized check pilot conducting the competency check. The competency check may include any of the maneuvers and procedures currently required for the original issuance of the particular pilot certificate required for

the operations authorized and appropriate to the category, class and type of aircraft involved. For the purposes of this paragraph (b), type, as to an airplane means any one of a group of airplanes determined by the Administrator to have a similar means of propulsion, the same manufacturer, and no significantly different handling or flight characteristics. For the purposes of this paragraph (b), type, as to a helicopter, means a basic make and model.

(c) Each competency check given in a rotorcraft or powered-lift must include a demonstration of the pilot's ability to maneuver the rotorcraft or powered-lift solely by reference to instruments. The check must determine the pilot's ability to safely maneuver the rotorcraft or powered-lift into visual meteorological conditions following an inadvertent encounter with instrument meteorological conditions. For competency checks in non-IFR-certified rotorcraft or powered-lift, the pilot must perform such maneuvers as are appropriate to the rotorcraft's or powered-lift's installed equipment, the certificate holder's operations specifications, and the operating environment.

* * * * *

■ 51. Amend § 135.297 by revising paragraphs (c)(1)(i) and (ii) and (g)(3) to read as follows:

§ 135.297 Pilot in command: Instrument proficiency check requirements.

* * * * *

(c) * * *

(1) * * *

(i) For a pilot in command of an aircraft under § 135.243(a), include the procedures and maneuvers for an airline transport pilot certificate in the particular type of aircraft, if appropriate; and

(ii) For a pilot in command of an aircraft under § 135.243(c), include the procedures and maneuvers for a commercial pilot certificate with an instrument rating and, if required, for the appropriate type rating.

* * * * *

(g) * * *

(3) Each pilot taking the autopilot check must show that, while using the autopilot:

(i) The airplane or powered-lift can be operated as proficiently as it would be if a second in command were present to handle air-ground communications and air traffic control instructions. The autopilot check need only be demonstrated once every 12 calendar months during the instrument proficiency check required under paragraph (a) of this section.

(ii) On and after July 21, 2025, rotorcraft can be operated as proficiently as it would be if a second in command were present to handle air-ground communications and air traffic control instructions. The autopilot check need only be demonstrated once every 12 calendar months during the instrument proficiency check required under paragraph (a) of this section.

■ 52. Effective July 21, 2025, further amend § 135.297 by revising paragraph (g)(3) to read as follows:

§ 135.297 Pilot in command: Instrument proficiency check requirements.

* * * * *

(g) * * *

(3) Each pilot taking the autopilot check must show that, while using the autopilot, the aircraft can be operated as proficiently as it would be if a second in command were present to handle air-ground communications and air traffic control instructions. The autopilot check need only be demonstrated once every 12 calendar months during the instrument proficiency check required under paragraph (a) of this section.

■ 53. Amend § 135.339 by revising paragraphs (e)(3) and (4) to read as follows:

§ 135.339 Initial and transition training and checking: Check airmen (aircraft), check airmen (simulator).

* * * * *

(e) * * *

(3) Training and practice in conducting flight checks from the left and right pilot seats, or in the case of powered-lift with one pilot seat from that seat as well as providing training and instruction from an observation seat, in the required normal, abnormal, and emergency procedures to ensure competence to conduct the pilot flight checks required by this part; and

(4) The safety measures to be taken from either pilot seat, or in the case of powered-lift with one pilot seat from that seat as well as providing training and instruction from an observation seat, for emergency situations that are likely to develop during checking.

* * * * *

■ 54. Amend § 135.340 by revising paragraphs (e)(3) and (4) to read as follows:

§ 135.340 Initial and transition training and checking: Flight instructors (aircraft), flight instructors (simulator).

* * * * *

(e) * * *

(3) Training and practice from the left and right pilot seats, or in the case of powered-lift with one pilot seat from that seat as well as providing training

and instruction from an observation seat, in the required normal, abnormal, and emergency maneuvers to ensure competence to conduct the flight instruction required by this part; and

(4) The safety measures to be taken from either the left or right pilot seat, or in the case of powered-lift with one pilot seat from that seat as well as providing training and instruction from an observation seat, for emergency situations that are likely to develop during instruction.

* * * * *

PART 136—COMMERCIAL AIR TOURS AND NATIONAL PARKS AIR TOUR MANAGEMENT

■ 55. The authority citation for part 136 continues to read as follows:

Authority: 49 U.S.C. 106(f), 40113, 40119, 44101, 44701–44702, 44705, 44709–44711, 44713, 44716–44717, 44722, 44901, 44903–44904, 44912, 46105.

■ 56. Amend § 136.1 by adding paragraph (f) to read as follows:

§ 136.1 Applicability and definitions.

* * * * *

(f) Additional requirements for powered-lift operations are set forth in part 194 of this chapter.

■ 57. Amend § 136.75 by revising paragraph (a) introductory text to read as follows:

§ 136.75 Equipment and requirements.

(a) *Flotation equipment.* No person may conduct an air tour in Hawaii in a single-engine rotorcraft beyond the shore of any island, regardless of whether the rotorcraft is within gliding distance of the shore, unless:

* * * * *

PART 141—PILOT SCHOOLS

■ 58. The authority citation for part 141 continues to read as follows:

Authority: 49 U.S.C. 106(f), 40113, 44701–44703, 44707, 44709, 44711, 45102–45103, 45301–45302.

■ 59. Revise § 141.1 to read as follows:

§ 141.1 Applicability.

This part prescribes the requirements for issuing pilot school certificates, provisional pilot school certificates, and associated ratings, and the general operating rules applicable to a holder of a certificate or rating issued under this part. Additional requirements for pilot schools seeking to provide training courses for powered-lift certification and ratings are set forth in part 194 of this chapter.

■ 60. Amend § 141.37 by revising paragraph (a)(3)(ii) to read as follows:

§ 141.37 Check Instructor Qualifications.

* * * * *

(a) * * *

(3) * * *

(ii) Except for a course of training for a lighter-than-air rating, hold either a current flight instructor certificate with the appropriate category and class of aircraft, or ground instructor certificate with appropriate ratings, to be used in the course of training; and

* * * * *

PART 142—TRAINING CENTERS

■ 61. The authority citation for part 142 continues to read as follows:

Authority: 49 U.S.C. 106(f), 106(g), 40113, 40119, 44101, 44701–44703, 44705, 44707, 44709–44711, 45102–45103, 45301–45302.

■ 62. Amend § 142.1 by adding paragraph (d) to read as follows:

§ 142.1 Applicability.

* * * * *

(d) Additional requirements for training centers seeking to provide curriculums for powered-lift certification and ratings are set forth in part 194 of this chapter.

■ 63. Amend § 142.11 by revising paragraph (d)(2)(iii) to read as follows:

§ 142.11 Application for issuance or amendment.

* * * * *

(d) * * *

(2) * * *

(iii) For each flight simulator or flight training device, the make model, and series of aircraft or the set of aircraft being simulated and the qualification level assigned;

* * * * *

■ 64. Amend § 142.47 by revising paragraphs (a)(5) and (c)(2)(ii) to read as follows:

§ 142.47 Training center instructor eligibility requirements.

(a) * * *

(5) Meets at least one of the requirements in paragraphs (a)(5)(i) through (iv) of this section:

(i) Except as allowed by paragraph (a)(5)(ii) of this section, meets the aeronautical experience requirements of § 61.129(a), (b), (c), or (e) of this chapter, as applicable, excluding the required hours of instruction in preparation for the commercial pilot practical test, or holds a commercial pilot certificate with the appropriate ratings;

(ii) Meets the aeronautical experience requirements of § 61.159, § 61.161, or § 61.163 of this chapter, as applicable, or holds an unrestricted airline transport pilot certificate with the appropriate ratings, if instructing;

(A) In a flight simulation training device that represents an airplane or rotorcraft requiring a type rating, a powered-lift over 12,500 pounds, or a turbojet powered powered-lift, except as provided in paragraph (a)(5)(iv) of this section, or

(B) In a curriculum leading to the issuance of an airline transport pilot certificate or an added rating to an airline transport pilot certificate.

(iii) Is employed as a flight simulator instructor or a flight training device instructor for a training center providing instruction and testing to meet the requirements of part 61 of this chapter on August 1, 1996.

(iv) A person employed as an instructor and providing training in an FSTD that represents a rotorcraft requiring a type rating is not required to meet the aeronautical experience requirements of paragraph (a)(5)(ii) of this section and may instead meet the experience requirements of paragraph (a)(i) of this section if:

(A) The person meets the experience requirements of paragraph (a)(5)(i) of this section;

(B) The person is not providing training in a curriculum leading to the issuance of an airline transport pilot certificate or an added rating to an airline transport pilot certificate, and

(C) The person was employed and met the remaining requirements of this section on March 21, 2025.

* * * * *

(c) * * *

(2) * * *

(ii) That is accepted by the Administrator as being of equivalent difficulty, complexity, and scope as the tests provided by the Administrator for the applicable flight instructor and instrument flight instructor knowledge tests to the aircraft category in which they are instructing.

§ 142.53 [Amended]

■ 65. Amend § 142.53 in paragraphs (b)(2)(i) and (b)(3)(i) by removing the word “airplane” and adding in its place the word “aircraft”.

§ 142.57 [Amended]

■ 66. Amend § 142.57(c) by removing the word “Airplanes” and adding in its place the word “Aircraft”.

■ 67. Under the authority of 49 U.S.C. 106(f), add subchapter L, consisting of part 194, to read as follows:

SUBCHAPTER L—OTHER SPECIAL FEDERAL AVIATION REGULATIONS

PART 194—SPECIAL FEDERAL AVIATION REGULATION NO. 120— POWERED-LIFT: PILOT CERTIFICATION AND TRAINING; OPERATIONS REQUIREMENTS

Sec.

Subpart A—General

194.101 Applicability.

194.103 Definitions.

194.105 Qualification of powered-Lift FSTDs.

194.107 Expiration.

194.109 Incorporation by reference.

Subpart B—Certification, Training, and Qualification Requirements for Pilots and Flight Instructors

194.201 Alternate definition of cross-country time.

194.203 Alternate qualification requirements for certain flight instructors.

194.205 Limitations on flight training privileges for holders of airline transport pilot certificates under a part 135 of this chapter approved training program.

194.207 Alternate requirement for practical tests and training in a powered-lift.

194.209 Additional qualification requirements for certain pilots serving as second-in-command.

194.211 Alternate eligibility requirements for a person seeking a powered-lift type rating.

194.213 Alternate endorsement requirements for certain persons seeking a powered-lift rating.

194.215 Applicability of alternate aeronautical experience and logging requirements for commercial pilot certification and a powered-lift instrument rating.

194.216 Alternate aeronautical experience: Pilot-in-command flight time in a powered-lift for a commercial pilot certificate with a powered-lift category rating.

194.217 Test pilots, FAA test pilots, or aviation safety inspectors: Alternate aeronautical experience and logging requirements for a commercial pilot certificate with a powered-lift category rating.

194.219 Instructor pilots: Alternate aeronautical experience and logging requirements for a commercial pilot certificate with a powered-lift category rating.

194.221 Initial cadre of instructors: Alternate aeronautical experience and logging requirements for a commercial pilot certificate with a powered-lift category rating.

194.223 Pilots receiving training under an approved training program: Alternate requirements for a commercial pilot certificate with a powered-lift category rating.

194.225 Test pilots, FAA test pilots, or aviation safety inspectors: Alternate aeronautical experience and logging

requirements for an instrument-powered-lift rating.

194.227 Instructor pilots: Alternate aeronautical experience and logging requirements for an instrument-powered-lift rating.

194.229 Initial cadre of instructors: Alternate aeronautical experience and logging requirements for an instrument-powered-lift rating.

194.231 Pilots receiving training under an approved training program: Alternate requirements for an instrument-powered-lift rating.

194.233 Alternate means to satisfy the cross-country aeronautical experience requirements for a commercial pilot certificate with a powered-lift category rating.

194.235 Alternate means to satisfy the cross-country aeronautical experience requirements for an instrument-powered-lift rating.

194.237 Alternate means to satisfy the cross-country aeronautical experience requirements for a private pilot certificate with a powered-lift category rating.

194.239 Alternate means to satisfy minimum curriculum content in certain appendices to part 141 of this chapter.

194.241 Alternate qualification requirements for chief instructors, assistant chief instructors, and check instructors.

194.243 Pilot certification through completion of training, testing, and checking under part 135 of this chapter.

194.245 Pilot qualification and program management requirements to operate powered-lift under subpart K to part 91 of this chapter.

194.247 Pilot qualification requirements to operate powered-lift under part 135 of this chapter.

194.249 References to class in parts 135, 141, and 142 of this chapter.

194.251 Alternate means to satisfy minimum curriculum content in training courses under part 142 of this chapter.

194.253 Alternate requirements for powered-lift without fully functional dual controls used in flight training.

194.255 Alternate requirements for powered-lift without fully functioning dual controls used in supervised operating experience when adding a type rating.

Subpart C—Requirements for Persons Operating Powered-Lift

194.301 Applicability.

194.302 Provisions under part 91 of this chapter applicable to powered-lift.

194.303 IFR takeoff, approach, and landing minimums.

194.304 ATC transponder and altitude reporting equipment and use.

194.305 Applicability of copter procedures under part 97 of this chapter to powered-lift.

194.306 Provisions under part 135 of this chapter applicable to powered-lift.

194.307 Applicability of rules for eligible on-demand operations.

- 194.308 Applicability of national air tour safety standards under part 136 of this chapter to powered-lift.
- 194.309 Applicability of flight instruction; Simulated instrument flight.
- 194.310 Powered-lift in vertical-lift flight mode, flight recorder specifications under part 91 of this chapter.
- 194.311 Powered-lift in wing-borne flight mode, flight recorder specifications under part 91 of this chapter.
- 194.312 Powered-lift in vertical-lift flight mode, flight recorder specifications under part 135 of this chapter.
- 194.313 Powered-lift in wing-borne flight mode, flight recorder specification under part 135 of this chapter.

Subpart D—Maintenance, Preventive Maintenance, Rebuilding, and Alteration Requirements for Powered-Lift Under Part 43 of This Chapter

- 194.401 Applicability.
- 194.402 Maintenance provisions.
- Appendix A to Part 194. Minimum requirements for a pilot training program in a powered-lift originally type certificated or seeking type certification with one set of controls and a single pilot station.

Authority: 42 U.S.C. 7572; 49 U.S.C. 106(f), 40113, 44701–44705, 44707, 44712, 44713, 44715, 44716, and 44722; Sec. 955 of Pub. L. 118–63.

Subpart A—General

§ 194.101 Applicability.

(a) The Special Federal Aviation Regulation (SFAR) in this part prescribes:

(1) Certain requirements that may be satisfied in lieu of the requirements of part 61 of this chapter for persons seeking a powered-lift pilot certificate and rating, the conditions under which those certificates and ratings are necessary, and the privileges and limitations of those certificates and ratings;

(2) The general operating rules applicable to all persons operating powered-lift, including those an operator must meet to conduct powered-lift operations under parts 91, 135, and 136 of this chapter;

(3) The requirements for persons conducting training, testing, and checking utilizing a powered-lift or flight simulation training device (FSTD) representing a powered-lift under parts 135, 141, and 142 of this chapter; and

(4) The requirements for persons conducting maintenance, preventative maintenance, rebuilds, alterations, or inspections on powered-lift pursuant to part 43 of this chapter.

(b) In addition to the requirements in this part, the following parts continue to apply to those persons described in paragraph (a) of this section unless otherwise specified in this part: parts

43, 60, 61, 91, 97, 135, 136, 141, and 142 of this chapter.

§ 194.103 Definitions.

For the purpose of this part:

Aviation Safety Inspector means a pilot employed by the FAA to conduct operations of a powered-lift for the purpose of establishing a type rating in that particular powered-lift under part 21 of this chapter, as appropriate.

Extended over-water operation means a powered-lift operation over water at a horizontal distance of more than 50 nautical miles from the nearest shoreline and more than 50 nautical miles from an off-shore heliport structure under part 91 or 135 of this chapter.

FAA test pilot means a pilot employed by the FAA to conduct operations of a powered-lift for the purpose of FAA examination or inspection of a type design for which an application for type certification has been submitted under part 21 of this chapter.

Heliport means an area of land, water, or structure used or intended to be used for the landing and takeoff of helicopters and powered-lift.

Instructor pilot means a pilot employed or used by a manufacturer of a powered-lift to conduct operations of the powered-lift for the purpose of developing a proposed training curriculum and providing crew training.

Manufacturer means any person who holds, or is an applicant for, a type or production certificate for an aircraft. An amateur builder under § 21.191(g) of this chapter, builder of a kit aircraft under § 21.191(h) of this chapter, or the holder of a restricted category type certificate are not considered manufacturers for the purpose of this part.

Test pilot means a pilot employed or used by a manufacturer of a powered-lift to conduct operations of the powered-lift for the purpose of research and development and showing compliance with this chapter.

Vertical-lift flight mode means a mode of flight where a powered-lift:

(1) Is in a configuration that allows vertical takeoff, vertical landing, and low-speed flight; and

(2) Depends principally on engine-driven lift devices or engine thrust for lift.

Wing-borne flight mode means a mode of flight where a powered-lift is not operating in the vertical-lift flight mode as defined and depends exclusively or partially on nonrotating airfoil(s) for lift during takeoff, landing, or horizontal flight.

§ 194.105 Qualification of powered-lift FSTDs.

(a) For flight simulation training devices (FSTDs) representing powered-lift for which qualification standards have not been issued under part 60 of this chapter, the applicable requirements will be the portions of the flight simulation training device qualification performance standards contained in appendices A through D to part 60 of this chapter that are found by the Administrator to be appropriate for the powered-lift and applicable to a specific type design, or such FSTD qualification criteria as the Administrator may find provide an equivalent level of safety to those FSTD qualification standards.

(b) Proposed qualification performance standards as set forth by paragraph (a) of this section will be published in the **Federal Register** for comment, except when the FAA considers public notice to be unnecessary because previous opportunities to comment on substantially identical proposed qualification performance standards have been provided. In these instances, FAA will provide personal notice and opportunity for comment.

§ 194.107 Expiration.

This part, consisting of Special Federal Aviation Regulation (SFAR) No. 120, will remain in effect until January 21, 2035.

§ 194.109 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. All approved incorporation by reference (IBR) material is available for inspection at the FAA and at the National Archives and Records Administration (NARA). Contact the FAA's Office of Rulemaking, 800 Independence Avenue SW, Washington, DC 20590; phone: (202) 267–9677. For information on the availability of this material at NARA, visit www.archives.gov/federal-register/cfr/ibr-locations.html or email fr.inspection@nara.gov. The material may be obtained from the sources in the following paragraphs:

(a) RTCA, Inc., 1150 18th St. NW, Suite 910, Washington, DC 20036; phone: (202) 833–9339; website: www.rtca.org/products.

(1) Section 2 of RTCA DO–309, Minimum Operational Performance Standards (MOPS) for Helicopter Terrain Awareness and Warning System (HTAWS) Airborne Equipment (Mar. 13, 2008); into §§ 194.302; 194.306.

(2) [Reserved]

(b) U.S. Department of Transportation, Subsequent Distribution Office, DOT Warehouse M30, Ardmore East Business Center, 3341 Q 75th Avenue, Landover, MD 20785; phone (301) 322-5377; website: www.faa.gov/aircraft/air_cert/design_approvals/tso/ (select the link "Search Technical Standard Orders").

(1) TSO-C194, Technical Standard Order: Helicopter Terrain Awareness and Warning System, effective Dec. 17, 2008; into §§ 194.302; 194.306.

(2) [Reserved]

Subpart B—Certification, Training, and Qualification Requirements for Pilots and Flight Instructors

§ 194.201 Alternate definition of cross-country time.

Notwithstanding the cross-country time definitions in § 61.1(b) of this chapter, a person may log flight time in a powered-lift as cross-country time provided the time was acquired during a flight—

(a) That includes a point of landing that was at least a straight-line distance of more than 25 nautical miles from the original point of departure; and

(b) That involves the use of dead reckoning, pilotage, electronic navigation aids, radio aids, or other navigation systems to navigate to the landing point.

§ 194.203 Alternate qualification requirements for certain flight instructors.

(a) *Instructor pilots at a manufacturer.* In addition to the provisions specified in § 61.3(d)(3) of this chapter, a flight instructor certificate issued under part 61 of this chapter is not necessary to conduct flight training if the training is given by an instructor pilot in a powered-lift at the manufacturer, provided the training is conducted in accordance with the manufacturer's training curriculum and is given to either—

(1) A test pilot;

(2) A person authorized by the Administrator to serve as an initial check pilot, chief instructor, assistant chief instructor, or training center evaluator for the purpose of initiating training in a powered-lift under an approved training program under part 135, 141, or 142 of this chapter, as appropriate; or

(3) An FAA test pilot or aviation safety inspector.

(b) *Flight instructors under part 135 of this chapter.* Notwithstanding the requirement in § 61.3(d)(3)(ii) of this chapter, a person must hold a flight instructor certificate with the appropriate powered-lift ratings to

conduct training in accordance with a training curriculum approved to meet the requirements of § 194.243(a)(1).

§ 194.205 Limitations on flight training privileges for holders of airline transport pilot certificates under a part 135 of this chapter approved training program.

Notwithstanding the privileges in § 61.167(a)(2) of this chapter, a person who holds an airline transport pilot certificate with powered-lift ratings must hold a flight instructor certificate with the appropriate powered-lift ratings to instruct pilots in accordance with a training curriculum approved to meet the requirements of § 194.243(a)(1).

§ 194.207 Alternate requirement for practical tests and training in a powered-lift.

(a) *Required equipment for the practical test.* Notwithstanding the equipment requirement in § 61.45(b)(1)(ii) of this chapter and the limitation specified in § 61.45(b)(2) of this chapter, an applicant for a certificate or rating may use a powered-lift that is precluded from performing all of the tasks required for the practical test without receiving a limitation on the applicant's certificate or rating, as appropriate.

(b) *Waiver authority for a practical test conducted in a powered-lift.* An Examiner who conducts a practical test in a powered-lift may waive any task for which the FAA has provided waiver authority.

(c) *Flight training on waived tasks.* Notwithstanding the requirements in §§ 61.107(a) and 61.127(a) of this chapter for training to include the areas of operation listed in § 61.107(b)(5) or § 61.127(b)(5) of this chapter, as applicable, an applicant seeking a private pilot certificate or commercial pilot certificate with a powered-lift category rating concurrently with a powered-lift type rating is not required to receive and log flight training on a task specified in an area of operation if the powered-lift is not capable of performing the task, provided the FAA has issued waiver authority for that task in accordance with paragraph (b) of this section.

§ 194.209 Additional qualification requirements for certain pilots serving as second-in-command.

(a) A person who obtains at least a private pilot certificate with a powered-lift category rating by satisfactorily completing the practical test in a powered-lift that is precluded from performing each task required by § 61.43(a)(1) of this chapter may not serve as second-in-command of a powered-lift that is capable of

performing the tasks that were waived on the person's practical test until the person has—

(1) Received and logged ground and flight training from an authorized instructor on the specific tasks that were waived on the person's practical test; and

(2) Received a logbook or training record endorsement from an authorized instructor certifying the person has satisfactorily demonstrated proficiency of those tasks.

(b) The training and endorsement required by paragraph (a) of this section are not required if, prior to serving as second-in-command, a person meets one of the following requirements—

(1) Successfully completes the practical test for a powered-lift type rating, and the practical test includes each task required by § 61.43(a)(1) of this chapter; or

(2) Has received ground and flight training under an approved training program and has satisfactorily completed a competency check under § 135.293 or § 91.1065 of this chapter in a powered-lift, and the approved training and checking include each task that was previously waived in accordance with § 194.207(b).

(c) An applicant receiving flight training under § 194.221, § 194.223, § 194.229, or § 194.231 may serve as second-in-command in a powered-lift type certificated for more than one required pilot flight crewmember without meeting the requirements of § 61.55(a)(1), (a)(2), and (b)(2) of this chapter.

§ 194.211 Alternate eligibility requirements for a person seeking a powered-lift type rating.

(a) *General applicability.* The requirements specified in paragraphs (b) and (c) of this section apply only to persons seeking a type rating in a powered-lift that is capable of performing instrument maneuvers and procedures.

(b) *Obtaining an initial powered-lift type rating without concurrently obtaining the instrument-powered-lift rating.* (1) Notwithstanding the requirement to hold or concurrently obtain an appropriate instrument rating in § 61.63(d)(1) of this chapter, a person who applies for an initial powered-lift type rating to be completed concurrently with a powered-lift category rating may apply for the type rating without holding or concurrently obtaining a powered-lift instrument rating, but the type rating will be limited to "visual flight rules (VFR) only."

(2) Notwithstanding the requirement in § 61.63(d)(4) of this chapter, a person who applies for a powered-lift type rating pursuant to paragraph (b)(1) of this section is not required to perform the type rating practical test in actual or simulated instrument conditions.

(3) Except as specified in paragraph (b)(6) of this section, a person who obtains a powered-lift type rating with a “VFR only” limitation pursuant to paragraph (b)(1) of this section must remove the limitation in accordance with paragraph (b)(4) of this section within 2 calendar months from the month in which the person passes the type rating practical test.

(4) The “VFR only” limitation may be removed after the person—

(i) Passes an instrument rating practical test in a powered-lift in actual or simulated instrument conditions; and

(ii) Passes a practical test in the powered-lift type for which the “VFR only” limitation applies on the appropriate areas of operation listed in § 61.157(e)(3) of this chapter that consist of performing instrument maneuvers and procedures in actual or simulated instrument conditions.

(5) Except as specified in paragraph (b)(6) of this section, if a person who obtains a powered-lift type rating with a “VFR only” limitation pursuant to paragraph (b)(1) of this section does not remove the limitation within 2 calendar months from the month in which the person completed the type rating practical test, the powered-lift type rating for which the “VFR only” limitation applies will become invalid for use until the person removes the limitation in accordance with paragraph (b)(4) of this section.

(6) A person holding a private pilot certificate is not required to remove the “VFR only” limitation if the limitation applies to a powered-lift type that is not a large aircraft or turbojet-powered.

(c) *Obtaining an additional powered-lift type rating with a “VFR Only” limitation.* (1) Notwithstanding the requirement to hold or concurrently obtain an appropriate instrument rating in § 61.63(d)(1) of this chapter, a person holding a private pilot certificate may apply for a powered-lift type rating for a powered-lift that is not a large aircraft or turbojet-powered without holding or concurrently obtaining a powered-lift instrument rating, but the type rating will be limited to “VFR only.”

(2) Notwithstanding the requirement in § 61.63(d)(4) of this chapter, a person who applies for a powered-lift type rating pursuant to paragraph (c)(1) of this section is not required to perform the type rating practical test in actual or simulated instrument conditions.

(3) A person who obtains a powered-lift type rating with a “VFR only” limitation pursuant to paragraph (c)(1) of this section may remove the “VFR only” limitation for that powered-lift type as specified in paragraph (b)(4) of this section.

(d) *Concurrent practical tests for removal of “VFR only” limitation.* If a task required for the practical test specified in paragraph (b)(4)(i) of this section overlaps with a task required for the practical test specified in paragraph (b)(4)(ii) of this section, a person may perform the task a single time provided the task is performed to the highest standard required for the task.

§ 194.213 Alternate endorsement requirements for certain persons seeking a powered-lift rating.

(a) Notwithstanding the requirements in part 61 of this chapter for an authorized instructor to provide endorsements for certificates and ratings, including endorsements for solo flight, the following persons may provide the required logbook or training record endorsements under part 61 of this chapter and this part for a commercial pilot certificate with a powered-lift category rating, an instrument-powered-lift rating, a powered-lift type rating, or a flight instructor certificate with powered-lift ratings—

(1) An instructor pilot, provided the applicant is either—

(i) A test pilot or instructor pilot for the manufacturer seeking type certification of an experimental powered-lift;

(ii) A person authorized by the Administrator to serve as an initial check pilot, chief instructor, assistant chief instructor, or training center evaluator for the purpose of initiating training in a powered-lift under an approved training program under part 135, 141, or 142 of this chapter, as appropriate; or

(iii) An FAA test pilot or aviation safety inspector; or

(2) A management official within the manufacturer's organization, provided the applicant is an instructor pilot for the manufacturer of an experimental powered-lift.

(b) The endorsements for training time under this section must include a description of the training given, length of training lesson, and the endorsement provider's signature and identifying information, including certificate number and expiration date, if applicable.

§ 194.215 Applicability of alternate aeronautical experience and logging requirements for commercial pilot certification and a powered-lift instrument rating.

(a) The alternate requirements set forth in §§ 194.216 through 194.231 apply only to persons who hold at least a commercial pilot certificate with the following ratings:

(1) An airplane category rating with a single-engine or multi-engine class rating and an instrument-airplane rating; or

(2) A rotorcraft category rating with a helicopter class rating and an instrument-helicopter rating.

(b) If no alternate aeronautical experience or logging requirement is provided under this part, the person must meet the applicable requirements under part 61 of this chapter, as appropriate.

§ 194.216 Alternate aeronautical experience: Pilot-in-command flight time in a powered-lift for a commercial pilot certificate with a powered-lift category rating.

(a) *Pilot-in-command flight time in a powered-lift.* Notwithstanding the eligibility requirement specified in § 61.123(f) of this chapter, an applicant for a commercial pilot certificate with a powered-lift category rating under § 194.217, § 194.219, § 194.221, or § 194.223 may log 35 hours of pilot-in-command flight time in a powered-lift in lieu of the aeronautical experience requirement of § 61.129(e)(2)(i) of this chapter.

(b) *Use of full flight simulators.* In addition to the permitted credit for use of a full flight simulator in § 61.129(i) of this chapter, an applicant for a commercial pilot certificate with a powered-lift category rating may credit a maximum of 15 hours toward the 35 hours of pilot-in-command flight time requirement in paragraph (a) of this section, provided—

(1) The aeronautical experience was obtained performing the duties of pilot-in-command in a Level C or higher full flight simulator that represents the powered-lift category; and

(2) The full flight simulator sessions are conducted in accordance with:

(i) For test pilots, instructor pilots, FAA test pilots, or FAA aviation safety inspectors under § 194.217 or § 194.219, as applicable, the manufacturer's proposed training curriculum;

(ii) For the initial cadre of instructors under § 194.221, the manufacturer's training curriculum; or

(iii) For pilots under § 194.223, an approved training program under part 135, 141, or 142 of this chapter.

§ 194.217 Test pilots, FAA test pilots, or aviation safety inspectors: Alternate aeronautical experience and logging requirements for a commercial pilot certificate with a powered-lift category rating.

(a) *General applicability.* An applicant for a commercial pilot certificate with a powered-lift category rating who is a test pilot for the manufacturer of an experimental powered-lift, an FAA test pilot, or an aviation safety inspector may satisfy the alternate aeronautical experience and logging requirements set forth in paragraphs (b) and (c) of this section, provided—

(1) The flights are conducted in an experimental powered-lift at the manufacturer;

(2) The applicant is authorized by the Administrator to act as pilot in command of the experimental powered-lift.

(b) *Alternate aeronautical experience requirements.* Notwithstanding the eligibility requirement specified in § 61.123(f) of this chapter, a test pilot, FAA test pilot, or aviation safety inspector may meet the requirements in paragraphs (b)(1) through (4) of this section in lieu of the aeronautical experience requirements of § 61.129(e)(3) and (4) of this chapter.

(1) A test pilot, FAA test pilot, or aviation safety inspector may receive 20 hours of flight training on the areas of operation listed in § 61.127(b)(5) of this chapter from an instructor pilot for the manufacturer of an experimental powered-lift in lieu of an authorized instructor, provided—

(i) The training is conducted in accordance with the manufacturer's proposed training curriculum in the experimental powered-lift; and

(ii) The test pilot, FAA test pilot, or aviation safety inspector receives a logbook or training record endorsement from the instructor pilot certifying that the test pilot satisfactorily completed the training curriculum specified in paragraph (b)(1)(i) of this section.

(2) A test pilot, FAA test pilot, or aviation safety inspector may accomplish the practical test preparation requirements in § 61.129(e)(3)(iv) of this chapter with a pilot who serves as an instructor pilot for the manufacturer of the experimental powered-lift.

(3) A test pilot, FAA test pilot, or aviation safety inspector may satisfy the aeronautical experience requirement in § 61.129(e)(4) of this chapter by logging at least 10 hours of solo flight time under an endorsement from an instructor pilot or performing the duties of pilot-in-command in an experimental powered-lift with one of the following

individuals onboard (which may be credited towards the flight time requirement in §§ 61.129(e)(2), and (e)(2)(ii) of this chapter and 194.216(a))—

(i) A test pilot for the manufacturer of the powered-lift who is authorized by the Administrator to act as pilot-in-command of the experimental powered-lift; or

(ii) An instructor pilot for the manufacturer of the powered-lift who is authorized by the Administrator to act as pilot-in-command of the experimental powered-lift.

(4) A test pilot, FAA test pilot, or aviation safety inspector may satisfy the alternate requirements in § 194.233 in lieu of the cross-country aeronautical experience requirements specified in § 61.129(e)(3)(ii) and (iii) and (e)(4)(i) of this chapter.

(c) *Alternate logging requirement.* Notwithstanding the logging requirements in § 61.51(e)(1) of this chapter, an applicant for a commercial pilot certificate with a powered-lift category rating may log pilot-in-command flight time for the purpose of satisfying the aeronautical experience requirements in §§ 61.129(e)(2)(ii) and 194.216(a) of this chapter for flights when the pilot is the sole manipulator of the controls of an experimental powered-lift for which the pilot is not rated, provided—

(1) The test pilot, FAA test pilot, or aviation safety inspector is acting as pilot-in-command of the experimental powered-lift in accordance with a letter of authorization issued by the Administrator; and

(2) The flight is conducted for the purpose of research and development or showing compliance with the regulations in this chapter in accordance with the experimental certificate issued to the powered-lift pursuant to § 21.191 of this chapter.

§ 194.219 Instructor pilots: Alternate aeronautical experience and logging requirements for a commercial pilot certificate with a powered-lift category rating.

(a) *General applicability.* An applicant for a commercial pilot certificate with a powered-lift category rating who is an instructor pilot for the manufacturer of an experimental powered-lift may satisfy the alternate aeronautical experience and logging requirements set forth in paragraphs (b) and (c) of this section, provided—

(1) The flights are conducted in an experimental powered-lift at the manufacturer; and

(2) The applicant is authorized by the Administrator to act as pilot-in-

command of the experimental powered-lift.

(b) *Alternate aeronautical experience requirements.* Notwithstanding the eligibility requirement specified in § 61.123(f) of this chapter, an instructor pilot may meet the requirements in paragraphs (b)(1) through (4) of this section in lieu of the aeronautical experience requirements of § 61.129(e)(3) and (4) of this chapter.

(1) An instructor pilot may meet the requirements of paragraphs (b)(1)(i) and (ii) of this section in lieu of the 20 hours of training with an authorized instructor required by § 61.129(e)(3) of this chapter.

(i) The instructor pilot provided the manufacturer's proposed training curriculum to a test pilot, FAA test pilot, or aviation safety inspector in the experimental powered-lift, which includes 20 hours of training on the areas of operation listed in § 61.127(b)(5) of this chapter; and

(ii) The instructor pilot receives a logbook or training record endorsement from a management official within the manufacturer's organization certifying that the instructor pilot provided the training specified in paragraph (b)(1)(i) of this section.

(2) An instructor pilot may accomplish the practical test preparation requirements in § 61.129(e)(3)(iv) of this chapter with a pilot who serves as an instructor pilot for the manufacturer of the experimental powered-lift.

(3) An instructor pilot may satisfy the aeronautical experience requirement in § 61.129(e)(4) of this chapter by logging at least 10 hours of solo flight time under an endorsement from another instructor pilot or performing the duties of pilot-in-command in an experimental powered-lift with one of the following individuals onboard (which may be credited towards the flight time requirement in §§ 61.129(e)(2), and (e)(2)(ii) of this chapter and 194.216(a))—

(i) A test pilot for the manufacturer of the powered-lift who is authorized by the Administrator to act as pilot-in-command of the experimental powered-lift;

(ii) Another instructor pilot for the manufacturer of the powered-lift who is authorized by the Administrator to act as pilot-in-command of the experimental powered-lift; or

(iii) An FAA test pilot or aviation safety inspector.

(4) An instructor pilot may satisfy the alternate requirements in § 194.233 in lieu of the cross-country aeronautical experience requirements specified in

§ 61.129(e)(3)(ii) and (iii) and (e)(4)(i) of this chapter.

(c) *Alternate logging requirement.* Notwithstanding the logging requirements in § 61.51(e)(3) of this chapter, an applicant for a commercial pilot certificate with a powered-lift category rating may log pilot-in-command flight time for the purpose of satisfying the aeronautical experience requirements in §§ 61.129(e)(2)(ii) of this chapter and 194.216(a) for flights when the pilot is serving as an instructor pilot for the manufacturer of an experimental powered-lift for which the pilot is not rated, provided—

(1) The pilot is acting as pilot-in-command of the experimental powered-lift in accordance with a letter of authorization issued by the Administrator; and

(2) The flight is conducted for the purpose of crew training in accordance with the experimental certificate issued to the powered-lift pursuant to § 21.191 of this chapter.

§ 194.221 Initial cadre of instructors: Alternate aeronautical experience and logging requirements for a commercial pilot certificate with a powered-lift category rating.

(a) *General applicability.* An applicant for a commercial pilot certificate with a powered-lift category rating may satisfy the alternate aeronautical experience and logging requirements set forth in paragraphs (b) and (c) of this section, provided—

(1) The applicant is authorized by the Administrator to serve as an initial check pilot, chief instructor, assistant chief instructor, or training center evaluator for the purpose of initiating training in a powered-lift under an approved training program under part 135, 141, or 142 of this chapter, as appropriate; and

(2) The flights are conducted in type-certificated powered-lift at the manufacturer.

(b) *Alternate aeronautical experience requirements.* Notwithstanding the eligibility requirement specified in § 61.123(f) of this chapter, an applicant may meet the requirements in paragraphs (b)(1) through (4) of this section in lieu of the aeronautical experience requirements of § 61.129(e)(3) and (4) of this chapter.

(1) An applicant may receive 20 hours of flight training on the areas of operation listed in § 61.127(b)(5) of this chapter from an instructor pilot for the manufacturer of the powered-lift in lieu of an authorized instructor, provided—

(i) The training is conducted in accordance with the manufacturer's training curriculum in the powered-lift; and

(ii) The applicant receives a logbook or training record endorsement from the instructor pilot certifying that the test pilot satisfactorily completed the training curriculum specified in paragraph (b)(1)(i) of this section.

(2) An applicant may accomplish the practical test preparation requirements in § 61.129(e)(3)(iv) of this chapter with a pilot who serves as an instructor pilot for the manufacturer of the powered-lift.

(3) An applicant may satisfy the aeronautical experience requirement in § 61.129(e)(4) of this chapter by logging at least 10 hours of solo flight time in a powered-lift under an endorsement from an instructor pilot or performing the duties of pilot-in-command in a powered-lift with a person onboard who serves as an instructor pilot for the manufacturer of the powered-lift (which may be credited towards the flight time requirement in § 61.129(e)(2) and (e)(2)(ii) of this chapter and 194.216(a)).

(4) An applicant may satisfy the alternate requirements in § 194.233 in lieu of the cross-country aeronautical experience requirements specified in § 61.129(e)(3)(ii) and (iii) and (e)(4)(i) of this chapter.

(c) *Alternate logging requirements.*

Notwithstanding the logging requirements in § 61.51(e)(1) of this chapter, an applicant for a commercial pilot certificate with a powered-lift category rating may log up to 25 hours of pilot-in-command flight time for the purpose of satisfying the aeronautical experience requirements in §§ 61.129(e)(2)(ii) of this chapter and 194.216(a) for flights when the pilot is the sole manipulator of the controls of a powered-lift for which the pilot is not rated, provided—

(1) The applicant is manipulating the controls of the powered-lift with a person onboard who serves as an instructor pilot for the manufacturer;

(2) The applicant is performing the duties of pilot-in-command; and

(3) The flight is conducted in accordance with the manufacturer's training curriculum for the powered-lift.

§ 194.223 Pilots receiving training under an approved training program: Alternate requirements for a commercial pilot certificate with a powered-lift category rating.

(a) *General applicability.* An applicant for a commercial pilot certificate with a powered-lift category rating may satisfy the alternate requirements set forth in paragraphs (b) through (d) of this section, provided the applicant is receiving training under an approved training program under part 135, 141, or 142 of this chapter for the purpose of obtaining a powered-lift category rating.

(b) *Alternate aeronautical experience requirements.* An applicant may satisfy the alternate requirements in § 194.233 in lieu of the cross-country aeronautical experience requirements specified in § 61.129(e)(3)(ii) and (iii) and (e)(4)(i) of this chapter.

(c) *Alternate logging requirement.*

Notwithstanding the logging requirements in § 61.51(e)(1) of this chapter, an applicant for a commercial pilot certificate with a powered-lift category rating may log up to 25 hours of pilot-in-command time towards the aeronautical experience requirement in § 194.216(a) for flights when the applicant is the sole manipulator of the controls of a powered-lift for which the pilot is not rated, provided—

(1) The applicant is manipulating the controls of the powered-lift with an authorized instructor onboard;

(2) The applicant is performing the duties of pilot-in-command; and

(3) The flight is conducted in accordance with an approved training program under part 135, 141, or 142 of this chapter.

§ 194.225 Test pilots, FAA test pilots, and aviation safety inspectors: Alternate aeronautical experience and logging requirements for an instrument-powered-lift rating.

(a) *General applicability.* An applicant for an instrument-powered-lift rating who is test pilot for the manufacturer of an experimental powered-lift, an FAA test pilot, or aviation safety inspector may satisfy the alternate aeronautical experience and logging requirements set forth in paragraphs (b) and (c) of this section, provided—

(1) The flights are conducted in an experimental powered-lift at the manufacturer; and

(2) The applicant is authorized by the Administrator to act as pilot-in-command of the experimental powered-lift.

(b) *Alternate aeronautical experience requirements.* A test pilot, FAA test pilot, or aviation safety inspector may meet the aeronautical experience requirements of paragraphs (b)(1) through (4) of this section in lieu of the aeronautical experience requirements of § 61.65(f)(2) of this chapter.

(1) Notwithstanding the eligibility requirement in § 61.65(a)(5) of this chapter, a test pilot, FAA test pilot, or aviation safety inspector may receive 15 hours of instrument training on the areas of operation listed in § 61.65(c) of this chapter from an instructor pilot for the manufacturer of an experimental powered-lift in lieu of an authorized instructor, provided—

(i) The training is conducted in accordance with the manufacturer's

proposed training curriculum in the experimental powered-lift; and

(ii) The test pilot, FAA test pilot, or aviation safety inspector receives a logbook or training record endorsement from the instructor pilot certifying that the applicant satisfactorily completed the training curriculum specified in paragraph (b)(1)(i) of this section.

(2) A test pilot, FAA test pilot, or aviation safety inspector may accomplish the practical test preparation requirements in § 61.65(f)(2)(i) of this chapter with an instructor pilot for the manufacturer of the experimental powered-lift.

(3) A test pilot, FAA test pilot, or aviation safety inspector may accomplish the cross-country flight specified in § 61.65(f)(2)(ii) of this chapter for an instrument-powered-lift rating without an authorized instructor, provided the test pilot, FAA test pilot, or aviation safety inspector—

(i) Completes the cross-country flight specified in § 61.65(f)(2)(ii) of this chapter with a pilot who serves as an instructor pilot for the manufacturer of the experimental powered-lift; and

(ii) Obtains a logbook or training record endorsement from the instructor pilot certifying that the person completed the cross-country flight.

(4) A test pilot, FAA test pilot, or aviation safety inspector may satisfy the alternate requirements in § 194.235 in lieu of the cross-country aeronautical experience requirements specified in § 61.65(f)(2)(ii) of this chapter.

(c) *Alternate logging requirement.* Notwithstanding the logging requirements in § 61.51(e)(1) of this chapter, a test pilot, FAA test pilot, or aviation safety inspector may log pilot-in-command flight time for the purpose of satisfying the 10-hour cross-country requirement in § 61.65(f)(1) of this chapter for flights when the pilot is the sole manipulator of the controls of an experimental powered-lift for which the pilot is not rated, provided—

(1) The test pilot, FAA test pilot, or aviation safety inspector is acting as pilot-in-command of the experimental powered-lift in accordance with a letter of authorization issued by the Administrator; and

(2) The flight is conducted for the purpose of research and development or showing compliance with the regulations in this chapter in accordance with the experimental certificate issued to the powered-lift pursuant to § 21.191 of this chapter.

§ 194.227 Instructor pilots: Alternate aeronautical experience and logging requirements for an instrument-powered-lift rating.

(a) *General applicability.* An applicant for an instrument-powered-lift rating who is an instructor pilot for the manufacturer of an experimental powered-lift may satisfy the alternate aeronautical experience and logging requirements set forth in paragraphs (b) and (c) of this section, provided—

(1) The flights are conducted in an experimental powered-lift at the manufacturer; and

(2) The applicant is authorized by the Administrator to act as pilot-in-command of the experimental powered-lift.

(b) *Alternate aeronautical experience requirements.* An instructor pilot may meet the aeronautical experience requirements of paragraphs (b)(1) through (4) of this section in lieu of the aeronautical experience requirements of § 61.65(f)(2) of this chapter.

(1) Notwithstanding the eligibility requirement in § 61.65(a)(5) of this chapter, an instructor pilot may meet the requirements of paragraphs (b)(1)(i) and (ii) of this section in lieu of the 15 hours of training with an authorized instructor required by § 61.65(f)(2) of this chapter.

(i) The instructor pilot provided the manufacturer's proposed training curriculum to a test pilot, FAA test pilot, or aviation safety inspector in the experimental powered-lift, which includes 15 hours of training on the areas of operation listed in § 61.65(c) of this chapter; and

(ii) The instructor pilot receives a logbook or training record endorsement from a management official within the manufacturer's organization certifying that the instructor pilot provided the training specified in paragraph (b)(1)(i) of this section.

(2) An instructor pilot may accomplish the practical test preparation requirements in § 61.65(f)(2)(i) of this chapter with another pilot who serves as an instructor pilot for the manufacturer of the experimental powered-lift.

(3) An instructor pilot may accomplish the cross-country flight specified in § 61.65(f)(2)(ii) of this chapter for an instrument-powered-lift rating without an authorized instructor, provided the instructor pilot—

(i) Completes the cross-country flight specified in § 61.65(f)(2)(ii) of this chapter with another pilot who serves as an instructor pilot for the manufacturer of the experimental powered-lift; and

(ii) Obtains a logbook or training record endorsement from the instructor

pilot certifying that the person completed the cross-country flight.

(4) An instructor pilot may satisfy the alternate requirements in § 194.235 in lieu of the cross-country aeronautical experience requirements specified in § 61.65(f)(2)(ii) of this chapter.

(c) *Alternate logging requirement.*

Notwithstanding the logging requirements in § 61.51(e)(3) of this chapter, an instructor pilot may log pilot-in-command flight time for the purpose of satisfying the 10-hour cross-country requirement in § 61.65(f)(1) of this chapter for flights when the pilot is serving as an instructor pilot for the manufacturer of an experimental powered-lift for which the pilot is not rated, provided the pilot—

(1) Is acting as pilot-in-command of the experimental powered-lift in accordance with a letter of authorization issued by the Administrator; and

(2) The flight is conducted for the purpose of crew training in accordance with the experimental certificate issued to the powered-lift pursuant to § 21.191 of this chapter.

§ 194.229 Initial cadre of instructors: Alternate aeronautical experience and logging requirements for an instrument-powered-lift rating.

(a) *General applicability.* An applicant for an instrument-powered-lift rating may satisfy the alternate aeronautical experience and logging requirements set forth in paragraphs (b) and (c) of this section, provided—

(1) The applicant is authorized by the Administrator to serve as an initial check pilot, chief instructor, assistant chief instructor, or training center evaluator for the purpose of initiating training in a powered-lift under an approved training program under part 135, 141, or 142 of this chapter, as appropriate; and

(2) The flights are conducted in type-certificated powered-lift at the manufacturer.

(b) *Alternate aeronautical experience requirements.* Notwithstanding the instrument rating requirements of § 61.65 of this chapter, an applicant may meet the requirements in paragraphs (b)(1) through (4) of this section in lieu of the aeronautical experience requirements of § 61.65(f)(2) of this chapter.

(1) Notwithstanding the eligibility requirement in § 61.65(a)(5) of this chapter, an applicant may receive 15 hours of instrument training on the areas of operation listed in § 61.65(c) of this chapter from an instructor pilot for the manufacturer of a powered-lift in lieu of an authorized instructor, provided—

(i) The training is conducted in accordance with the manufacturer's training curriculum in the powered-lift; and

(ii) The applicant receives a logbook or training record endorsement from the instructor pilot certifying that the applicant satisfactorily completed the training curriculum specified in paragraph (b)(1)(i) of this section.

(2) An applicant may accomplish the practical test preparation requirements in § 61.65(f)(2)(i) of this chapter with a pilot who serves as an instructor pilot for the manufacturer of the powered-lift.

(3) An applicant may accomplish the cross-country flight specified in § 61.65(f)(2)(ii) of this chapter for an instrument-powered-lift rating without an authorized instructor, provided the applicant—

(i) Completes the cross-country flight specified in § 61.65(f)(2)(ii) of this chapter with a pilot who serves as an instructor pilot for the manufacturer of the powered-lift; and

(ii) Obtains a logbook or training record endorsement from the instructor pilot certifying that the person completed the cross-country flight.

(4) An applicant may satisfy the alternate requirements in § 194.235 in lieu of the cross-country aeronautical experience requirements specified in § 61.65(f)(2)(ii) of this chapter.

(c) *Alternate logging requirement.* Notwithstanding the logging requirements in § 61.51(e)(1) of this chapter, an applicant for an instrument-powered-lift rating may log pilot-in-command flight time for the purpose of satisfying the 10-hour cross-country requirement in § 61.65(f)(1) of this chapter for flights when the applicant is the sole manipulator of the controls of a powered-lift for which the pilot is not rated, provided—

(1) The applicant is manipulating the controls of the powered-lift with a person onboard who serves as an instructor pilot for the manufacturer;

(2) The applicant is performing the duties of pilot-in-command; and

(3) The flight is conducted in accordance with the manufacturer's training curriculum for the powered-lift.

§ 194.231 Pilots receiving training under an approved training program: Alternate requirements for an instrument-powered-lift rating.

(a) *General applicability.* An applicant for an instrument-powered-lift rating may satisfy the alternate requirements set forth in paragraphs (b) and (c) of this section, provided the applicant is receiving training under an approved training program under part 135, 141, or 142 of this chapter for the purpose of

obtaining an instrument-powered-lift rating.

(b) *Alternate aeronautical experience requirements.* An applicant may satisfy the alternate requirements in § 194.235 in lieu of the cross-country aeronautical experience requirements specified in § 61.65(f)(2)(ii) of this chapter.

(c) *Use of full flight simulators.* In addition to the permitted credit for use of a full flight simulator in § 61.65(h) of this chapter, an applicant for an instrument-powered-lift rating may credit a maximum of 4 hours toward the aeronautical experience requirement in § 61.65(f)(1) of this chapter that requires 10 hours of cross-country time in a powered-lift, provided—

(1) The aeronautical experience was obtained performing the duties of pilot-in-command during a simulated cross-country flight in a Level C or higher full flight simulator that represents the powered-lift category;

(2) The cross-country flight includes the performance of instrument procedures under simulated instrument conditions; and

(3) The sessions are conducted in accordance with an approved training program under part 135, 141, or 142 of this chapter.

§ 194.233 Alternate means to satisfy the cross-country aeronautical experience requirements for a commercial pilot certificate with a powered-lift category rating.

Notwithstanding the eligibility requirement in § 61.123(f) of this chapter, an applicant who does not meet the cross-country aeronautical experience requirements specified in § 61.129(e) of this chapter will be considered eligible for a commercial pilot certificate with a powered-lift category rating as specified in paragraphs (a) and (b) of this section.

(a) An applicant who does not meet the cross-country aeronautical experience requirements specified in § 61.129(e)(3)(ii) and (iii) of this chapter will be considered eligible for a commercial pilot certificate with a powered-lift category rating, provided the applicant has logged at least three cross-country flights consisting of—

(1) One 2-hour cross-country flight in a powered-lift in daytime conditions that consists of a total straight-line distance of more than 50 nautical miles from the original point of departure;

(2) One 2-hour cross-country flight in a powered-lift in nighttime conditions that consists of a total straight-line distance of more than 50 nautical miles from the original point of departure; and

(3) An additional cross-country flight with landings at a minimum of three

points, with one segment consisting of a straight-line distance of at least 50 nautical miles from the original point of departure. Except for the original point of departure, this additional cross-country flight must include landings at different points than the cross-country flights specified in paragraphs (a)(1) and (2) of this section.

(b) An applicant who does not have the cross-country aeronautical experience specified in § 61.129(e)(4)(i) of this chapter will be considered eligible for a commercial pilot certificate with a powered-lift category, provided the applicant has logged at least two cross-country flights with landings at a minimum of three points, with one segment consisting of a straight-line distance of at least 50 nautical miles from the original point of departure. Except for the original point of departure, the second cross-country flight must include landings at different points than the first cross-country flight.

§ 194.235 Alternate means to satisfy the cross-country aeronautical experience requirements for an instrument-powered-lift rating.

(a) An applicant who does not meet the cross-country aeronautical experience requirements specified in § 61.65(f)(2)(ii) of this chapter will be considered eligible for an instrument-powered-lift rating, provided the applicant has logged instrument time that includes instrument flight training on cross-country flight procedures, including two cross-country flights in a powered-lift, provided each cross-country flight—

(1) Is conducted with either an authorized instructor or an instructor pilot; and

(2) Involves—

(i) A flight of 100 nautical miles along airways or by directed routing from an air traffic control facility;

(ii) An instrument approach at each airport; and

(iii) Three different kinds of approaches with the use of navigation systems.

(b) Notwithstanding the requirements in § 61.65(f)(2)(ii) of this chapter for the cross-country flight in a powered-lift, an applicant for an instrument-powered-lift rating is not required to file a flight plan and perform the cross-country flight under instrument flight rules, provided—

(1) The powered-lift is not certificated for instrument flight; and

(2) The applicant holds one of the following—

(i) An instrument-airplane rating;

(ii) An instrument-helicopter rating; or

(iii) An airline transport pilot certificate.

§ 194.237 Alternate means to satisfy the cross-country aeronautical experience requirements for a private pilot certificate with a powered-lift category rating.

Notwithstanding the eligibility requirement in § 61.103(g) of this chapter, an applicant who does not meet the cross-country aeronautical experience requirements specified in § 61.109(e) of this chapter will be considered eligible for a private pilot certificate with a powered-lift category rating as specified in paragraphs (a) and (b) of this section.

(a) *Cross-country aeronautical experience at night.* An applicant who does not meet the cross-country aeronautical experience specified in § 61.109(e)(2)(i) of this chapter will be considered eligible for a private pilot certificate with a powered-lift category rating, provided the applicant has received 3 hours of night flight training that includes two cross-country flights that are each over 50 nautical miles total distance.

(b) *Solo cross-country aeronautical experience.* An applicant who does not meet the solo cross-country aeronautical experience specified in § 61.109(e)(5)(ii) of this chapter will be considered eligible for a private pilot certificate with a powered-lift category rating, provided the applicant has completed—

(1) One solo cross-country flight of 100 nautical miles total distance, with landings at three points, and one segment of the flight being a straight-line distance of more than 25 nautical miles between the takeoff and landing locations; and

(2) An additional solo cross-country flight in a powered-lift with landings at a minimum of three points, with one segment consisting of a straight-line distance of at least 50 nautical miles from the original point of departure. Except for the original point of departure, the additional cross-country flight must include landings at different points than the first cross-country flight.

§ 194.239 Alternate means to satisfy minimum curriculum content in certain appendices to part 141 of this chapter.

(a) *Flight training minimum curriculum content.* Notwithstanding the minimum curriculum requirements in § 141.55(a) of this chapter, a training course for which approval is requested is not required to consist of training on a task specified in an area of operation listed in the applicable appendix to part 141, provided—

(1) The training course for which approval is requested is for a powered-lift course;

(2) The powered-lift to be used in the course is not capable of performing the task specified in an area of operation listed in the applicable appendix to part 141; and

(3) The FAA has issued waiver authority for that task in accordance with § 194.207(b).

(b) *Cross-country minimum curriculum content.* Notwithstanding the minimum curriculum requirements in § 141.55(a) of this chapter, a training course for which approval is requested is not required to meet the minimum curriculum content specified in appendices B, C, and D to part 141, provided—

(1) The training course for which approval is requested is for a powered-lift course.

(2) The minimum curriculum content that is not met may consist of the training specified in—

(i) Appendix B, paragraph 4.(b)(5)(ii)(A);

(ii) Appendix B, paragraph 5.(e)(1);

(iii) Appendix C, paragraph

4.(c)(3)(ii);

(iv) Appendix D, paragraph 4.(b)(5)(ii) and (iii);

(v) Appendix D, paragraph 5.(e)(2); or

(vi) Appendix M, paragraphs

4.(b)(4)(ii)(A), 4.(b)(4)(iii)(A), and

5.(d)(1).

(3) For each provision of training specified in paragraph (b)(2) of this section that is not met, the training course must include an additional cross-country flight consistent with the requirements of §§ 194.233, 194.235, and 194.237.

§ 194.241 Alternate qualification requirements for chief instructors, assistant chief instructors, and check instructors.

(a) Notwithstanding the qualification requirements in §§ 141.35(a)(1), 141.36(a)(1), and 141.37(a)(2)(ii) of this chapter, for a course of training under part 141 of this chapter that uses a powered-lift, a person seeking designation as a chief instructor, an assistant chief instructor, or a check instructor for checks and tests that relate to flight training must meet the following requirements—

(1) Hold a commercial pilot certificate or an airline transport pilot certificate with the following ratings—

(i) A powered-lift category rating;

(ii) A type rating for the powered-lift used in the course; and

(iii) An instrument-powered-lift rating or an airline transport pilot certificate with instrument privileges.

(2) Hold a current flight instructor certificate with the following ratings—

(i) A powered-lift category rating; and

(ii) An instrument-powered-lift rating, if an instrument rating is required for the course.

(b) Notwithstanding the qualification requirements in § 141.37(a)(3)(ii) of this chapter, for a course of training under part 141 of this chapter that uses a powered-lift, a person seeking designation as a check instructor for checks and tests that relate to ground training must hold a current flight instructor certificate with a powered-lift category rating or a ground instructor rating appropriate for the course.

§ 194.243 Pilot certification through completion of training, testing, and checking under part 135 of this chapter.

(a) *Part 135 airman certification training program.* (1) Subject to the requirements in subpart H to part 135 of this chapter, a certificate holder under part 119 of this chapter authorized to conduct part 135 operations may obtain approval under § 135.325 of this chapter to establish and implement a training curriculum to satisfy the following:

(i) Ground training, flight training, and aeronautical experience requirements in § 61.65 of this chapter and § 194.231 for the addition of an instrument-powered-lift rating to a commercial pilot certificate;

(ii) Ground training, flight training, and aeronautical experience requirements in § 61.63(b) of this chapter for the addition of an aircraft category rating to a commercial pilot certificate; and

(iii) Ground and flight training requirements in § 61.63(d) of this chapter to add a type rating to a commercial pilot certificate.

(2) No certificate holder may use a person, nor may any person serve, as an instructor in a training curriculum approved to meet the requirements of paragraph (a)(1) of this section unless, in addition to being qualified under §§ 135.338 and 135.340 of this chapter, the person holds a flight instructor certificate with a powered-lift category rating and instrument-powered-lift rating issued under part 61 of this chapter.

(3) A certificate holder may train a pilot in a training curriculum approved to meet the requirements of paragraph (a)(1) of this section only if the pilot is employed by the certificate holder under part 119 of this chapter and holds at least the certificates and ratings set forth by § 194.215(a).

(4) In addition to § 135.327 of this chapter, any curriculum approved under paragraphs (a)(1)(i) through (iii) of this section must include the applicable aeronautical knowledge areas, areas of operation, and flight

training required by part 61 of this chapter. If an alternative requirement is provided in this part, that alternative may be used.

(b) *Part 135 airman certification and checking.* (1) A pilot who is employed by a certificate holder under part 119 of this chapter authorized to conduct operations under part 135 who completes the approved curricula in paragraphs (a)(1)(i) through (iii) of this section may apply to add a powered-lift category rating concurrently with a powered-lift instrument rating and an initial powered-lift type rating to a commercial pilot certificate if the person meets the following requirements:

(i) Meets the requirements of §§ 61.63(b) and 61.65(f) of this chapter, or if an alternative requirement is provided in this part, that alternative may be used;

(ii) Has a training record endorsement from the certificate holder certifying that the pilot satisfactorily completed the applicable ground and flight training curricula in the approved part 135 airman certification training program; and

(iii) Successfully completes the written or oral testing under § 135.293(a)(2) and (3) of this chapter, a competency check under § 135.293(b) of this chapter, and an instrument proficiency check under § 135.297 of this chapter provided the following conditions are met:

(A) The competency check includes the maneuvers and procedures required for the issuance of a commercial pilot certificate with a powered-lift category rating, for the issuance of an instrument-powered-lift rating and for the issuance of a powered-lift type rating.

(B) The instrument proficiency check meets the requirements of § 135.297 of this chapter as applicable to a pilot in command (PIC) holding a commercial pilot certificate except that the instrument approaches to be included in the check must include all instrument approaches required for the issuance of an instrument-powered-lift rating and not only those for which the pilot is to be authorized to perform in part 135 operations.

(2) Sections 135.293(d) and 135.301(b) of this chapter are not applicable to the competency check and instrument proficiency check required by paragraph (b)(1)(iii) of this section.

(3) A pilot who meets paragraph (b)(1) of this section will be issued a commercial pilot certificate with a powered-lift category rating, an instrument-powered-lift rating, and a powered-lift type rating.

(4) An applicant who fails a check under paragraph (b)(1) of this section may reapply for the check only after the applicant has received:

(i) The necessary training from an authorized instructor or instructor pilot who has determined that the applicant is proficient to pass the test; and

(ii) An endorsement from an authorized instructor or instructor pilot who gave the applicant the additional training.

(c) *Part 135 certification testing and checking personnel.* The testing, competency checks, and instrument proficiency checks required by paragraph (b) of this section must be administered by one of the following:

(1) An FAA Aviation Safety Inspector.

(2) An Aircrew Program Designee who is authorized to perform competency checks and instrument proficiency checks for the certificate holder whose approved ground and flight training curricula has been satisfactorily completed by the pilot applicant.

(3) A Training Center Evaluator with appropriate certification authority who is also authorized to perform competency checks and instrument proficiency checks for the certificate holder whose approved ground and flight training curricula has been satisfactorily completed by the pilot applicant.

§ 194.245 Pilot qualification and program management requirements to operate powered-lift under subpart K to part 91 of this chapter.

(a) Section 91.1055(a) of this chapter applies to powered-lift operating under subpart K to part 91.

(b) Reference to class of aircraft in § 91.1055(b)(2) of this chapter is inapplicable when a powered-lift is used for the operation under subpart K to part 91.

§ 194.247 Pilot qualification requirements to operate powered-lift under part 135 of this chapter.

(a) Unless otherwise directed in this chapter, powered-lift must continue to comply with rules applicable to aircraft specified in part 135.

(b) To comply with § 135.3 of this chapter, each certificate holder that conducts commuter operations under part 135 with powered-lift for which two pilots are required by the type certificate must:

(1) Comply with subpart Y to part 121 of this chapter instead of the requirements of subparts G and H to part 135; and

(2) Include in initial ground training for pilots in command and upgrade ground training, instruction and facilitated discussion on the following:

(i) Leadership and command; and

(ii) Mentoring, including techniques for instilling and reinforcing the highest standards of technical performance, airmanship, and professionalism in newly hired pilots.

(3) Include the training required by paragraph (b)(2)(ii) of this section in recurrent ground training for pilots in command every 36 calendar months.

(4) Include in initial flight training for pilots in command and upgrade flight training, sufficient scenario-based training incorporating crew resource management and leadership and command skills, to ensure the pilot's proficiency as pilot in command.

(c) In lieu of compliance with the operating experience requirements listed in § 135.244(a)(1) through (4) of this chapter, no certificate holder may use a person, nor may any person serve, as pilot in command of a powered-lift unless that person possesses 20 hours of operating experience in each make and basic model of powered-lift to be flown.

(d) To comply with § 135.345 of this chapter, initial, transition, and upgrade ground training for powered-lift pilots must include instruction in § 135.345(b)(6)(iv) of this chapter, as applicable.

§ 194.249 References to class in parts 135, 141, and 142 of this chapter.

(a) References to class of aircraft in §§ 135.4(b)(2), 135.247(a)(1) and (2), and 135.603 of this chapter are inapplicable when a powered-lift is used for the operation under part 135.

(b) Notwithstanding the course content contained in the appendices to part 141, references to a class rating or a class of aircraft in those appendices is inapplicable when a powered-lift is used for the course of training.

(c) References to class of aircraft in §§ 142.11(d)(2)(ii), 142.49(c)(3)(iii), 142.53(b)(1), and 142.65(b)(1) of this chapter are inapplicable when a powered-lift or flight simulation training device representing a powered-lift is used for the operation under part 142.

§ 194.251 Alternate means to satisfy minimum curriculum content in training courses under part 142 of this chapter.

A training course for which approval is requested is not required to consist of training on a task specified in an area of operation if the powered-lift is not capable of performing the task, provided the FAA has issued waiver authority for that task in accordance with § 194.207(b).

§ 194.253 Alternate requirements for powered-lift without fully functional dual controls used in flight training.

(a) *Powered-lift equipped with an instantly accessible single, functioning control.* (1) A person may utilize the alternate requirement provided in paragraph (a)(2) of this section only if the applicant holds at least the certificates and ratings set forth by § 194.215(a) and instruction is provided by:

(i) An instructor pilot for the manufacturer of the powered-lift under the manufacturer's proposed training curriculum, or

(ii) A flight instructor under an approved training curriculum under part 135, 141, or 142 of this chapter, as applicable.

(2) Notwithstanding the requirements of §§ 61.195(g) and 91.109(a) of this chapter, a person may operate a powered-lift that is being used for flight training without fully functioning dual controls provided—

(i) The powered-lift is equipped with a single functioning flight control that is instantly accessible by both the applicant and the instructor;

(ii) The single functioning flight control meets the certification standards for both pilot stations; and

(iii) The instructor has determined that the flight can be conducted safely.

(b) *Full flight simulator training for powered-lift with single functioning controls and a single pilot station.* A person may apply for a powered-lift category rating, an instrument-powered-lift rating, and a powered-lift type rating concurrently for a powered-lift with single controls and a single pilot station under an approved part 135, 141, or 142 training program by meeting the requirements set forth in appendix A to this part.

(c) *Deviation authority.* Notwithstanding the requirements of §§ 61.195(g) and 91.109 of this chapter, the Administrator may authorize a deviation to operate a powered-lift that

is being used for flight training in an approved training program under part 135, 141, or 142 without fully functioning dual controls provided:

(1) The certificate holder demonstrates in a form and manner acceptable to the Administrator that—

(i) The person providing the flight training and the PIC observing any applicable supervised operating experience can take immediate corrective action and full control of the powered-lift;

(ii) The flight training and any applicable supervised operating experience can be effectively conducted in the powered-lift; and

(2) The Administrator determines that the alternate flight training and applicable supervised operating experience set forth by paragraph (c)(1) of this section will not adversely affect safety.

(3) The FAA may cancel or amend a letter of deviation authority at any time if the Administrator determines that the requirements of this section are not met or if such action is necessary in the interest of safety.

§ 194.255 Alternate requirements for powered-lift without fully functioning dual controls used in supervised operating experience when adding a type rating.

(a) Notwithstanding § 61.64(f) of this chapter, a person who holds a powered-lift category, instrument-powered-lift rating, and powered-lift type rating and seeks an additional type rating for a powered-lift with a single functioning control and a single pilot station in accordance with §§ 61.63(d) and 61.64(a) of this chapter, and does not meet requirements of § 61.64(e), will receive a limitation on the certificate restricting the person operating the powered-lift type from carrying any person or property on the aircraft, other than necessary for the purpose of paragraph (b) of this section.

(b) The limitation described in paragraph (a) of this section may be

removed from the rating if the person complies with the following:

(1) Performs 25 hours of flight time in the type of powered-lift for which the limitation applies under the observation of a fully rated pilot without limitations for the aircraft, maintaining full communication with the observing pilot,

(2) Logs each flight and the observing pilot attests in writing to each flight, and

(3) Presents evidence of the supervised operating experience to any examiner or Flight Standards office to have the limitation removed.

(c) The observing pilot must have unobstructed visual sight of the controls and instrumentation.

Subpart C—Requirements for Persons Operating Powered-lift**§ 194.301 Applicability.**

Unless otherwise specified by this part, persons operating powered-lift must continue to comply with rules applicable to all aircraft in parts 91, 135, and 136 of this chapter, as applicable to the operation. In addition, any sections or paragraphs within sections under parts 91 and 135 that refer to specific categories of aircraft and that are not referenced in the SFAR table to § 194.302 or § 194.306, do not apply to powered-lift.

§ 194.302 Provisions under part 91 of this chapter applicable to powered-lift.

No person may operate a powered-lift under part 91 of this chapter unless that person complies with the regulations listed in the first column of table 1 to this section, notwithstanding their applicability to airplanes, helicopters, or rotorcraft, subject to the applicability provisions in the second column, and any additional requirements or clarification specified in the third column:

TABLE 1 TO § 194.302

Regulation	Applicability	Additional requirements or clarification
Part 91, Subpart A—General		
(a) Section 91.9 (a) and (b) of this chapter.	Applies to all powered-lift	The requirement for an approved Aircraft Flight Manual is set forth in the airworthiness criteria established under § 21.17(b) of this chapter.
Part 91, Subpart B—Flight Rules		
(b) Section 91.103(b)(1) of this chapter.	Applies to powered-lift for which an approved Aircraft Flight Manual containing takeoff and landing distance data is required.	
(c) Section 91.107(a)(3)(i) through (iii) of this chapter.	Applies to all powered-lift	The exception under § 91.107(a)(3) of this chapter for seaplane and float equipped rotorcraft operations during movement on the surface applies to persons pushing off a powered-lift from the dock or persons mooring the powered-lift at the dock.

TABLE 1 TO § 194.302—Continued

Regulation	Applicability	Additional requirements or clarification
(d) Section 91.119(d) of this chapter.	Applies to powered-lift operating in vertical-lift flight mode	Under § 91.119(d) of this chapter, a powered-lift may be operated in vertical-lift flight mode at less than the minimums prescribed in § 91.119(b) or (c) of this chapter, provided each person operating the powered-lift complies with any routes or altitudes specifically prescribed for powered-lift by the FAA.
(e) Section 91.126(b)(1) of this chapter.	Applies to powered-lift operating in wing-borne flight mode	If the powered-lift is operating in vertical-lift flight mode, see paragraph (f) of this section.
(f) Section 91.126(b)(2) of this chapter.	Applies to powered-lift operating in vertical-lift flight mode	If the powered-lift is operating in wing-borne flight mode, see paragraph (e) of this section.
(g) Section 91.129(e)(1) and (2), (g)(2), and (h) of this chapter.	Applies to large or turbine-powered powered-lift	
(h) Section 91.129(e)(3) of this chapter.	Applies to powered-lift preparing to land in wing-borne flight mode.	
(i) Section 91.129(f)(1) of this chapter.	Applies to powered-lift operating in wing-borne flight mode	(1) If the powered-lift is operating in vertical-lift flight mode, see paragraph (j) of this section. (2) Section 91.129(f)(1) of this chapter does not apply when the operator of a powered-lift is conducting a circling approach under part 97 of this chapter or when otherwise requested by air traffic control (ATC).
(j) Section 91.129(f)(2) of this chapter.	Applies to powered-lift operating in vertical-lift flight mode	(1) If the powered-lift is operating in wing-borne flight mode, see paragraph (i) of this section. (2) Section 91.129(f)(2) does not apply when the operator of a powered-lift is conducting a circling approach under part 97 of this chapter or when otherwise requested by ATC.
(k) Section 91.131(a)(2) of this chapter.	Applies to large powered-lift.	
(l) Section 91.151(a) and (b) of this chapter.	Applies to powered-lift	(1) A powered-lift with the performance capability, as outlined in the Aircraft Flight Manual, to conduct a landing in the vertical-lift flight mode along the entire route of flight may use the VFR fuel requirements outlined in § 91.151(b) of this chapter. (2) Powered-lift unable to meet the requirements of paragraph (l)(1) of this section must use the rule requirements outlined in § 91.151(a) of this chapter.
(m) Section 91.155(a) of this chapter.	The helicopter provision under § 91.155(a) of this chapter applies to powered-lift operating in vertical-lift flight mode and at a speed that allows the pilot to see any other traffic or obstructions in time to avoid a collision.	(1) Except as provided in § 91.155(b) of this chapter, powered-lift that meet the requirements of paragraph (m) of this section may operate under the helicopter VFR visibility minimums outlined under § 91.155(a) of this chapter in class G airspace. (2) Powered-lift unable to meet the requirements of paragraph (m) of this section must use the VFR visibility minimums in § 91.155(a) of this chapter for aircraft other than helicopters.
(n) Section 91.155(b)(1) of this chapter.	Applies to powered-lift operating in the vertical-lift flight mode and at a speed that allows the pilot to see any other traffic or obstructions in time to avoid a collision.	(1) Powered-lift that meet the requirements of paragraph (n) of this section may use the VFR visibility minimums outlined in § 91.155(b)(1) of this chapter in Class G airspace. (2) Powered-lift unable to meet the requirements of paragraph (n) of this section must use the visibility minimums outlined in § 91.155(b)(2) of this chapter.
(o) Section 91.155(b)(2) of this chapter.	Applies to powered-lift	Powered-lift operating in Class G airspace that cannot meet the requirements of paragraph (n) of this section must use the VFR visibility minimums outlined under § 91.155(b)(2) of this chapter.
(p) Section 91.157(b)(3), (b)(4), and (c) of this chapter.	The helicopter exceptions outlined in § 91.157(b)(3), (b)(4), and (c) of this chapter apply to powered-lift operating in vertical-lift flight mode when those aircraft are operated at a speed that allows the pilot to see any other traffic or obstructions in time to avoid a collision.	
(q) Section 91.167(a)(3) and (b)(2)(ii) of this chapter.	The helicopter provisions in § 91.167(a)(3) and (b)(2)(ii) of this chapter apply to powered-lift authorized to conduct copter procedures and that have the performance capability for the entire flight to conduct a landing in the vertical-lift flight mode, as outlined in the Aircraft Flight Manual.	(1) Powered-lift that meet the requirements of paragraph (q) of this section may use the helicopter provisions under § 91.167(a)(3) and (b)(2)(ii) of this chapter. (2) Powered-lift that are unable to meet the requirements outlined in paragraph (q) of this section must use the 45-minute fuel requirement outlined in § 91.167(a)(3) of this chapter and the aircraft requirement outlined in § 91.167(b)(2)(i) of this chapter.
(r) Section 91.169(b)(2)(ii) and (c)(1)(ii) of this chapter.	Applies to powered-lift authorized to conduct copter procedures and that have the performance capability to land in the vertical-lift flight mode, as outlined in the Aircraft Flight Manual.	(1) Powered-lift that meet the requirements of paragraph (r) of this section may use the helicopter provisions specified in § 91.169(b)(2)(ii) and (c)(1)(ii) of this chapter. (2) Powered-lift that are unable to meet the requirements outlined in paragraph (r) of this section must use the requirements for aircraft other than helicopters under § 91.169(b)(2)(i) and (c)(1)(i) of this chapter.
(s) Section 91.175(f)(2)(iii) of this chapter.	Applies to powered-lift with two engines or less, that takeoff in vertical-lift flight mode, and that are authorized to conduct copter procedures.	Powered-lift with two engines or less that are unable to meet the requirements outlined in this paragraph (s) must comply with § 91.175(f)(2)(i) of this chapter.
(t) Section 91.175(f)(4)(i) of this chapter.	Applies to part 135 of this chapter powered-lift operators required to comply with subpart I to part 135 of this chapter.	

Part 91, Subpart C—Equipment, Instrument, and Certificate Requirements

(u) Section 91.205(b)(11) and (14) of this chapter.	Applies to small powered-lift	Position and anti-collision lights must meet § 23.2530(b) of this chapter.

TABLE 1 TO § 194.302—Continued

Regulation	Applicability	Additional requirements or clarification
(v) Section 91.205(d)(3)(i) of this chapter. (w) Section 91.207 of this chapter. (x) Section 91.219 of this chapter. (y) Section 91.223(a) and (c) of this chapter.	Applies to powered-lift certified for instrument flight rules operations. Applies to all powered-lift. Applies to all powered-lift. Applies to powered-lift configured with 6 or more passenger seats, excluding any pilot seat.	Instead of terrain awareness and warning system (TAWS), powered-lift must be equipped with a helicopter terrain awareness and warning system (HTAWS) that meets the requirements in TSO-C194 and Section 2 of RTCA DO-309 (incorporated by reference, see § 194.109) or a FAA-approved TAWS A/ HTAWS hybrid system.
Part 91, Subpart D—Special Flight Operations		
(z) Section 91.313(g) of this chapter.	Applies to restricted category small powered-lift.	
Part 91, Subpart E—Maintenance, Preventive Maintenance, and Alterations		
(aa) Section 91.409(e) through (h) of this chapter. <		

TABLE 1 TO § 194.302—Continued

Regulation	Applicability	Additional requirements or clarification
(ll) Section 91.519 of this chapter.	Applies to powered-lift subject to the requirements of subpart F to part 91 of this chapter as specified in paragraph (cc) of this section.	
(mm) Section 91.521 of this chapter.	Applies to large powered-lift subject to the requirements of subpart F to part 91 of this chapter as specified in paragraph (cc) of this section.	The safety belt and shoulder harness required by § 91.521 of this chapter must comply with § 25.785 of this chapter or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(nn) Section 91.523 of this chapter.	Applies to powered-lift having a seating capacity of more than 19 passengers subject to the requirements of subpart F to part 91 of this chapter as specified in paragraph (cc) of this section.	The carry-on baggage required by § 91.523 of this chapter must be stowed such that it can withstand the inertia forces specified in § 25.561(b)(3) of this chapter or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(oo) Section 91.525 of this chapter.	Applies to powered-lift subject to the requirements of subpart F to part 91 of this chapter as specified in paragraph (cc) of this section.	
(pp) Section 91.527(a) of this chapter.	Applies to powered-lift subject to the requirements of subpart F to part 91 of this chapter as specified in paragraph (cc) of this section.	(1) Powered-lift critical surfaces, as outlined in the Aircraft Flight Manual for that aircraft, must also be determined to be free of frost, ice, or snow. (2) Powered-lift critical surfaces under this section are determined by the manufacturer.
(qq) Section 91.527(b)(2) and (3) of this chapter.	Applies to powered-lift subject to the requirements of subpart F to part 91 of this chapter as specified in paragraph (cc) of this section.	Instead of § 91.527(b)(2) and (3) of this chapter, to operate instrument flight rules (IFR) into known light or moderate icing conditions or VFR into known light or moderate icing conditions, an operator must comply with § 194.306(xx).
(rr) Section 91.527(c) of this chapter.	Applies to powered-lift subject to the requirements of subpart F to part 91 of this chapter as specified in paragraph (cc) of this section.	No pilot may fly a powered-lift into known or forecast severe icing conditions.
(ss) Section 91.531(a)(1) and (2), (b), and (c) of this chapter.	Applies to powered-lift subject to the requirements of subpart F to part 91 of this chapter as specified in paragraph (cc) of this section and that meet the additional requirements as set forth in each paragraph of § 91.531 of this chapter; § 91.531(b)(2) of this chapter applies to large powered-lift that meet the additional requirements set forth in that paragraph.	
(tt) Section 91.533 of this chapter.	Applies to powered-lift subject to the requirements of subpart F to part 91 of this chapter as specified in paragraph (cc) of this section.	
Part 91, Subpart G—Additional Equipment and Operating Requirements for Large and Transport Category Aircraft		
(uu) Section 91.603 of this chapter.	Applies to large powered-lift	The aural speed warning device required by § 91.603 of this chapter must comply with § 25.1303(c)(1) of this chapter or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(vv) Section 91.605(b)(1) of this chapter.	Applies to large powered-lift	The Aircraft Flight Manual must contain the takeoff weight performance information.
(ww) Section 91.605(b)(2) of this chapter.	Applies to large powered-lift	The Aircraft Flight Manual must contain the landing performance information.
(xx) Section 91.605(b)(3), (b)(4)(ii), and (c) of this chapter.	Applies to large powered-lift that execute takeoff operations using wing-borne lift and that have takeoff performance information contained in the Aircraft Flight Manual.	
(yy) Section 91.609(c), (d), (e), (i), and (j) of this chapter.	Paragraph (c) of § 91.609 of this chapter applies to powered-lift with a passenger seating configuration, excluding any pilot seats, of 10 or more seats; § 91.609(e) of this chapter applies to powered-lift with a passenger seating configuration of six or more seats and for which two pilots are required by type certification or operating rule; § 91.609(d) of this chapter applies to powered-lift required by that section to have a flight data recorder; and § 91.609(i) and (j) of this chapter apply to powered-lift required by that section to have a cockpit voice recorder and a flight data recorder.	(1) Operators of powered-lift having a passenger seating configuration, excluding any pilot seat, of 10 or more must comply with § 194.310 or § 194.311 in lieu of the appendices referenced in § 91.609(c)(1) of this chapter. (2) For compliance with § 91.609(c)(3), (e)(1), and (i) of this chapter, powered-lift must comply with the certification provisions listed in those paragraphs or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter. (3) Under § 91.609(d) of this chapter, the flight recorder must operate continuously from the earlier of when the powered-lift begins the takeoff roll or begins lift-off until the later of when the powered-lift completes the landing roll or lands at its destination.
(zz) Section 91.613(b)(2) of this chapter.	Applies to large powered-lift	The thermal/acoustic installation materials required by § 91.613(b)(2) of this chapter must meet the requirements of § 25.856 of this chapter or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
Part 91, Subpart K—Fractional Ownership Operations		
(aaa) Section 91.1037 of this chapter.	Applies to large powered-lift subject to the requirements of subpart K to part 91 of this chapter that are certificated to conduct landing operations in wing-borne flight mode as indicated in the Aircraft Flight Manual.	If a powered-lift operator is required to comply with this section, the operator must also comply with § 91.1025(o)(7) of this chapter.
(bbb) Section 91.1041(b) and (d) of this chapter.	Applies to all powered-lift subject to the requirements of subpart K to part 91 of this chapter.	

TABLE 1 TO § 194.302—Continued

Regulation	Applicability	Additional requirements or clarification
(ccc) Section 91.1045(a) of this chapter.	Applies to powered-lift subject to the requirements of subpart K to part 91 of this chapter with a passenger-seat configuration of more than 30 seats or a payload capacity of more than 7,500 pounds.	Under § 91.1045(a)(3) of this chapter, instead of TAWS, powered-lift must be equipped with a helicopter terrain awareness and warning system (HTAWS) that meets the requirements in TSO-C194 and Section 2 of RTCA DO-309 (incorporated by reference, see § 194.109) or a FAA-approved TAWS A/ HTAWS hybrid system.
(ddd) Section 91.1045(b) of this chapter.	Applies to powered-lift subject to the requirements of subpart K to part 91 of this chapter with a passenger-seat configuration of 30 seats or fewer, excluding each crewmember, and a payload capacity of 7,500 pounds or less.	Compliance with § 91.1045(b)(3) of this chapter requires a helicopter terrain awareness and warning system that complies with § 194.306(s).

TABLE 1 TO § 194.302

Regulation	Applicability	Additional requirements or clarification
Part 91, Subpart A—General		
(a) Section 91.9 (a) and (b) of this chapter.	Applies to all powered-lift	The requirement for an approved Aircraft Flight Manual is set forth in the airworthiness criteria established under § 21.17(b) of this chapter.
Part 91, Subpart B—Flight Rules		
(b) Section 91.103(b)(1) of this chapter.	Applies to powered-lift for which an approved Aircraft Flight Manual containing takeoff and landing distance data is required.	
(c) Section 91.107(a)(3)(i) through (iii) of this chapter.	Applies to all powered-lift	The exception under § 91.107(a)(3) of this chapter for seaplane and float equipped rotorcraft operations during movement on the surface applies to persons pushing off a powered-lift from the dock or persons mooring the powered-lift at the dock.
(d) Section 91.119(d) of this chapter.	Applies to powered-lift operating in vertical-lift flight mode	Under § 91.119(d) of this chapter, a powered-lift may be operated in vertical-lift flight mode at less than the minimums prescribed in § 91.119(b) or (c) of this chapter, provided each person operating the powered-lift complies with any routes or altitudes specifically prescribed for powered-lift by the FAA.
(e) Section 91.126(b)(1) of this chapter.	Applies to powered-lift operating in wing-borne flight mode	If the powered-lift is operating in vertical-lift flight mode, see paragraph (f) of this section.
(f) Section 91.126(b)(2) of this chapter.	Applies to powered-lift operating in vertical-lift flight mode	If the powered-lift is operating in wing-borne flight mode, see paragraph (e) of this section.
(g) Section 91.129(e)(1) and (2), (g)(2), and (h) of this chapter.	Applies to large or turbine-powered powered-lift.	
(h) Section 91.129(e)(3) of this chapter.	Applies to powered-lift preparing to land in wing-borne flight mode.	
(i) Section 91.129(f)(1) of this chapter.	Applies to powered-lift operating in wing-borne flight mode	(1) If the powered-lift is operating in vertical-lift flight mode, see paragraph (j) of this section. (2) Section 91.129(f)(1) does not apply when the operator of a powered-lift is conducting a circling approach under part 97 of this chapter or when otherwise requested by air traffic control (ATC).
(j) Section 91.129(f)(2) of this chapter.	Applies to powered-lift operating in vertical-lift flight mode	(1) If the powered-lift is operating in wing-borne flight mode, see paragraph (i) of this section. (2) Section 91.129(f)(2) does not apply when the operator of a powered-lift is conducting a circling approach under part 97 of this chapter or when otherwise requested by ATC.
(k) Section 91.131(a)(2) of this chapter.	Applies to large powered-lift.	
(l) Section 91.151(a) and (b) of this chapter.	Applies to powered-lift	(1) A powered-lift with the performance capability, as outlined in the Aircraft Flight Manual, to conduct a landing in the vertical-lift flight mode along the entire route of flight may use the VFR fuel requirements outlined in § 91.151(b). (2) Powered-lift unable to meet the requirements of paragraph (l)(1) of this section must use the rule requirements outlined in § 91.151(a).
(m) Section 91.155(a) of this chapter.	The helicopter provision under § 91.155(a) applies to powered-lift operating in vertical-lift flight mode and at a speed that allows the pilot to see any other traffic or obstructions in time to avoid a collision.	(1) Except as provided in § 91.155(b), powered-lift that meet the requirements of paragraph (m) of this section may operate under the helicopter VFR visibility minimums outlined under § 91.155(a) in class G airspace. (2) Powered-lift unable to meet the requirements of paragraph (m) of this section must use the VFR visibility minimums in § 91.155(a) for aircraft other than helicopters.
(n) Section 91.155(b)(1) of this chapter.	Applies to powered-lift operating in the vertical-lift flight mode and at a speed that allows the pilot to see any other traffic or obstructions in time to avoid a collision.	(1) Powered-lift that meet the requirements of paragraph (n) of this section may use the VFR visibility minimums outlined in § 91.155(b)(1) in Class G airspace. (2) Powered-lift unable to meet the requirements of paragraph (n) of this section must use the visibility minimums outlined in § 91.155(b)(2).
(o) Section 91.155(b)(2) of this chapter.	Applies to powered-lift	Powered-lift operating in Class G airspace that cannot meet the requirements of paragraph (n) of this section must use the VFR visibility minimums outlined under § 91.155(b)(2).

TABLE 1 TO § 194.302—Continued

Regulation	Applicability	Additional requirements or clarification
(p) Section 91.157(b)(3), (b)(4), and (c) of this chapter.	The helicopter exceptions outlined in § 91.157(b)(3), (b)(4), and (c) apply to powered-lift operating in vertical-lift flight mode when those aircraft are operated at a speed that allows the pilot to see any other traffic or obstructions in time to avoid a collision.	
(q) Section 91.167(a)(3) and (b)(2)(ii) of this chapter.	The helicopter provisions in § 91.167(a)(3) and (b)(2)(ii) apply to powered-lift authorized to conduct copter procedures and that have the performance capability for the entire flight to conduct a landing in the vertical-lift flight mode, as outlined in the Aircraft Flight Manual.	(1) Powered-lift that meet the requirements of paragraph (q) of this section may use the helicopter provisions under § 91.167(a)(3) and 91.167(b)(2)(ii). (2) Powered-lift that are unable to meet the requirements outlined in paragraph (q) of this section must use the 45-minute fuel requirement outlined in § 91.167(a)(3) and the aircraft requirement outlined in § 91.167(b)(2)(i).
(r) Section 91.169(b)(2)(ii) and (c)(1)(ii) of this chapter.	Applies to powered-lift authorized to conduct copter procedures and that have the performance capability to land in the vertical-lift flight mode, as outlined in the Aircraft Flight Manual.	(1) Powered-lift that meet the requirements of paragraph (r) of this section may use the helicopter provisions specified in § 91.169(b)(2)(ii) and § 91.169(c)(1)(ii). (2) Powered-lift that are unable to meet the requirements outlined in paragraph (r) of this section must use the requirements for aircraft other than helicopters under § 91.169(b)(2)(i) and (c)(1)(i).
(s) Section 91.175(f)(2)(iii) of this chapter.	Applies to powered-lift with two engines or less, that takeoff in vertical-lift flight mode, and that are authorized to conduct copter procedures.	Powered-lift with two engines or less that are unable to meet the requirements outlined in this paragraph (s) must comply with § 91.175(f)(2)(i).
(t) Section 91.175(f)(4)(i) of this chapter.	Applies to part 135 powered-lift operators required to comply with subpart I to part 135 of this chapter.	
Part 91, Subpart C—Equipment, Instrument, and Certificate Requirements		
(u) Section 91.205(b)(11) and (14).	Applies to small powered-lift	Position and anti-collision lights must meet § 23.2530(b) of this chapter.
(v) Section 91.205(d)(3)(i)	Applies to powered-lift certified for instrument flight rules operations.	
(w) Section 91.207	Applies to all powered-lift.	
(x) Section 91.219	Applies to all powered-lift.	
(y) Section 91.223(a) and (c)	Applies to powered-lift configured with 6 or more passenger seats, excluding any pilot seat.	Instead of terrain awareness and warning system (TAWS), powered-lift must be equipped with a helicopter terrain awareness and warning system (HTAWS) that meets the requirements in Technical Standard Order (TSO)—C194 and Section 2 of RTCA DO-309 (incorporated by reference, see § 194.109) or a FAA-approved TAWS A/HTAWS hybrid system.
Part 91, Subpart D—Special Flight Operations		
(z) Section 91.313(g)	Applies to restricted category small powered-lift.	
Part 91, Subpart E—Maintenance, Preventive Maintenance, and Alterations		
(aa) Section 91.409(e) through (h).	Applies to technically-advanced powered-lift which are powered-lift equipped with an electronically advanced system in which the pilot interfaces with a multi-computer system with increasing levels of automation in order to aviate, navigate, or communicate.	(1) Unless otherwise authorized by the Administrator, a technically advanced powered-lift must be equipped with an electronically advanced multi-computer system that includes one or more of the following installed components: (i) An electronic Primary Flight Display (PFD) that includes, at a minimum, an airspeed indicator, turn coordinator, attitude indicator, heading indicator, altimeter, and vertical speed indicator; (ii) An electronic Multifunction Display (MFD) that includes, at a minimum, a moving map using Global Positioning System (GPS) navigation with the aircraft position displayed; (iii) A multi-axis autopilot integrated with the navigation and heading guidance system; and (iv) Aircraft design with advanced fly-by-wire-flight control system that utilizes electronically operated controls with no direct mechanical link from the pilot to the control surfaces. (2) The display elements described in paragraphs (aa)(1)(i) and (ii) of this section must be continuously visible.
(bb) Section 91.411	Applies to all powered-lift.	
Part 91, Subpart F—Large and Turbine-Powered Multiengine Airplanes and Fractional Ownership Program Aircraft		
(cc) Section 91.501	Applies to large powered-lift regardless of powerplant, as well as powered-lift operating under subpart K to part 91, and subject to any limitations outlined in this SFAR.	Any sections or paragraphs within sections to subpart F to part 91 that refer to a specific category of aircraft and that are not referenced in the SFAR tables to this section or § 194.306, do not apply to powered-lift.
(dd) Section 91.503	Applies to powered-lift subject to the requirements of subpart F to part 91 as specified in paragraph (cc) of this section.	Powered-lift may comply with § 91.503(a)(5) by having the appropriate engine or multiple-engines inoperative climb performance data available at the pilot station of the aircraft.
(ee) Section 91.505	Applies to powered-lift subject to the requirements of subpart F to part 91 as specified in paragraph (cc) of this section.	
(ff) Section 91.507	Applies to powered-lift subject to the requirements of subpart F to part 91 as specified in paragraph (cc) of this section.	

TABLE 1 TO § 194.302—Continued

Regulation	Applicability	Additional requirements or clarification
(gg) Section 91.509	Applies to powered-lift subject to the requirements of subpart F to part 91 as specified in paragraph (cc) of this section.	(1) Powered-lift operating over water under § 91.509(a) or (b) may use either the nearest shore or the nearest off-shore heliport structure by which to measure the nautical mile limits provided in § 91.509(a) and (b). (2) The lifeline required by § 91.509(b)(5) must be stored in accordance with § 25.1411(g) of this chapter or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(hh) Section 91.511	Applies to powered-lift subject to the requirements of subpart F to part 91 as specified in paragraph (cc) of this section.	Powered-lift operating over water under § 91.511(a) may use either the nearest shore or the nearest off-shore heliport structure by which to measure the nautical mile limits provided in § 91.511(a).
(ii) Section 91.513	Applies to powered-lift subject to the requirements of subpart F to part 91 as specified in paragraph (cc) of this section.	
(jj) Section 91.515	Applies to powered-lift subject to the requirements of subpart F to part 91 as specified in paragraph (cc) of this section.	
(kk) Section 91.517	Applies to powered-lift subject to the requirements of subpart F to part 91 as specified in paragraph (cc) of this section.	
(ll) Section 91.519	Applies to powered-lift subject to the requirements of subpart F to part 91 as specified in paragraph (cc) of this section.	
(mm) Section 91.521	Applies to large powered-lift subject to the requirements of subpart F to part 91 as specified in paragraph (cc) of this section.	The safety belt and shoulder harness required by § 91.521 must comply with § 25.785 of this chapter or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(nn) Section 91.523	Applies to powered-lift having a seating capacity of more than 19 passengers subject to the requirements of subpart F to part 91 as specified in paragraph (cc) of this section.	The carry-on baggage required by § 91.523 must be stowed such that it can withstand the inertia forces specified in § 25.561(b)(3) of this chapter or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(oo) Section 91.525	Applies to powered-lift subject to the requirements of subpart F to part 91 as specified in paragraph (cc) of this section.	
(pp) Section 91.527(a)	Applies to powered-lift subject to the requirements of subpart F to part 91m as specified in paragraph (cc) of this section.	(1) Powered-lift critical surfaces, as outlined in the Aircraft Flight Manual for that aircraft, must also be determined to be free of frost, ice, or snow. (2) Powered-lift critical surfaces under this section are determined by the manufacturer.
(qq) Section 91.527(b)(2) and (3).	Applies to powered-lift subject to the requirements of subpart F to part 91 as specified in paragraph (cc) of this section.	Instead of § 91.527(b)(2) and (3), to operate instrument flight rules (IFR) into known light or moderate icing conditions or VFR into known light or moderate icing conditions, an operator must comply with § 194.306(xx).
(rr) Section 91.527(c)	Applies to powered-lift subject to the requirements of subpart F to part 91 as specified in paragraph (cc) of this section.	No pilot may fly a powered-lift into known or forecast severe icing conditions.
(ss) Section 91.531(a)(1) and (2), (b), and (c).	Applies to powered-lift subject to the requirements of subpart F to part 91 as specified in paragraph (cc) of this section and that meet the additional requirements as set forth in each paragraph of § 91.531. Section 91.531(b)(2) applies to large powered-lift that meet the additional requirements set forth in that paragraph.	
(tt) Section 91.533	Applies to powered-lift subject to the requirements of subpart F to part 91 as specified in paragraph (cc) of this section.	

Part 91, Subpart G—Additional Equipment and Operating Requirements for Large and Transport Category Aircraft

(uu) Section 91.603	Applies to large powered-lift	The aural speed warning device required by § 91.603 must comply with § 25.1303(c)(1) of this chapter or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(vv) Section 91.605(b)(1)	Applies to large powered-lift	The Aircraft Flight Manual must contain the takeoff weight performance information.
(ww) Section 91.605(b)(2)	Applies to large powered-lift	The Aircraft Flight Manual must contain the landing performance information.
(xx) Section 91.605(b)(3), (b)(4)(ii), and (c).	Applies to large powered-lift that execute takeoff operations using wing-borne lift and that have takeoff performance information contained in the Aircraft Flight Manual.	
(yy) Section 91.609(c), (d), (e), (i), and (j).	Paragraph (c) of § 91.609 applies to powered-lift with a passenger seating configuration, excluding any pilot seats, of 10 or more seats; paragraph (e) of § 91.609 applies to powered-lift with a passenger seating configuration of six or more seats and for which two pilots are required by type certification or operating rule; paragraph (d) of § 91.609 applies to powered-lift required by that section to have a flight data recorder; and paragraphs (i) and (j) of § 91.609 apply to powered-lift required by that section to have a cockpit voice recorder and a flight data recorder.	(1) Operators of powered-lift having a passenger seating configuration, excluding any pilot seat, of 10 or more must comply with § 194.310 or § 194.311 in lieu of the appendices referenced in § 91.609(c)(1). (2) For compliance with § 91.609(c)(3), (e)(1), and (i), powered-lift must comply with the certification provisions listed in those paragraphs or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter. (3) Under § 91.609(d), the flight recorder must operate continuously from the earlier of when the powered-lift begins the takeoff roll or begins lift-off until the later of when the powered-lift completes the landing roll or lands at its destination.

TABLE 1 TO § 194.302—Continued

Regulation	Applicability	Additional requirements or clarification
(zz) Section 91.613(b)(2)	Applies to large powered-lift	The thermal/acoustic installation materials required by § 91.613(b)(2) must meet the requirements of § 25.856 of this chapter or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
Part 91, Subpart K—Fractional Ownership Operations		
(aaa) Section 91.1037	Applies to large powered-lift subject to the requirements of subpart K to part 91 that are certificated to conduct landing operations in wing-borne flight mode as indicated in the Aircraft Flight Manual.	If a powered-lift operator is required to comply with this section, the operator must also comply with § 91.1025(o)(7) of this chapter.
(bbb) Section 91.1041(b) and (d).	Applies to all powered-lift subject to the requirements of subpart K to part 91.	
(ccc) Section 91.1045(a)	Applies to powered-lift subject to the requirements of subpart K to part 91 with a passenger-seat configuration of more than 30 seats or a payload capacity of more than 7,500 pounds.	Under § 91.1045(a)(3), instead of TAWS, powered-lift must be equipped with a helicopter terrain awareness and warning system (HTAWS) that meets the requirements in Technical Standard Order (TSO)—C194 and Section 2 of RTCA DO-309 (incorporated by reference, see § 194.109) or a FAA-approved TAWS A/HTAWS hybrid system.
(ddd) Section 91.1045(b)	Applies to powered-lift subject to the requirements of subpart K to part 91 with a passenger-seat configuration of 30 seats or fewer, excluding each crewmember, and a payload capacity of 7,500 pounds or less.	Compliance with § 91.1045(b)(3) requires a helicopter terrain awareness and warning system that complies with § 194.306(s).

§ 194.303 IFR takeoff, approach, and landing minimums.

Section 91.1039(c) of this chapter applies to all powered-lift operated under subpart K to part 91 of this chapter regardless of powerplant type.

§ 194.304 ATC transponder and altitude reporting equipment and use.

Notwithstanding § 194.301, the exceptions outlined in § 91.215(b)(3) and (5) of this chapter for aircraft not certificated with an engine-driven

electrical system do not apply to powered-lift.

§ 194.305 Applicability of copter procedures under part 97 of this chapter to powered-lift.

Persons operating powered-lift may use copter procedures as defined in § 97.3 of this chapter if the aircraft is certified for instrument flight rule operations and does not contain a limitation prohibiting use of such procedures in its Aircraft Flight Manual.

§ 194.306 Provisions under part 135 of this chapter applicable to powered-lift.

No person may operate a powered-lift under part 135 of this chapter unless that person complies with the regulations listed in the first column of table 1 to this section, notwithstanding their applicability to airplanes, helicopters, or rotorcraft, subject to the applicability provisions in the second column and any additional requirements or clarification specified in the third column.

TABLE 1 TO § 194.306

Regulation	Applicability	Additional requirements or clarification
Part 135, Subpart A—General		
(a) Section 135.1(a)(9) of this chapter.	Applies to powered-lift conducting operations in accordance with subpart L of part 135 of this chapter.	
(b) Section 135.23(r) of this chapter.	Applies to powered-lift required to comply with § 135.385 of this chapter as set forth in paragraphs (hhh) and (iii) of this section.	
Part 135, Subpart B—Flight Operations		
(c) Section 135.93(a) through (f) of this chapter.	Applies to all powered-lift	(1) The requirements referencing an Airplane Flight Manual under § 135.93(b) of this chapter apply to a powered-lift's Aircraft Flight Manual. (2) Under § 135.93(c) of this chapter, no person operating a powered-lift may use an autopilot enroute, including climb and descent, below the following— (i) Either: (A) At a minimum engagement altitude specified in the Aircraft Flight Manual; or (B) If no minimum engagement altitude is specified, 500 feet, or at an altitude that is no lower than twice the altitude loss specified in the Aircraft Flight Manual for an autopilot malfunction in cruise conditions, whichever is greater; or (ii) Notwithstanding the requirements of paragraphs (c)(2)(i)(A) and (B) of this section, at an altitude specified by the Administrator.
(d) Section 135.117(a)(9) of this chapter.	Applies to powered-lift conducting operations beyond the autorotational distance from the shoreline, as defined in § 135.168(a) of this chapter, or gliding distance of a shoreline.	

TABLE 1 TO § 194.306—Continued

Regulation	Applicability	Additional requirements or clarification
(e) Section 135.128(a) of this chapter.	Applies to all powered-lift	The exception under § 135.128(a) of this chapter for seaplane and float equipped rotorcraft operations during movement on the surface applies to persons pushing off a powered-lift from the dock or persons mooring the powered-lift at the dock.
Part 135, Subpart C—Aircraft and Equipment		
(f) Section 135.145(b) of this chapter.	Applies to all powered-lift unless the certificate holder has previously proven a powered-lift under part 135 of this chapter.	
(g) Section 135.145(d)(1) of this chapter.	Applies to all powered-lift unless a powered-lift of the same make or similar design has been proven or validated by that certificate holder under part 135 of this chapter.	
(h) Section 135.150(a)(7) of this chapter.	Applies to large powered-lift with a passenger seating configuration, excluding any pilot seat, of more than 19.	The public address system required by § 135.150(a)(7) of this chapter must comply with § 25.1423 of this chapter or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(i) Section 135.150(b)(7) of this chapter.	Applies to large powered-lift with a passenger seating configuration, excluding any pilot seat, of more than 19.	The crewmember interphone system must comply with the requirements of § 135.150(b)(7) of this chapter or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(j) Section 135.151(a) of this chapter.	Applies to powered-lift with a passenger seating configuration of six or more seats and for which two pilots are required by certification or operating rules.	The cockpit voice recorder must be installed and equipped in accordance with the certification provisions listed in § 135.151(a)(1) of this chapter or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(k) Section 135.151(b) of this chapter.	Applies to powered-lift with a passenger seating configuration of 20 or more seats.	The cockpit voice recorder must be installed and equipped in accordance with the certification provisions listed in § 135.151(b)(1) of this chapter or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(l) Section 135.151(d) of this chapter.	Applies to large powered-lift or powered-lift equipped with a cockpit voice recorder.	The cockpit voice recorder required by § 135.151(d) of this chapter must record the uninterrupted audio signal received by a boom or mask microphone in accordance with § 25.1457(c)(5) of this chapter or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(m) Section 135.151(g)(1) of this chapter.	Applies to powered-lift with a passenger seating configuration of six or more seats, for which two pilots are required by certification or operating rules, and that are required to have a flight data recorder under § 135.152 of this chapter.	The cockpit voice recorder must be installed and equipped in accordance with the appropriate certification provisions listed in § 135.151(g)(1)(i) and (iv) of this chapter or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(n) Section 135.151(g)(2) of this chapter.	Applies to powered-lift with a passenger seating configuration of 20 or more seats and that is required to have a flight data recorder under § 135.152 of this chapter.	The cockpit voice recorder must be installed and equipped in accordance with the appropriate certification provisions listed in § 135.151(g)(2)(i) and (iv) of this chapter or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(o) Section 135.151(h) of this chapter.	Applies to powered-lift required to have a cockpit voice recorder and a flight data recorder under part 135 with installed datalink communication equipment.	
(p) Section 135.152(a) of this chapter.	Section 135.152(a) of this chapter applies to powered-lift with a passenger seating configuration of 10 to 19 seats.	Powered-lift operators must comply with § 194.312 or § 194.313 in lieu of the appendices referenced in § 135.152 of this chapter.
(q) Section 135.152(b) introductory text and (b)(3) of this chapter.	Section 135.152(b) introductory text and (b)(3) apply to powered-lift with a passenger seating configuration of 20 to 30 seats.	
(r) Section 135.152(c), (d), (f), and (j) of this chapter.	Applies to powered-lift with a passenger seating configuration, excluding crewmember seats, of 10 to 30.	(1) The flight recorder must be installed and equipped in accordance with the appropriate certification provisions listed in § 135.152 of this chapter or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter. (2) Certificate holders must keep the recorded data until the powered-lift has been operating for at least 25 hours. (3) The powered-lift flight recorder must be operated continuously from the instant the powered-lift begins the takeoff roll or lift-off until the landing is completed.
(s) Section 135.154(a) and (c) of this chapter.	Applies to powered-lift configured with 6 or more passenger seats, excluding any pilot seat.	Instead of TAWS, powered-lift must be equipped with a helicopter terrain awareness and warning system (HTAWS) that meets the requirements in TSO-C194 and Section 2 of RTCA DO-309 (incorporated by reference, see § 194.109) or a FAA-approved TAWS A/HTAWS hybrid system.
(t) Section 135.158 of this chapter.	Applies to powered-lift equipped with a flight instrument pitot heating system.	Under § 135.158(a) of this chapter, no person may operate a powered-lift equipped with a flight instrument pitot heating system unless the aircraft is also equipped with an operable pitot heat indication system that complies with § 23.2605 or § 25.1326 of this chapter, or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter that provides an alert that is in clear view of a flightcrew member.
(u) Section 135.159(a)(1) of this chapter.	Applies to powered-lift with a third attitude instrument system that meets the requirements of § 135.159(a)(1) of this chapter.	

TABLE 1 TO § 194.306—Continued

Regulation	Applicability	Additional requirements or clarification
(v) Section 135.160 of this chapter.	Applies to all powered-lift.	
(w) Section 135.163(g) of this chapter.	Applies to all powered-lift	The two required generators may be mounted on a drivetrain that is driven by two separate powerplants as outlined in § 135.163(g) of this chapter for multi-engine helicopters.
(x) Section 135.165(d) of this chapter.	Applies to powered-lift having a passenger seat configuration, excluding any pilot seat, of 10 seats or more, or a powered-lift in a commuter operation, as defined in part 119 of this chapter.	
(y) Section 135.165(g)(1) of this chapter.	Applies to powered-lift for purposes of approving a single long-range navigation system and a single long-range communication system for extended over-water operations.	
(z) Section 135.168 of this chapter.	Applies to powered-lift operating beyond autorotational distance or gliding distance from the shoreline.	(1) The life preserver required by § 135.168(b)(1) of this chapter need not be worn but must be readily available for its intended use and easily accessible to each occupant when the powered-lift is a multiengine aircraft operated at a weight that will allow it to climb, with the critical engine inoperative or while experiencing a critical change of thrust, at least 50 feet a minute, at an altitude of 1,000 feet above the surface. (2) For powered-lift unable to meet the requirements of paragraph (z)(1) of this section, the occupants must wear life preservers during the flight. (3) For purposes of paragraphs (z), (ii), (jj), and (kk) of this section, <i>critical change of thrust</i> means a failure that would most adversely affect the performance or handling qualities of an aircraft.
(aa) Section 135.169(a) of this chapter.	Applies to large powered-lift	Powered-lift must comply with appropriate certification provisions listed in § 135.169(a) of this chapter or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(bb) Section 135.169(b)(1) and (b)(8) of this chapter.	Applies to small powered-lift with a passenger seating configuration, excluding pilot seats, of 10 seats or more.	(1) Under § 135.169(b)(1) of this chapter, small powered-lift with a passenger seating configuration of 10 seats or more must comply with the applicable requirements for transport category powered-lift or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter. (2) Under § 135.169(b)(8) of this chapter, small powered-lift with a passenger seating configuration of 10 seats or more must comply with the applicable requirements under part 23 of this chapter referenced in § 135.169(b)(8) of this chapter or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(cc) Section 135.169(d) of this chapter.	Applies to large powered-lift with a cargo or baggage compartment of 200 cubic feet or greater.	The cargo and baggage compartments required by § 135.169(d) of this chapter must comply with the certification provisions listed in that paragraph or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(dd) Section 135.170(b)(1) of this chapter.	Applies to large powered-lift; § 135.170(b)(1)(ii) applies to large powered-lift with a passenger capacity of 20 or more.	Powered-lift must comply with appropriate certification provisions listed in § 135.170(b)(1) of this chapter or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(ee) Section 135.170(b)(2) of this chapter.	Applies to large powered-lift	The seat cushions required by § 135.170(b)(2) of this chapter must comply with § 25.853 of this chapter or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(ff) Section 135.170(c)(2) of this chapter.	Applies to large powered-lift	The seat cushions required by § 135.170(c)(2) of this chapter must comply with § 25.856 of this chapter or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(gg) Section 135.178 of this chapter.	Applies to powered-lift having a passenger-seating configuration of more than 19 seats.	The additional emergency equipment must comply with appropriate certification provisions listed in § 135.178 of this chapter or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(hh) Section 135.180 of this chapter.	Applies to powered-lift with a passenger seat configuration, excluding any pilot seat, of 10 to 30 seats.	The Aircraft Flight Manual must contain the information outlined in § 135.180(b) of this chapter.
(ii) Section 135.181(a)(2) of this chapter.	Applies to powered-lift	No person may operate a multiengine powered-lift carrying passengers over-the-top or in IFR conditions at a weight that will not allow it to climb, with the critical engine inoperative or while experiencing a critical change of thrust as defined in paragraph (z) of this section, at least 50 feet a minute when operating at the MEAs of the route to be flown or 5,000 feet MSL, whichever is higher.
(jj) Section 135.181(b) of this chapter.	Applies to powered-lift conducting offshore passenger operations.	Multiengine powered-lift carrying passengers offshore may conduct such operations in over-the-top or in IFR conditions at a weight that will allow the powered-lift to climb at least 50 feet per minute with the critical engine inoperative or while experiencing a critical change of thrust as defined in paragraph (z) of this section, when operating at the MEA of the route to be flown or 1,500 feet MSL, whichever is higher.

TABLE 1 TO § 194.306—Continued

Regulation	Applicability	Additional requirements or clarification
(kk) Section 135.183(c) of this chapter.	Applies to powered-lift	No person may operate a land aircraft carrying passengers over water unless it is a multiengine aircraft operated at a weight that will allow it to climb, with the critical engine inoperative or while experiencing a critical change of thrust as defined in paragraph (z) of this section, at least 50 feet a minute, at an altitude of 1,000 feet above the surface.
(ll) Section 135.183(d) of this chapter.	Applies if the powered-lift is equipped with flotation devices and carrying passengers over water.	
Part 135, Subpart D—VFR/IFR Operating Limitations and Weather Requirements		
(mm) Section 135.203(a) of this chapter.	Applies to powered-lift except those operating in the vertical-lift flight mode under paragraph (nn) of this section.	The Administrator may authorize a lower minimum altitude for a powered-lift if the FAA has determined, during type certification, the lower minimum altitude enables a transition from wing-borne to vertical-lift flight mode and the aircraft can conduct a safe autorotation, or an approved equivalent maneuver, to a landing but no lower than 300 feet above the surface.
(nn) Section 135.203(b) of this chapter.	Applies to powered-lift operating in vertical-lift flight mode that are certificated and able to conduct an autorotation or an approved equivalent maneuver to a landing.	Powered-lift that do not meet the requirements of this paragraph (nn) must use the VFR minimum altitudes outlined in paragraph (mm) of this section.
(oo) Section 135.205(a) of this chapter.	Applies to all powered-lift except as provided in paragraph (pp) of this section.	
(pp) Section 135.205(b) of this chapter.	Applies to powered-lift operating in vertical-lift flight mode and at a speed that allows the pilot adequate opportunity to see and avoid any other air traffic or any obstructions in time to avoid a collision.	Powered-lift that do not meet the requirements of this paragraph (pp) must use the VFR visibility requirements outlined in § 135.205(a) of this chapter.
(qq) Section 135.207 of this chapter.	Applies if the powered-lift does not have the flight instrumentation listed in § 135.159 of this chapter installed and operable.	
(rr) Section 135.209(a) of this chapter.	Applies to all powered-lift except as provided in paragraph (ss) of this section.	(1) The Administrator may authorize deviations from paragraph (a) of § 135.209 of this chapter for specific routes with one or more predetermined suitable landing areas if the FAA finds the operation can be conducted safely. If the Administrator authorizes such a deviation, an operations specification will be issued to the operator containing, at a minimum, the specific routes and the VFR fuel reserve specified in minutes. The Administrator may, at any time, terminate any grant of deviation authority issued under this paragraph. (2) <i>Suitable landing area</i> for purposes of this paragraph (rr) and paragraph (ss) of this section means an area that provides the operator reasonable capability to land without causing undue hazard to persons or property. These suitable landing areas must be site specific, designated by the operator, and accepted by the FAA.
(ss) Section 135.209(b) of this chapter.	Applies to powered-lift with the performance capability, as provided in the Aircraft Flight Manual, for the entire flight to conduct a landing in the vertical-lift flight mode.	The Administrator may authorize deviations from § 135.209(b) of this chapter for specific routes with one or more predetermined suitable landing areas if the FAA finds the operation can be conducted safely. If the Administrator authorizes such a deviation, an operations specification will be issued to the operator containing, at a minimum, the specific routes and the VFR fuel reserve specified in minutes. The Administrator may, at any time, terminate any grant of deviation authority issued under this paragraph.
(tt) Section 135.221(b) of this chapter.	Applies to powered-lift authorized to conduct copter procedures and which can land in the vertical-lift flight mode, as provided in the Aircraft Flight Manual.	Powered-lift that do not meet these criteria must use the alternate airport minimums specified for aircraft in § 135.221(a) of this chapter.
(uu) Section 135.223(a)(3) of this chapter.	Applies to powered-lift authorized to conduct copter procedures and that have the performance capability, as provided in the Aircraft Flight Manual, to conduct a landing in the vertical-lift flight mode for the entire flight.	(1) A powered-lift that meets the requirements of paragraph (uu) of this section may use the 30-minute fuel requirements specified for helicopters in § 135.223(a)(3) of this chapter. (2) Powered-lift that are unable to meet the requirements outlined in paragraph (uu) of this section must use the 45-minute fuel requirement outlined in § 135.223(a)(3) of this chapter.
(vv) Section 135.225(e) of this chapter.	Applies to all powered-lift.	
(ww) Section 135.227(b) of this chapter.	Applies to all powered-lift	(1) Powered-lift critical surfaces, as outlined in the aircraft flight manual for that aircraft, must also be determined to be free of frost, ice, or snow. (2) Powered-lift critical surfaces under this section are determined by the manufacturer.
(xx) Section 135.227(d) of this chapter.	Applies to powered-lift that are type certificated and appropriately equipped for operations in icing conditions.	
(yy) Section 135.229(b)(2)(ii) of this chapter.	Applies to powered-lift taking off or landing in vertical-lift flight mode and equipped with landing lights oriented in a direction that enables the pilot to see the area to be used for landing or takeoff marked by reflective material.	If a powered-lift is not taking off or landing in vertical-lift flight mode and is not equipped with landing lights oriented in a direction that enables the pilot to see the area to be used for landing or takeoff marked by reflective material, the powered-lift must take off or land at an airport with boundary or runway marker lights.

TABLE 1 TO § 194.306—Continued

Regulation	Applicability	Additional requirements or clarification
Part 135, Subpart F—Crewmember Flight Time and Duty Period Limitations and Rest Requirements		
(zz) Section 135.271 of this chapter.	Applies to powered-lift conducting operations in accordance with subpart L to part 135 of this chapter.	
Part 135, Subpart I—Airplane Performance Operating Limitations		
(aaa) Section 135.361(a) of this chapter.	As applicable to each powered-lift considering size and certification basis and subject to any limitations outlined in this part.	Any sections or paragraphs within sections to subpart I to part 135 of this chapter that refer to a specific category of aircraft and that are not referenced in the table to § 194.302 or this table, do not apply to powered-lift.
(bbb) Section 135.363(b) through (e) of this chapter.	As applicable to each powered-lift, regardless of power plant type, considering size and certification basis.	
(ccc) Section 135.363(f) of this chapter.	Applies to powered-lift that must comply with §§ 135.365 through 135.387 of this chapter as set forth in paragraphs (ddd) through (jjj) of this section.	
(ddd) Section 135.379(a) and (d) of this chapter.	Applies to large powered-lift	The Aircraft Flight Manual must contain the takeoff weight performance information.
(eee) Section 135.379(c), (e), (f), and (g) of this chapter.	Applies to large powered-lift certificated to conduct takeoff operations that utilize wing-borne lift as indicated in the aircraft flight manual.	The accelerate-stop distance required by § 135.379(c)(1) of this chapter must comply with § 25.109 of this chapter or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(fff) Section 135.381 of this chapter.	Applies to large powered-lift.	
(ggg) Section 135.383(c) of this chapter.	Applies to large powered-lift.	
(hhh) Section 135.385(a) of this chapter.	Applies to large powered-lift	The Aircraft Flight Manual must contain the landing weight performance information.
(iii) Section 135.385(b), (d), (e), and (f) of this chapter.	Applies to large powered-lift certificated to conduct landing operations that utilize wing-borne lift and that have landing performance information contained in the aircraft flight manual.	Section 135.385(f) only applies to eligible on-demand operators.
(jjj) Section 135.387(a) and (b) of this chapter.	Applies to large powered-lift certificated to conduct landing operations that utilize wing-borne lift and that have landing performance information contained in the aircraft flight manual.	(1) Powered-lift operating under § 135.387(a) of this chapter must be able to complete a full stop landing within 60 percent of the effective length of the runway. (2) Section 135.387(b) only applies to eligible on-demand operators.
(kkk) Section 135.397(b) of this chapter.	Applies to small powered-lift having a passenger-seating configuration of more than 19 seats and that utilize wing-borne lift during takeoff and landing.	The Aircraft Flight Manual must contain the takeoff and landing weight performance information.
Part 135, Subpart J—Maintenance, Preventive Maintenance, and Alterations		
(lll) Section 135.429(d) of this chapter.	Applies to powered-lift that operate in remote areas or sites.	
Part 135, Subpart L—Helicopter Air Ambulance Equipment, Operations, and Training Requirements		
(mmm) Section 135.601 of this chapter.	Applies to powered-lift conducting operations in accordance with subpart L to part 135 of this chapter.	(1) Under § 135.603 of this chapter, no certificate holder may use, nor may any person serve as, a pilot in command of an air ambulance operation unless that person meets the requirements of § 135.243 of this chapter and holds a powered-lift instrument rating or an airline transport pilot certificate with a category rating for that aircraft, that is not limited to VFR. (2) See § 194.249 of this chapter for references to class in part 135 of this chapter.
(nnn) Section 135.603 of this chapter.	Applies to powered-lift conducting operations in accordance with subpart L to part 135 of this chapter.	
(ooo) Section 135.605 of this chapter.	Applies to powered-lift conducting operations in accordance with subpart L to part 135 of this chapter.	Powered-lift must be equipped with a helicopter terrain awareness and warning system (HTAWS) that meets the requirements in TSO-C194 and Section 2 of RTCA DO-309 (incorporated by reference, see § 194.109) or a FAA-approved TAWS A/HTAWS hybrid system.
(ppp) Section 135.607 of this chapter.	Applies to powered-lift conducting operations in accordance with subpart L to part 135 of this chapter.	(1) For nonmountainous local flying areas, powered-lift must comply with the following weather minimums: (i) During day operations in a vertical-lift or wing-borne flight mode, a ceiling of 800 feet and visibility of 2 SM; (ii) During night operations in a vertical-lift flight mode, a ceiling of 800 feet and visibility of 3 SM; and (iii) During night operations in a wing-borne flight mode, a ceiling of 1500 feet and visibility of 3 SM. (2) For nonmountainous, non-local flying areas, powered-lift must comply with the following weather minimums: (i) During day operations in a vertical-lift or wing-borne flight mode, a ceiling of 800 feet and visibility of 3 SM; (ii) During night operations in a vertical-lift flight mode, a ceiling of 1000 feet and visibility of 3 SM. (iii) During night operations in a wing-borne flight mode, a ceiling of 1500 feet and visibility of 3 SM.
(qqq) Section 135.609 of this chapter.	Applies to powered-lift conducting operations in accordance with subpart L to part 135 of this chapter.	

TABLE 1 TO § 194.306—Continued

Regulation	Applicability	Additional requirements or clarification
(rrr) Section 135.611 of this chapter. (sss) Section 135.613(a) of this chapter.	Applies to powered-lift conducting operations in accordance with subpart L to part 135 of this chapter. Applies to powered-lift conducting operations in accordance with subpart L to part 135 of this chapter.	(3) For mountainous local flying areas, powered-lift must comply with the following weather minimums: (i) During day operations in a vertical-lift or wing-borne flight mode, a ceiling of 800 feet and visibility of 3 SM; (ii) During night operations in a vertical-lift flight mode, a ceiling of 1000 feet and visibility of 3 SM. (iii) During night operations in a wing-borne flight mode, a ceiling of 2500 feet and visibility of 3 SM. (4) For mountainous non-local flying areas, powered-lift must comply with the following weather minimums: (i) During day operations in a vertical-lift or wing-borne flight mode, a ceiling of 1000 feet and visibility of 3 SM; and (ii) During night operations in a vertical-lift flight mode, a ceiling of 1000 feet and visibility of 5 SM; (iii) During night operations in a wing-borne flight mode, a ceiling of 2500 feet and visibility of 5 SM.
(ttt) Section 135.613(b) of this chapter.	Applies to powered-lift conducting operations in accordance with subpart L to part 135.	(1) Section 135.613(a)(1) of this chapter only applies to powered-lift equipped and certified to conduct PinS approaches annotated with a "Proceed VFR" segment. (2) The applicable VFR weather minimums under § 135.613(a)(2) of this chapter for powered-lift operating in the wing-borne flight mode are: (i) For Day Operations: No less than a 1000-foot ceiling and 2 statute miles flight visibility; and (ii) For Night Operations: No less than a 1500-foot ceiling and 3 statute miles flight visibility. (3) The applicable VFR weather minimums under § 135.613(a)(2) of this chapter for powered-lift operating in the vertical-lift mode are: (i) For Day Operations: No less than a 600-foot ceiling and 2 statute miles flight visibility; and (ii) For Night Operations: No less than a 600-foot ceiling and 3 statute miles flight visibility. (1) Under § 135.613(b)(1) of this chapter, for transitions from VFR to IFR upon departure, the VFR weather minimums outlined for powered-lift under paragraph (sss) of this section apply if: (i) An FAA-approved obstacle departure procedure is followed; and (ii) An IFR clearance is obtained on or before reaching a predetermined location that is not more than 3 NM from the departure location. (2) Under § 135.613(b)(2) of this chapter, if the departure does not meet the requirements of paragraph (ttt)(1) of this section, the VFR weather minimums required by the SFAR for the class of airspace apply.
(uuu) Section 135.615 of this chapter.	Applies to powered-lift conducting operations in accordance with subpart L to part 135 of this chapter.	(1) For powered-lift operating in wing-borne flight mode during the enroute phase of flight, under § 135.615(a)(3) of this chapter, (b), and (c), the following minimums apply: (i) For day operations: no less than 500 feet above the surface or no less than 500 feet horizontally from any obstacle; or (ii) For night operations: at an altitude no less than 1,000 feet above the highest obstacle within a horizontal distance of 5 miles from the course intended to be flown or, in designated mountainous terrain, no less than 2,000 feet above the highest obstacle within a horizontal distance of 5 miles from the course intended to be flown. (2) For powered-lift operating in vertical-lift flight mode during the enroute phase of flight, under § 135.615(a)(3), (b), and (c) of this chapter the following minimums apply: (i) No less than 300 feet for day operations. (ii) No less than 500 feet for night operations.
(vvv) Section 135.617 of this chapter. (www) Section 135.619	Applies to powered-lift conducting operations in accordance with subpart L to part 135 of this chapter. Applies to powered-lift operators with 10 or more powered-lift, helicopters, or any combination thereof, assigned to the certificate holder's operations specifications for air ambulance operations.	
(xxx) Section 135.621	Applies to powered-lift conducting operations in accordance with subpart L to part 135 of this chapter.	

TABLE 1 TO § 194.306

Regulation	Applicability	Additional requirements or clarification
Part 135, Subpart A—General		
(a) Section 135.1(a)(9)	Applies to powered-lift conducting operations in accordance with subpart L to part 135.	
(b) Section 135.23(r)	Applies to powered-lift required to comply with § 135.385 as set forth in paragraphs (hhh) and (iii) of this section.	
Part 135, Subpart B—Flight Operations		
(c) Section 135.93(a) through (f)	Applies to all powered-lift	(1) The requirements referencing an Airplane Flight Manual under § 135.93(b) apply to a powered-lift's Aircraft Flight Manual. (2) Under § 135.93(c), no person operating a powered-lift may use an autopilot enroute, including climb and descent, below the following— (i) Either: (A) At a minimum engagement altitude specified in the Aircraft Flight Manual; or (B) If no minimum engagement altitude is specified, 500 feet, or at an altitude that is no lower than twice the altitude loss specified in the Aircraft Flight Manual for an autopilot malfunction in cruise conditions, whichever is greater; or (ii) Notwithstanding the requirements of paragraphs (c)(2)(i)(A) and (B) of this section, at an altitude specified by the Administrator.
(d) Section 135.117(a)(9)	Applies to powered-lift conducting operations beyond the autorotational distance from the shoreline, as defined in § 135.168(a), or gliding distance of a shoreline.	
(e) Section 135.128(a)	Applies to all powered-lift	The exception under § 135.128(a) for seaplane and float equipped rotorcraft operations during movement on the surface applies to persons pushing off a powered-lift from the dock or persons mooring the powered-lift at the dock.
Part 135, Subpart C—Aircraft and Equipment		
(f) Section 135.145(b)	Applies to all powered-lift unless the certificate holder has previously proven a powered-lift under part 135.	
(g) Section 135.145(d)(1)	Applies to all powered-lift unless a powered-lift of the same make or similar design has been proven or validated by that certificate holder under part 135.	
(h) Section 135.150(a)(7)	Applies to large powered-lift with a passenger seating configuration, excluding any pilot seat, of more than 19.	The public address system required by § 135.150(a)(7) must comply with § 25.1423 of this chapter or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(i) Section 135.150(b)(7)	Applies to large powered-lift with a passenger seating configuration, excluding any pilot seat, of more than 19.	The crewmember interphone system must comply with the requirements of § 135.150(b)(7) or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(j) Section 135.151(a)	Applies to powered-lift with a passenger seating configuration of six or more seats and for which two pilots are required by certification or operating rules.	The cockpit voice recorder must be installed and equipped in accordance with the certification provisions listed in § 135.151(a)(1) or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(k) Section 135.151(b)	Applies to powered-lift with a passenger seating configuration of 20 or more seats.	The cockpit voice recorder must be installed and equipped in accordance with the certification provisions listed in § 135.151(b)(1) or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(l) Section 135.151(d)	Applies to large powered-lift or powered-lift equipped with a cockpit voice recorder.	The cockpit voice recorder required by § 135.151(d) must record the uninterrupted audio signal received by a boom or mask microphone in accordance with § 25.1457(c)(5) of this chapter or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(m) Section 135.151(g)(1)	Applies to powered-lift with a passenger seating configuration of six or more seats, for which two pilots are required by certification or operating rules, and that are required to have a flight data recorder under § 135.152.	The cockpit voice recorder must be installed and equipped in accordance with the appropriate certification provisions listed in § 135.151(g)(1)(i) and (iv) or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(n) Section 135.151(g)(2)	Applies to powered-lift with a passenger seating configuration of 20 or more seats and that is required to have a flight data recorder under § 135.152.	The cockpit voice recorder must be installed and equipped in accordance with the appropriate certification provisions listed in § 135.151(g)(2)(i) and (iv) or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(o) Section 135.151(h)	Applies to powered-lift required to have a cockpit voice recorder and a flight data recorder under part 135 with installed datalink communication equipment.	
(p) Section 135.152(a)	Paragraph (a) of § 135.152 applies to powered-lift with a passenger seating configuration of 10 to 19 seats.	Powered-lift operators must comply with § 194.312 or § 194.313 in lieu of the appendices referenced in § 135.152.

TABLE 1 TO § 194.306—Continued

Regulation	Applicability	Additional requirements or clarification
(q) Section 135.152(b) introductory text and (b)(3).	Paragraphs (b) introductory text and (b)(3) of § 135.152 apply to powered-lift with a passenger seating configuration of 20 to 30 seats.	
(r) Section 135.152(c), (d), (f), and (j).	Applies to powered-lift with a passenger seating configuration, excluding crewmember seats, of 10 to 30.	(1) The flight recorder must be installed and equipped in accordance with the appropriate certification provisions listed in § 135.152 or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter. (2) Certificate holders must keep the recorded data until the powered-lift has been operating for at least 25 hours. (3) The powered-lift flight recorder must be operated continuously from the instant the powered-lift begins the takeoff roll or lift-off until the landing is completed.
(s) Section 135.154(a) and (c) ..	Applies to powered-lift configured with 6 or more passenger seats, excluding any pilot seat.	Instead of TAWS, powered-lift must be equipped with a helicopter terrain awareness and warning system (HTAWS) that meets the requirements in Technical Standard Order (TSO)–C194 and Section 2 of RTCA DO–309 (incorporated by reference, see § 194.109) or a FAA-approved TAWS A/HTAWS hybrid system.
(t) Section 135.158	Applies to powered-lift equipped with a flight instrument pitot heating system.	Under § 135.158(a), no person may operate a powered-lift equipped with a flight instrument pitot heating system unless the aircraft is also equipped with an operable pitot heat indication system that complies with § 23.2605 of this chapter, or § 25.1326 of this chapter, or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) that provides an alert that is in clear view of a flightcrew member.
(u) Section 135.159(a)(1)	Applies to powered-lift with a third attitude instrument system that meets the requirements of paragraph (a)(1) of § 135.159.	
(v) Section 135.160	Applies to all powered-lift.	
(w) Section 135.163(g)	Applies to all powered-lift	The two required generators may be mounted on a drivetrain that is driven by two separate powerplants as outlined in § 135.163(g) for multi-engine helicopters.
(x) Section 135.165(d)	Applies to powered-lift having a passenger seat configuration, excluding any pilot seat, of 10 seats or more, or a powered-lift in a commuter operation, as defined in part 119 of this chapter.	
(y) Section 135.165(g)(1)	Applies to powered-lift for purposes of approving a single long-range navigation system and a single long-range communication system for extended over-water operations.	
(z) Section 135.168	Applies to powered-lift operating beyond autorotational distance or gliding distance from the shoreline.	(1) The life preserver required by § 135.168(b)(1) need not be worn but must be readily available for its intended use and easily accessible to each occupant when the powered-lift is a multiengine aircraft operated at a weight that will allow it to climb, with the critical engine inoperative or while experiencing a critical change of thrust, at least 50 feet a minute, at an altitude of 1,000 feet above the surface. (2) For powered-lift unable to meet the requirements of paragraph (z)(1) of this section, the occupants must wear life preservers during the flight. (3) For purposes of paragraphs (z), (ii), (jj), and (kk) of this section, <i>critical change of thrust</i> means a failure that would most adversely affect the performance or handling qualities of an aircraft.
(aa) Section 135.169(a)	Applies to large powered-lift	Powered-lift must comply with appropriate certification provisions listed in § 135.169(a) or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(bb) Section 135.169(b)(1) and (b)(8).	Applies to small powered-lift with a passenger seating configuration, excluding pilot seats, of 10 seats or more.	(1) Under § 135.169(b)(1), small powered-lift with a passenger seating configuration of 10 seats or more must comply with the applicable requirements for transport category powered-lift or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter. (2) Under § 135.169(b)(8), small powered-lift with a passenger seating configuration of 10 seats or more must comply with the applicable requirements under part 23 of this chapter referenced in § 135.169(b)(8) or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(cc) Section 135.169(d)	Applies to large powered-lift with a cargo or baggage compartment of 200 cubic feet or greater.	The cargo and baggage compartments required by § 135.169(d) must comply with the certification provisions listed in that paragraph or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(dd) Section 135.170(b)(1)	Applies to large powered-lift; paragraph (b)(1)(ii) of § 135.170 applies to large powered-lift with a passenger capacity of 20 or more.	Powered-lift must comply with appropriate certification provisions listed in § 135.170(b)(1) or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.

TABLE 1 TO § 194.306—Continued

Regulation	Applicability	Additional requirements or clarification
(ee) Section 135.170(b)(2)	Applies to large powered-lift	The seat cushions required by § 135.170(b)(2) must comply with § 25.853 of this chapter or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(ff) Section 135.170(c)(2)	Applies to large powered-lift	The seat cushions required by § 135.170(c)(2) must comply with § 25.856 of this chapter or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(gg) Section 135.178	Applies to powered-lift having a passenger-seating configuration of more than 19 seats.	The additional emergency equipment must comply with appropriate certification provisions listed in § 135.178 or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(hh) Section 135.180	Applies to powered-lift with a passenger seat configuration, excluding any pilot seat, of 10 to 30 seats.	The Aircraft Flight Manual must contain the information outlined in § 135.180(b).
(ii) Section 135.181(a)(2)	Applies to powered-lift	No person may operate a multiengine powered-lift carrying passengers over-the-top or in IFR conditions at a weight that will not allow it to climb, with the critical engine inoperative or while experiencing a critical change of thrust as defined in paragraph (z) of this section, at least 50 feet a minute when operating at the MEAs of the route to be flown or 5,000 feet MSL, whichever is higher.
(jj) Section 135.181(b)	Applies to powered-lift conducting offshore passenger operations.	Multiengine powered-lift carrying passengers offshore may conduct such operations in over-the-top or in IFR conditions at a weight that will allow the powered-lift to climb at least 50 feet per minute with the critical engine inoperative or while experiencing a critical change of thrust as defined in paragraph (z) of this section, when operating at the MEA of the route to be flown or 1,500 feet MSL, whichever is higher.
(kk) Section 135.183(c)	Applies to powered-lift	No person may operate a land aircraft carrying passengers over water unless it is a multiengine aircraft operated at a weight that will allow it to climb, with the critical engine inoperative or while experiencing a critical change of thrust as defined in paragraph (z) of this section, at least 50 feet a minute, at an altitude of 1,000 feet above the surface.
(ll) Section 135.183(d)	Applies if the powered-lift is equipped with flotation devices and carrying passengers over water.	
Part 135, Subpart D—VFR/IFR Operating Limitations and Weather Requirements		
(mm) Section 135.203(a)	Applies to powered-lift except those operating in the vertical-lift flight mode under paragraph (nn) of this section.	The Administrator may authorize a lower minimum altitude for a powered-lift if the FAA has determined, during type certification, the lower minimum altitude enables a transition from wing-borne to vertical-lift flight mode and the aircraft can conduct a safe autorotation, or an approved equivalent maneuver, to a landing but no lower than 300 feet above the surface.
(nn) Section 135.203(b)	Applies to powered-lift operating in vertical-lift flight mode that are certificated and able to conduct an autorotation or an approved equivalent maneuver to a landing.	Powered-lift that do not meet the requirements of this paragraph (nn) must use the VFR minimum altitudes outlined in paragraph (mm) of this section.
(oo) Section 135.205(a)	Applies to all powered-lift except as provided in paragraph (pp) of this section.	
(pp) Section 135.205(b)	Applies to powered-lift operating in vertical-lift flight mode and at a speed that allows the pilot adequate opportunity to see and avoid any other air traffic or any obstructions in time to avoid a collision.	Powered-lift that do not meet the requirements of this paragraph (pp) must use the VFR visibility requirements outlined in § 135.205(a).
(qq) Section 135.207	Applies if the powered-lift does not have the flight instrumentation listed in § 135.159 installed and operable.	
(rr) Section 135.209(a)	Applies to all powered-lift except as provided in paragraph (ss) of this section.	(1) The Administrator may authorize deviations from paragraph (a) of § 135.209 for specific routes with one or more predetermined suitable landing areas if the FAA finds the operation can be conducted safely. If the Administrator authorizes such a deviation, an operations specification will be issued to the operator containing, at a minimum, the specific routes and the VFR fuel reserve specified in minutes. The Administrator may, at any time, terminate any grant of deviation authority issued under this paragraph. (2) <i>Suitable landing area</i> for purposes of this paragraph (rr) and paragraph (ss) of this section means an area that provides the operator reasonable capability to land without causing undue hazard to persons or property. These suitable landing areas must be site specific, designated by the operator, and accepted by the FAA.
(ss) Section 135.209(b)	Applies to powered-lift with the performance capability, as provided in the Aircraft Flight Manual, for the entire flight to conduct a landing in the vertical-lift flight mode.	The Administrator may authorize deviations from paragraph (b) of § 135.209 for specific routes with one or more predetermined suitable landing areas if the FAA finds the operation can be conducted safely. If the Administrator authorizes such a deviation, an operations specification will be issued to the operator containing, at a minimum, the specific routes and the VFR fuel reserve specified in minutes. The Administrator may, at any time, terminate any grant of deviation authority issued under this paragraph.

TABLE 1 TO § 194.306—Continued

Regulation	Applicability	Additional requirements or clarification
(tt) Section 135.221(b)	Applies to powered-lift authorized to conduct copter procedures and which can land in the vertical-lift flight mode, as provided in the Aircraft Flight Manual.	Powered-lift that do not meet these criteria must use the alternate airport minimums specified for aircraft in § 135.221(a).
(uu) Section 135.223(a)(3)	Applies to powered-lift authorized to conduct copter procedures and that have the performance capability, as provided in the Aircraft Flight Manual, to conduct a landing in the vertical-lift flight mode for the entire flight.	(1) A powered-lift that meets the requirements of paragraph (uu) of this section may use the 30-minute fuel requirements specified for helicopters in § 135.223(a)(3). (2) Powered-lift that are unable to meet the requirements outlined in paragraph (uu) of this section must use the 45-minute fuel requirement outlined in § 135.223(a)(3).
(vv) Section 135.225(e)	Applies to all powered-lift.	(1) Powered-lift critical surfaces, as outlined in the aircraft flight manual for that aircraft, must also be determined to be free of frost, ice, or snow. (2) Powered-lift critical surfaces under this section are determined by the manufacturer.
(ww) Section 135.227(b)	Applies to all powered-lift	
(xx) Section 135.227(d)	Applies to powered-lift that are type certificated and appropriately equipped for operations in icing conditions.	If a powered-lift is not taking off or landing in vertical-lift flight mode and is not equipped with landing lights oriented in a direction that enables the pilot to see the area to be used for landing or takeoff marked by reflective material, the powered-lift must take off or land at an airport with boundary or runway marker lights.
(yy) Section 135.229(b)(2)(ii)	Applies to powered-lift taking off or landing in vertical-lift flight mode and equipped with landing lights oriented in a direction that enables the pilot to see the area to be used for landing or takeoff marked by reflective material.	
Part 135, Subpart F—Crewmember Flight Time and Duty Period Limitations and Rest Requirements		
(zz) Section 135.271	Applies to powered-lift conducting operations in accordance with subpart L to part 135.	
Part 135, Subpart I—Airplane Performance Operating Limitations		
(aaa) Section 135.361(a)	As applicable to each powered-lift considering size and certification basis and subject to any limitations outlined in this SFAR.	Any sections or paragraphs within sections to subpart I to part 135 that refer to a specific category of aircraft and that are not referenced in the SFAR tables to § 194.302 or this section, do not apply to powered-lift.
(bbb) Section 135.363(b) through (e).	As applicable to each powered-lift, regardless of power plant type, considering size and certification basis.	
(ccc) Section 135.363(f)	Applies to powered-lift that must comply with §§ 135.365 through 135.387 as set forth in paragraphs (ddd) through (jjj) of this section.	The Aircraft Flight Manual must contain the takeoff weight performance information. The accelerate-stop distance required by § 135.379(c)(1) must comply with § 25.109 of this chapter or such airworthiness criteria as the FAA may find provide an equivalent level of safety in accordance with § 21.17(b) of this chapter.
(ddd) Section 135.379(a) and (d).	Applies to large powered-lift	
(eee) Section 135.379(c), (e), (f), and (g).	Applies to large powered-lift certificated to conduct takeoff operations that utilize wing-borne lift as indicated in the aircraft flight manual.	The Aircraft Flight Manual must contain the landing weight performance information. Paragraph (f) of § 135.385 only applies to eligible on-demand operators.
(fff) Section 135.381	Applies to large powered-lift.	
(ggg) Section 135.383(c)	Applies to large powered-lift.	(1) Powered-lift operating under § 135.387(a) must be able to complete a full stop landing within 60 percent of the effective length of the runway. (2) Paragraph (b) of § 135.387 only applies to eligible on-demand operators.
(hhh) Section 135.385(a)	Applies to large powered-lift	
(iii) Section 135.385(b), (d), (e), and (f).	Applies to large powered-lift certificated to conduct landing operations that utilize wing-borne lift and that have landing performance information contained in the aircraft flight manual.	The Aircraft Flight Manual must contain the takeoff and landing weight performance information.
(jjj) Section 135.387(a) and (b)	Applies to large powered-lift certificated to conduct landing operations that utilize wing-borne lift and that have landing performance information contained in the aircraft flight manual.	
(kkk) Section 135.397(b)	Applies to small powered-lift having a passenger-seating configuration of more than 19 seats and that utilize wing-borne lift during takeoff and landing.	
Part 135, Subpart J—Maintenance, Preventive Maintenance, and Alterations		
(lll) Section 135.429(d)	Applies to powered-lift that operate in remote areas or sites.	
Part 135, Subpart L—Helicopter Air Ambulance Equipment, Operations, and Training Requirements		
(mmm) Section 135.601	Applies to powered-lift conducting operations in accordance with subpart L to part 135.	(1) Under § 135.603, no certificate holder may use, nor may any person serve as, a pilot in command of an air ambulance operation unless that person meets the requirements of § 135.243 and holds a powered-lift instrument rating or an airline transport pilot certificate with a category rating for that aircraft, that is not limited to VFR. (2) See § 194.249 for references to class in part 135.
(nnn) Section 135.603	Applies to powered-lift conducting operations in accordance with subpart L to part 135.	

TABLE 1 TO § 194.306—Continued

Regulation	Applicability	Additional requirements or clarification
(ooo) Section 135.605	Applies to powered-lift conducting operations in accordance with subpart L to part 135.	Powered-lift must be equipped with a helicopter terrain awareness and warning system (HTAWS) that meets the requirements in Technical Standard Order (TSO)—C194 and Section 2 of RTCA DO-309 (incorporated by reference, see § 194.109) or a FAA-approved TAWS A/HTAWS hybrid system. (1) For nonmountainous local flying areas, powered-lift must comply with the following weather minimums: (i) During day operations in a vertical-lift or wing-borne flight mode, a ceiling of 800 feet and visibility of 2 SM; (ii) During night operations in a vertical-lift flight mode, a ceiling of 800 feet and visibility of 3 SM; and (iii) During night operations in a wing-borne flight mode, a ceiling of 1500 feet and visibility of 3 SM. (2) For nonmountainous, non-local flying areas, powered-lift must comply with the following weather minimums: (i) During day operations in a vertical-lift or wing-borne flight mode, a ceiling of 800 feet and visibility of 3 SM; (ii) During night operations in a vertical-lift flight mode, a ceiling of 1000 feet and visibility of 3 SM. (iii) During night operations in a wing-borne flight mode, a ceiling of 1500 feet and visibility of 3 SM. (3) For mountainous local flying areas, powered-lift must comply with the following weather minimums: (i) During day operations in a vertical-lift or wing-borne flight mode, a ceiling of 800 feet and visibility of 3 SM; (ii) During night operations in a vertical-lift flight mode, a ceiling of 1000 feet and visibility of 3 SM. (iii) During night operations in a wing-borne flight mode, a ceiling of 2500 feet and visibility of 3 SM. (4) For mountainous non-local flying areas, powered-lift must comply with the following weather minimums: (i) During day operations in a vertical-lift or wing-borne flight mode, a ceiling of 1000 feet and visibility of 3 SM; and (ii) During night operations in a vertical-lift flight mode, a ceiling of 1000 feet and visibility of 5 SM; (iii) During night operations in a wing-borne flight mode, a ceiling of 2500 feet and visibility of 5 SM.
(ppp) Section 135.607	Applies to powered-lift conducting operations in accordance with subpart L to part 135.	
(qqq) Section 135.609	Applies to powered-lift conducting operations in accordance with subpart L to part 135.	
(rrr) Section 135.611	Applies to powered-lift conducting operations in accordance with subpart L to part 135.	(1) Section 135.613(a)(1) only applies to powered-lift equipped and certified to conduct PinS approaches annotated with a “Proceed VFR” segment. (2) The applicable VFR weather minimums under § 135.613(a)(2) for powered-lift operating in the wing-borne flight mode are: (i) For Day Operations: No less than a 1000-foot ceiling and 2 statute miles flight visibility; and (ii) For Night Operations: No less than a 1500-foot ceiling and 3 statute miles flight visibility. (3) The applicable VFR weather minimums under § 135.613(a)(2) for powered-lift operating in the vertical-lift mode are: (i) For Day Operations: No less than a 600-foot ceiling and 2 statute miles flight visibility; and (ii) For Night Operations: No less than a 600-foot ceiling and 3 statute miles flight visibility.
(sss) Section 135.613(a)	Applies to powered-lift conducting operations in accordance with subpart L to part 135.	
(ttt) Section 135.613(b)	Applies to powered-lift conducting operations in accordance with subpart L to part 135.	(1) Under § 135.613(b)(1), for transitions from VFR to IFR upon departure, the VFR weather minimums outlined for powered-lift under paragraph (sss) of this section apply if: (i) An FAA-approved obstacle departure procedure is followed; and (ii) An IFR clearance is obtained on or before reaching a pre-determined location that is not more than 3 NM from the departure location. (2) Under § 135.613(b)(2), if the departure does not meet the requirements of paragraph (ttt)(1) of this section, the VFR weather minimums required by the SFAR for the class of airspace apply.

TABLE 1 TO § 194.306—Continued

Regulation	Applicability	Additional requirements or clarification
(uuu) Section 135.615	Applies to powered-lift conducting operations in accordance with subpart L to part 135.	(1) For powered-lift operating in wing-borne flight mode during the enroute phase of flight, under § 135.615(a)(3), (b), and (c), the following minimums apply: (i) For day operations: no less than 500 feet above the surface or no less than 500 feet horizontally from any obstacle; or (ii) For night operations: at an altitude no less than 1,000 feet above the highest obstacle within a horizontal distance of 5 miles from the course intended to be flown or, in designated mountainous terrain, no less than 2,000 feet above the highest obstacle within a horizontal distance of 5 miles from the course intended to be flown. (2) For powered-lift operating in vertical-lift flight mode during the enroute phase of flight, under § 135.615(a)(3), (b), and (c) the following minimums apply: (i) No less than 300 feet for day operations. (ii) No less than 500 feet for night operations.
(vvv) Section 135.617	Applies to powered-lift conducting operations in accordance with subpart L to part 135.	
(www) Section 135.619	Applies to powered-lift operators with 10 or more powered-lift, helicopters, or any combination thereof, assigned to the certificate holder's operations specifications for air ambulance operations.	
(xxx) Section 135.621	Applies to powered-lift conducting operations in accordance with subpart L to part 135.	

§ 194.307 Applicability of rules for eligible on-demand operations.

No person may operate a powered-lift in an eligible on-demand operation under part 135 of this chapter without complying with the requirements specified for the second in command of a fixed-wing aircraft contained in § 135.4(a)(3) of this chapter.

§ 194.308 Applicability of national air tour safety standards under part 136 of this chapter to powered-lift.

(a) Persons operating powered-lift in commercial air tours must continue to comply with rules applicable to all aircraft in part 136 of this chapter, as applicable to the operation.

(b) Suitable landing area, as defined in § 136.1 of this chapter, applies to powered-lift conducting commercial air tours.

(c) Critical change of thrust for purposes of this section means a failure

that would most adversely affect the performance or handling qualities of an aircraft.

(d) No person may operate a powered-lift in a commercial air tour unless that person complies with the regulations listed in the first column of table 1 to this section, notwithstanding their applicability to airplanes or rotorcraft, subject to the applicability provisions in the second column, and any additional requirements or clarification specified in the third column:

TABLE 1 TO § 194.308

Regulation	Applicability	Additional Requirements or Clarification
Part 136, Subpart A National Air Tour Safety Standards		
(1) Section 136.9	Applies to powered-lift used in commercial air tours over water beyond the shoreline.	(i) Section 136.9(b)(2) applies to powered-lift operating in wing-borne flight mode within power-off gliding distance to the shoreline for the duration of the time that the flight is over water. (ii) Section 136.9(b)(3), applies to multiengine powered-lift that can be operated with the critical engine inoperative or while experiencing a critical change of thrust, at a weight that will allow it to climb, at least 50 feet a minute, at an altitude of 1,000 feet above the surface, as provided in the approved aircraft flight manual for that aircraft.
(2) Section 136.11	Applies to powered-lift used in commercial air tours over water beyond the shoreline.	(i) Section 136.11(a)(1) applies to single-engine powered-lift. (ii) Section 136.11(a)(2) applies to multi-engine powered-lift that cannot be operated with the critical engine inoperative or while experiencing a critical change of thrust, at a weight that will allow it to climb, at least 50 feet a minute, at an altitude of 1,000 feet above the surface, as provided in the approved aircraft flight manual for that aircraft.
(3) Section 136.13	Applies to powered-lift.	
(4) Section 136.75(a)	Applies to all single-engine powered-lift conducting air tours in Hawaii beyond the shore of any island.	
(5) Section 136.75(b)	Applies to powered-lift.	
(6) Section 136.75(c)	Applies to powered-lift with an Aircraft Flight Manual containing height velocity information.	Except for approach to and transition from a hover, and except for the purpose of takeoff and landing, the PIC of a powered-lift may only operate such aircraft at a combination of height and forward speed (including hover) that would permit a safe landing in the event of engine power loss or critical change of thrust, in accordance with the height-speed envelope for that powered-lift under current weight and aircraft altitude.

§ 194.309 Applicability of flight instruction; Simulated instrument flight.

The requirement to hold the appropriate category and class rating in § 91.109(c)(1)(i) of this chapter is not

applicable to operations conducted to meet alternate aeronautical experience requirements set forth in §§ 194.225, 194.227, and 194.229.

§ 194.310 Powered-lift in vertical-lift flight mode, flight recorder specifications under part 91 of this chapter.

TABLE 1 TO § 194.310

Parameters	Range	Installed system ¹ minimum accuracy (to recovered data)	Sampling interval (per second)	Resolution 3 read out
Relative Time (From Recorded on Prior to Takeoff).	4 hr minimum	±0.125% per hour	1	1 sec.
Indicated Airspeed	VM in to VD (KIAS) (minimum airspeed signal attainable with installed pilot-static system).	±5% or ±10 kts., whichever is greater.	1	1 kt.
Altitude	– 1,000 ft. to 20,000 ft. pressure altitude.	±100 to ±700 ft. (see Table 1, TSO C51–a).	1	25 to 150 ft.
Magnetic Heading	360°	±5°	1	1°
Vertical Acceleration	– 3g to + 6g	±0.2g in addition to ±0.3g maximum datum.	4 (or 1 per second where peaks, ref. to 1g are recorded).	0.05g.
Longitudinal Acceleration	±1.0g	±1.5% max. range excluding datum error of ±5%.	2	0.03g.
Pitch Attitude	100% of usable range	±2°	1	0.8°.
Roll Attitude	±60 or 100% of usable range, whichever is greater.	±2°	1	0.8°.
Altitude Rate	±8,000 fpm	±10% Resolution 250 fpm below 12,000 ft. indicated.	1	250 fpm below 12,000.
<i>Engine Power, Each Engine:</i>				
Main Rotor Speed	Maximum Range	±5%	1	1%. ²
Free or Power Turbine	Maximum Range	±5%	1	1%. ²
Engine Torque	Maximum Range	±5%	1	1%. ²
<i>Flight Control Hydraulic Pressure:</i>				
Primary (Discrete)	High/Low .....	.....	1.	
Secondary—if applicable (Discrete)	High/Low .....	.....	1.	
Radio Transmitter Keying (Discrete)	On/Off .....	.....	1.	
Autopilot Engaged (Discrete)	Engaged or Disengaged .....	.....	1.	
SAS Status-Engaged (Discrete)	Engaged or Disengaged .....	.....	1.	
SAS Fault Status (Discrete)	Fault/OK .....	.....	1.	
<i>Flight Controls:</i>				
Pilot Inputted—Primary Controls (I.E. Ascent, descent, acceleration, and deceleration, heading and directional control for all axis).	Full range	±3%	2	1%. ²
Controllable Stabilator Position	Full range	±3%	2	1%. ²

¹ When data sources are aircraft instruments (except altimeters) of acceptable quality to fly the aircraft the recording system excluding these sensors (but including all other characteristics of the recording system) shall contribute no more than half of the values in this column.

² Percent of full range.

§ 194.311 Powered-lift in wing-borne flight mode, flight recorder specifications under part 91 of this chapter.

TABLE 1 TO § 194.311

Parameters	Range	Installed system ¹ minimum accuracy (to recovered data)	Sampling interval (per second)	Resolution read out
Relative Time (From Recorded on Prior to Takeoff).	8 hr minimum	±0.125% per hour	1	1 sec.
Indicated Airspeed	Vso to VD (KIAS)	±5% or ±10 kts., whichever is greater. Resolution 2 kts. below 175 KIAS.	1	1%. ³
Altitude	– 1,000 ft. to max cert. alt. of A/C.	±100 to ±700 ft. (see Table 1, TSO C51–a).	1	25 to 150 ft.
Magnetic Heading	360°	±5°	1	1°.
Vertical Acceleration	– 3g to + 6g	±0.2g in addition to ±0.3g maximum datum.	4 (or 1 per second where peaks, ref. to 1g are recorded).	0.03g.
Longitudinal Acceleration	±1.0g	±1.5% max. range excluding datum error of ±5%.	2	0.01g.
Pitch Attitude	100% of usable	±2°	1	0.8°.
Roll Attitude	±60° or 100% of usable range, whichever is greater.	±2°	1	0.8°.
Stabilizer Trim Position, or	Full Range	±3% unless higher uniquely required.	1	1%. ³
Pitch Control Position				

TABLE 1 TO § 194.311—Continued

Parameters	Range	Installed system ¹ minimum accuracy (to recovered data)	Sampling interval (per second)	Resolution read out
Engine Power, Each Engine:	Full Range	±3% unless higher uniquely required.	1	1%. ³
Fan or N ¹ Speed or EPR or Cockpit indications Used for Aircraft Certification OR.	Maximum Range	±5%	1	1%. ³
Prop. speed and Torque (Sample Once/ Sec as Close together as Practicable).	.....	.....	1 (prop Speed)	1%. ³
Altitude Rate ² (need depends on altitude resolution).	±8,000 fpm	±10%. Resolution 250 fpm below 12,000 ft. indicated..	1	1%. ³
Angle of Attack ² (need depends on altitude resolution).	–20° to 40° or 100% of usable range.	±2°	1	250 fpm. below 12,000.
Radio Transmitter Keying (Discrete)	On/Off .....	.....	1.	0.8%. ³
TE Flaps (Discrete or Analog)	Each discrete position (U, D, T/O, AAP) OR.	.....	1.	.....
LE Flaps (Discrete or Analog)	Analog 0–100% range	±3%	1	1%. ³
Thrust Reverser, Each Engine (Discrete)	Each discrete position (U, D, T/O, AAP) OR.	.....	1.	.....
Spoiler/Speedbrake (Discrete)	Analog 0–100% range	±3°	1	1%. ³
Autopilot Engaged (Discrete)	Stowed or full reverse.	.....	1.	.....
.....	Stowed or out .....	.....	1.	.....
.....	Engaged or Disengaged .....	.....	1.	.....

¹ When data sources are aircraft instruments (except altimeters) of acceptable quality to fly the aircraft the recording system excluding these sensors (but including all other characteristics of the recording system) shall contribute no more than half of the values in this column.

² If data from the altitude encoding altimeter (100 ft. resolution) is used, then either one of these parameters should also be recorded. If, however, altitude is recorded at a minimum resolution of 25 feet, then these two parameters can be omitted.

³ Percent of full range.

§ 194.312 Powered-lift in vertical-lift flight mode, flight recorder specifications under part 135 of this chapter.

TABLE 1 TO § 194.312

Parameters	Range	Installed system ¹ minimum accuracy (to recovered data)	Sampling interval (per second)	Resolution read out
Relative time (from recorded on prior to take-off).	25 hr minimum	±0.125% per hour	1	1 sec.
Indicated airspeed	V _m in to V _D (KIAS) (minimum airspeed signal attainable with installed pilot-static system).	±5% or ±10 kts., whichever is greater.	1	1 kt.
Altitude	–1,000 ft. to 20,000 ft. pressure altitude.	±100 to ±700 ft. (see Table 1, TSO C51–a).	1	25 to 150 ft.
Magnetic heading	360°	±5°	1	1°.
Vertical acceleration	–3g to +6g	±0.2g in addition to ±0.3g maximum datum.	4 (or 1 per second where peaks, ref. to 1g are recorded).	0.05g.
Longitudinal acceleration	±1.0g	±1.5% max. range excluding datum error of ±5%.	2	0.03g.
Pitch attitude	100% of usable range	±2°	1	0.8°.
Roll attitude	±60° or 100% of usable range, whichever is greater.	±2°	1	0.8°.
Altitude rate	±8,000 fpm	±10% Resolution 250 fpm below 12,000 ft. indicated.	1	250 fpm below 12,000.
Engine Power, Each Engine:				
Main rotor speed	Maximum range	±5%	1	1%. ²
Free or power turbine	Maximum range	+ 5%	1	1%. ²
Engine torque	Maximum range	±5%	1	1%. ²
Flight Control—Hydraulic Pressure:				
Primary (discrete)	High/low .....	.....	1.	.....
Secondary—if applicable (discrete)	High/low .....	.....	1.	.....
Radio transmitter keying (discrete)	On/off .....	.....	1.	.....
Autopilot engaged (discrete)	Engaged or disengaged .....	.....	1.	.....
SAS status—engaged (discrete)	Engaged/disengaged .....	.....	1.	.....
SAS fault status (discrete)	Fault/OK .....	.....	1.	.....
Flight Controls:				
Primary Controls (I.E. Ascent, descent, acceleration, and deceleration, heading and directional control for all axis) ³ .	Full range	±3%	2	1%. ²
Controllable Stabilator Position ³	Full range	±3%	2	1%. ²

¹ When data sources are aircraft instruments (except altimeters) of acceptable quality to fly the aircraft the recording system excluding these sensors (but including all other characteristics of the recording system) shall contribute no more than half of the values in this column.

² Percent of full range.

³ For all aircraft manufactured on or after December 6, 2010, the sampling interval per second is 4.

§ 194.313 Powered-lift in wing-borne flight mode, flight recorder specification under part 135 of this chapter.

TABLE 1 TO § 194.313

Parameters	Range	Installed system ¹ minimum accuracy (to recovered data)	Sampling interval (per second)	Resolution read out
Relative time (from recorded on prior to take-off).	25 hr minimum	±0.125% per hour	1	1 sec.
Indicated airspeed	V _{so} to V _D (KIAS)	±5% or ±10 kts., whichever is greater. Resolution 2 kts. below 175 KIAS.	1	1%. ³
Altitude	– 1,000 ft. to max cert. alt. of A/C.	±100 to ±700 ft. (see Table 1, TSO C51–a).	1	25 to 150
Magnetic heading	360°	±5°	1	1°
Vertical acceleration	– 3g to + 6g	±0.2g in addition to ±0.3g maximum datum.	4 (or 1 per second where peaks, ref. to 1g are recorded).	0.03g.
Longitudinal acceleration	±1.0g	±1.5% max. range excluding datum error of ±5%.	2	0.01g.
Pitch attitude	100% of usable	±2°	1	0.8°
Roll attitude	±60° or 100% of usable range, whichever is greater.	±2°	1	0.8°
Stabilizer trim position	Full range	±3% unless higher uniquely required.	1	1%. ³
Or Pitch control position	Full range	±3% unless higher uniquely required.	1	1%. ³
<i>Engine Power, Each Engine</i> Fan or N ₁ speed or EPR or cockpit indications used for aircraft certification.	Maximum range	±5%	1	1%. ³
Or Prop. speed and torque (sample once/sec as close together as practicable).	.....	.....	1 (prop speed), 1 (torque).	.....
Altitude rate ² (need depends on altitude resolution).	±8,000 fpm	±10%. Resolution 250 fpm below 12,000 ft. indicated.	1	250 fpm Below 12,000
Angle of attack ² (need depends on altitude resolution).	– 20° to 40° or of usable range.	±2°	1	0.8%. ³
Radio transmitter keying (discrete)	On/off .....	.....	1.	.....
TE flaps (discrete or analog)	Each discrete position (U, D, T/O, AAP). Or. Analog 0–100% range	 ±3°	1. 1. 1	 1%. ³
LE flaps (discrete or analog)	Each discrete position (U, D, T/O, AAP). Or. Analog 0–100% range	 ±3°	1. 1. 1	 1%. ³
Thrust reverser, each engine (Discrete) ...	Stowed or full reverse .....	.....	1.	.....
Spoiler/speedbrake (discrete)	Stowed or out .....	.....	1.	.....
Autopilot engaged (discrete)	Engaged or disengaged .....	.....	1.	.....

¹ When data sources are aircraft instruments (except altimeters) of acceptable quality to fly the aircraft the recording system excluding these sensors (but including all other characteristics of the recording system) shall contribute no more than half of the values in this column.

² If data from the altitude encoding altimeter (100 ft. resolution) is used, then either one of these parameters should also be recorded. If, however, altitude is recorded at a minimum resolution of 25 feet, then these two parameters can be omitted.

³ Percent of full range.

Subpart D—Maintenance, Preventive Maintenance, Rebuilding, and Alteration Requirements for Powered-Lift Under Part 43 of This Chapter

§ 194.401 Applicability.

Unless otherwise specified by this part, powered-lift must continue to comply with rules applicable to all aircraft in part 43 of this chapter.

§ 194.402 Maintenance provisions.

The following maintenance provisions under part 43 of this chapter that pertain to rotorcraft also apply to powered-lift:

(a) Section 43.3(h) of this chapter applies to certificate holders operating powered-lift under part 135 of this chapter in a remote area; and

(b) In lieu of complying with § 43.15(b) of this chapter, each person performing an inspection required by part 91 of this chapter on a powered-lift shall inspect critical parts in accordance with the maintenance manual or Instruction for Continuous Airworthiness, or as otherwise approved by the Administrator.

(1) A “critical part” has the same meaning as provided in §§ 27.602 and 29.602 of this chapter.

(2) [Reserved]

Appendix A to Part 194. Minimum Requirements for a Pilot Training Program in a Powered-Lift Originally Type Certificated or Seeking Type Certification With One Set of Controls and a Single Pilot Station

1. Applicability

(a) This appendix prescribes the minimum requirements to apply for a pilot training program for the following ratings in a powered-lift originally type certificated or seeking type certification with one set of controls and a single pilot station:

- (1) Powered-lift Category;
- (2) Powered-lift Type;
- (3) Instrument-Powered-lift.

(b) Notwithstanding the exceptions in § 194.211, a person utilizing the alternate pathway set forth in this appendix must apply for all three ratings simultaneously.

2. Eligibility

(a) To utilize the alternate framework set forth by this appendix, an applicant must be qualified in accordance with the requirements set forth by § 194.215(a).

(b) The alternate framework set forth in this appendix may only be provided under a part 135, 141, or 142 approved training program.

3. Ground Training

(a) An applicant must receive and log all required ground training set forth by §§ 61.63(b) and 61.65(b) of this chapter prior to receiving training in accordance with section 4. of this appendix.

(b) Following the required ground training as set forth in paragraph (a) of this section, an applicant must successfully complete a written or oral check administered by the training provider.

4. Simulator Training in a Level C or Higher Full Flight Simulator Representative of a Powered-Lift With Single Controls and a Single Pilot Station

(a) In lieu of flight training in a powered-lift with single controls and a single pilot station, an applicant seeking a powered-lift category rating, instrument rating, and a type rating may complete all applicable flight training requirements prescribed in part 61 of this chapter or the corresponding framework prescribed in §§ 194.217 through 194.235 (except for the cross-country requirements in § 194.233), as applicable, in a qualified Level C or higher full flight simulator representative of the powered-lift type with single controls and a single pilot station.

(b) Following the training set forth in paragraph (a) of this section, the applicant must satisfactorily accomplish a check with a check pilot, a training center evaluator, an authorized instructor, instructor pilot, an FAA aviation safety inspector, or another person authorized by the FAA to administer this check in a qualified Level C or higher full flight simulator in accordance with the approved training program. The check must consist of oral questioning followed by the satisfactory performance of all the maneuvers and procedures required for the issuance of a commercial pilot certificate with a powered-lift category rating, for the issuance of an instrument-powered-lift rating and for the issuance of a powered-lift type rating, except those tasks waived in accordance with § 194.207(c).

5. Aircraft Familiarity Flight

(a) Within 90 days of an applicant's successful completion of the check set forth by section 4.(b) of this appendix, the applicant must observe an aircraft familiarity flight with an authorized instructor.

(b) The aircraft familiarity flight must include the following components:

(1) The authorized instructor must demonstrate the flight maneuvers and procedures required for the issuance of a commercial pilot certificate with a powered-lift category rating, for the issuance of an instrument-powered-lift rating and for the issuance of a powered-lift type rating, except those tasks waived in accordance with § 194.207(c), in the aircraft in flight, and

(2) The applicant must have unobstructed visual sight of the controls and instrumentation and maintain active communication with the authorized instructor for the entire flight.

(c) The aircraft familiarity flight may occur during one flight or over multiple flights.

(d) Following successful completion of the aircraft familiarity flight, the authorized instructor may endorse the applicant to act as pilot in command of the specific powered-lift to accomplish the demonstration flight with an authorized instructor on board as set forth in section 6.(a) of this appendix. The endorsement is valid for 90 days from the date of successful completion of the full flight simulator check set forth by section 4.(b) of this appendix.

6. Demonstration and Solo Flights

(a) *Demonstration flight.*

(1) After an applicant receives an endorsement to act as PIC in accordance with section 5.(d) of this appendix, the applicant must complete a demonstration flight under the direct observation of an authorized instructor.

(2) The demonstration flight must include the following components:

(i) The applicant must demonstrate the flight maneuvers and procedures required for the issuance of a commercial pilot certificate with a powered-lift category rating, for the issuance of an instrument-powered-lift rating and for the issuance of a powered-lift type rating, except those tasks waived in accordance with § 194.207(c), in the aircraft in flight, and

(ii) The authorized instructor must have unobstructed visual sight of the controls and instrumentation and maintain active communication with the applicant for the entire flight.

(3) The demonstration flight may occur during one flight or over multiple flights.

(4) Upon determination that the applicant has demonstrated satisfactory proficiency in the aircraft, the check pilot, training center evaluator, authorized instructor, instructor pilot, FAA aviation safety inspector, or another person authorized by the FAA to administer this check may endorse the applicant to act as pilot in command of the specific powered-lift to conduct solo flight in accordance with paragraph (c) of this section. The endorsement is valid for 90 days from the day the demonstration flight is successfully completed.

(b) *Failure to complete demonstration flight during endorsement period.*

(1) If the applicant does not successfully complete the demonstration flight in paragraph (a) of this section within the 90-day endorsement period, the applicant may receive another endorsement by:

(i) Completing a demonstration of proficiency in the full flight simulator consisting of the tasks and maneuvers set forth by section 10. of this appendix, in addition to any maneuvers or procedures deemed necessary by the check pilot, training center evaluator, authorized instructor, instructor pilot, an FAA aviation safety inspector, or other person authorized by the FAA to administer this check to ensure proficiency, and

(ii) Completing an aircraft familiarity flight meeting the requirements of section 5.(b) of this appendix.

(2) After the applicant meets the requirements of paragraph (b)(1) of this section, the applicant may receive another endorsement for the applicant to act as pilot in command of the specific powered-lift to accomplish the demonstration flight with an authorized instructor on board as set forth in section 6.(a) of this appendix. This endorsement is valid for 90 days from the day the demonstration of proficiency in the full flight simulator was successfully completed.

(c) *Solo Flights.* After an applicant receives an endorsement to conduct solo flights in accordance with section 6.(a)(4) of this appendix, the applicant must complete 20 hours of solo flight in the aircraft, which must include:

(1) 10 hours of solo flight time in accordance with § 61.129(e)(4) or the corresponding alternate provision set forth in §§ 194.217 through 194.231 of this part;

(2) 10 hours of solo flight time that includes the maneuvers and procedures required for the issuance of a commercial pilot certificate with a powered-lift category rating, for the issuance of an instrument-powered-lift rating and for the issuance of a powered-lift type rating; and

(3) The alternate cross-country aeronautical experience requirements prescribed in § 194.233 of this part.

(d) *Lapse of endorsement for solo flights.*

If the applicant does not successfully complete the solo flight time required in paragraph (c) of this section within the 90-day endorsement period, the applicant may receive another 90-day endorsement by satisfying the requirements of paragraph (d)(1) or (2) of this section, as applicable.

(1) If the applicant seeks to renew the endorsement for another 90-day period and is within the 90-day period of the original endorsement, the applicant must complete a demonstration flight consisting of the tasks and maneuvers set forth by section 10. of this appendix, in addition to any maneuvers or procedures deemed necessary by the check pilot, training center evaluator, authorized instructor, instructor pilot, FAA aviation safety inspector, or another person authorized by the FAA to ensure proficiency.

(2) If the applicant seeks another endorsement outside the 90-day period of the original endorsement, the applicant must:

(i) The applicant must satisfactorily complete a demonstration of proficiency in the full flight simulator consisting of the tasks and maneuvers set forth by section 10. of this appendix, in addition to any maneuvers or procedures deemed necessary by the authorized instructor to ensure proficiency, successful completion of which will result in a 90-day endorsement to accomplish a demonstration flight with an authorized instructor on board; and

(ii) The applicant must complete a demonstration flight with a check pilot, training center evaluator, authorized instructor, instructor pilot, FAA aviation safety inspector, or another person authorized by the FAA to administer this check consisting of the tasks and maneuvers

set forth by section 10. of this appendix, in addition to any maneuvers or procedures deemed necessary by the authorized instructor to ensure proficiency.

7. Practical Test

(a) The applicant may meet the training requirements of § 61.129(e)(3)(iv) in a Level C or higher FFS.

(b) A person who uses a flight simulator or flight training device for any portion of the practical test in accordance with § 61.64(a) of this chapter after training in accordance with this appendix and does not meet the requirements of § 61.64(e) of this chapter will—

(1) Receive a limitation that states “the certificate is subject to certain pilot in command limitations,” in lieu of the limitation set forth by § 61.64(f); and

(2) Be restricted from the carriage of persons or property other than necessary for the conduct of the flight.

(c) The limitation described under paragraph (b) of this section may be removed from the pilot certificate by meeting the requirements set forth in section 8. of this appendix.

8. Supervised Operating Experience for a Powered-Lift With Single Controls and a Single Pilot Station

(a) The limitation set forth in paragraph 7.(b) of this appendix may be removed if the pilot complies with the following:

(1) Performs 10 hours of flight time in an aircraft of category and type for which the limitation applies under the observation of a pilot who holds a category and type rating without limitations for the aircraft, maintaining full communication with the observing pilot;

(2) Logs each flight and the observing pilot attests in writing to each flight; and

(3) Presents evidence of the supervised operating experience to any examiner or Flight Standards office to have the limitation removed.

(b) The flight time required in paragraph (a)(1) of this section must include a cross-country flight in a powered-lift under instrument flight rules on a flight plan filed with an air traffic control facility that involves—

(i) A flight of at least 100 nautical miles along airways or by directed routing from an air traffic control facility;

(ii) An instrument approach at each airport; and

(iii) Three different kinds of approaches with the use of navigation systems.

(c) The observing pilot must have unobstructed visual sight of the controls and instrumentation.

9. Deviation Authority

The Administrator may authorize a deviation from the simulator qualification requirement in section 4. of this appendix stipulating that training must be completed in a qualified Level C or higher full flight simulator upon a determination by the Administrator that—

(a) The alternative training device is of adequate fidelity to be used as a substitution for in-aircraft flight training; and

(b) The effectiveness and objectives of the training program can be met utilizing the alternative training device.

10. Maneuvers and Procedures Required for Certain Flights Prescribed by This Appendix

This section sets forth the maneuvers and procedures required for flights required in accordance with sections 6.(b)(1)(i), 6.(d)(1), 6.(d)(2)(i), and 6.(d)(2)(ii) of this appendix, except those maneuvers and procedures

under tasks waived in accordance with § 194.207(c).

(a) Proper flight preparation procedures, including preflight planning and preparation, powerplant operation, and aircraft systems;

(b) Taxiing or surface operations, including runups;

(c) Takeoffs and landings, including normal and crosswind;

(d) Straight and level flight, and turns in both directions;

(e) Climbs and climbing turns;

(f) Airport traffic patterns, including entry and departure procedures;

(g) Collision avoidance, windshear avoidance, and wake turbulence avoidance;

(h) Descents with and without turns;

(i) Flight at various airspeeds from cruise to slow flight;

(j) Stall entries from various flight attitudes and power combinations with recovery initiated at the first indication of a stall, and recovery from a full stall;

(k) Emergency procedures and equipment malfunctions;

(l) Ground reference maneuvers;

(m) Approaches to a landing with simulated engine malfunctions;

(n) Go-arounds;

(o) Approaches to the landing area;

(p) Hovering and hovering turns; and

(q) For a multiengine powered-lift, simulated one-engine-inoperative approaches and landings.

Issued under authority provided by 49 U.S.C. 106(f), 40113, 44701–44705, 44707, 44712, 44713, 44715, 44722, and 44730 in Washington, DC, on October 22, 2024.

Michael Gordon Whitaker,

Administrator.

[FR Doc. 2024–24886 Filed 11–20–24; 8:45 am]

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Part III

Department of the Interior

Fish and Wildlife Service

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Listing the Giraffe;
Proposed Rule

DEPARTMENT OF THE INTERIOR**Fish and Wildlife Service****50 CFR Part 17**

[Docket No. FWS-HQ-ES-2024-0157;
FXES1111090FEDR-256-FF09E21000]

RIN 1018-BH64

Endangered and Threatened Wildlife and Plants; Listing the Giraffe

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), announce our 12-month finding on a petition to list the giraffe (including its subspecies) as endangered or threatened under the Endangered Species Act of 1973, as amended (Act or ESA). After a review of the best available scientific and commercial information, we find that the following listing actions are warranted: We propose to list all three subspecies of the northern giraffe (*Giraffa camelopardalis*)—the West African giraffe (*Giraffa camelopardalis peralta*), the Kordofan giraffe (*Giraffa camelopardalis antiquorum*), and the Nubian giraffe (*Giraffa camelopardalis camelopardalis*)—as endangered species under Act. We also propose to list the reticulated giraffe (*Giraffa reticulata*) and the Masai giraffe (*Giraffa tippelskirchi*), both from east Africa, as threatened species with protective regulations issued under section 4(d) of the Act (“4(d) rule”). After a thorough review of the best scientific and commercial data available, we find that, based on the Act’s section 4(a)(1) factors, it is not warranted at this time to list either subspecies of the southern giraffe (*Giraffa giraffa*)—the Angolan giraffe (*Giraffa giraffa angolensis*) and the South African giraffe (*Giraffa giraffa giraffa*)—but we are proposing, under the authority of section 4(e) of the Act, to treat both of these subspecies as threatened species based on their similarity of appearance to the West African giraffe, Kordofan giraffe, Nubian giraffe, reticulated giraffe, and Masai giraffe. If we finalize this rule as proposed, it would add all giraffes to the List of Endangered and Threatened Wildlife, under the authority of either section 4(a)(1) or 4(e) of the Act, and extend the Act’s protections to these taxa.

DATES: *Comments on the proposed rule:* We will accept comments on the proposals in this document that are received or postmarked on or before February 19, 2025. Comments submitted

electronically using the Federal eRulemaking Portal (see **ADDRESSES**, below) must be received by 11:59 p.m. eastern time on the closing date. We must receive requests for a public hearing, in writing, at the address shown in **FOR FURTHER INFORMATION CONTACT** by January 6, 2025.

12-month petition finding: The 12-month petition finding for the Angolan giraffe and South African giraffe announced in this document was made on November 21, 2024.

ADDRESSES:

Written comments: You may submit comments by one of the following methods:

(1) *Electronically:* Go to the Federal eRulemaking Portal: <https://www.regulations.gov>. In the Search box, enter FWS-HQ-ES-2024-0157, which is the docket number for this rulemaking. Then, click on the Search button. On the resulting page, in the panel on the left side of the screen, under the Document Type heading, check the Proposed Rule box to locate this document. You may submit a comment by clicking on “Comment.” If your comments will fit in the provided comment box, please use this feature of <https://www.regulations.gov>, as it is most compatible with our comment review procedures. If you attach your comments as a separate document, our preferred file format is Microsoft Word. If you attach multiple comments (such as form letters), our preferred format is a spreadsheet in Microsoft Excel.

(2) *By hard copy:* Submit by U.S. mail to: Public Comments Processing, Attn: FWS-HQ-ES-2024-0157, U.S. Fish and Wildlife Service, MS: PRB/3W, 5275 Leesburg Pike, Falls Church, VA 22041-3803.

We request that you send comments only by the methods described above. We will post all comments on <https://www.regulations.gov>. This generally means that we will post any personal information you provide us (see Information Requested, below, for more information).

Availability of supporting materials: Supporting materials, such as the species status assessment report, are available at <https://www.regulations.gov> at Docket No. FWS-HQ-ES-2024-0157.

FOR FURTHER INFORMATION CONTACT:

Rachel London, Manager, Branch of Delisting and Foreign Species, Ecological Services Program, U.S. Fish and Wildlife Service, MS: ES, 5275 Leesburg Pike, Falls Church, VA 22041-3803; telephone 703-358-2171. Individuals in the United States who are deaf, deafblind, hard of hearing, or have a speech disability may dial 711 (TTY,

TDD, or TeleBraille) to access telecommunications relay services. Individuals outside the United States should use the relay services offered within their country to make international calls to the point-of-contact in the United States. Please see Docket No. FWS-HQ-ES-2024-0157 on <https://www.regulations.gov> for a document that summarizes this proposed rule.

SUPPLEMENTARY INFORMATION:**Executive Summary**

Why we need to publish a rule. Under the Act, a species warrants listing if it meets the definition of an endangered species (in danger of extinction throughout all or a significant portion of its range) or a threatened species (likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range). If we determine that a species warrants listing, we must list the species promptly. We have determined that the three subspecies of northern giraffe—West African giraffe, Kordofan giraffe, and Nubian giraffe—each meet the Act’s definition of an endangered species, and the reticulated giraffe and Masai giraffe each meet the Act’s definition of a threatened species; therefore, we are proposing to list these species as such. Listing a species as an endangered or threatened species can be completed only by issuing a rule through the Administrative Procedure Act rulemaking process (5 U.S.C. 551 *et seq.*).

What this document does. We propose to list the West African giraffe, Kordofan giraffe, and Nubian giraffe as endangered species under the Act. We also propose to list the reticulated giraffe and Masai giraffe as threatened species with protective regulations under section 4(d) of the Act. We find that listing the Angolan giraffe and South African giraffe as endangered or threatened species under the factors set forth in section 4(a)(1) of the Act is not warranted. However, we propose to list the Angolan giraffe and South African giraffe as threatened species under the authority of section 4(e) of the Act, with protective regulations under section 4(d) of the Act, based on their similarity of appearance to the West African giraffe, Kordofan giraffe, Nubian giraffe, reticulated giraffe, and Masai giraffe.

The basis for our action. Under the Act’s section 4(a)(1), we may determine that a species is an endangered or threatened species because of any of five factors: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial,

recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. We have determined that West African giraffe, Kordofan giraffe, and Nubian giraffe are endangered due to the following ongoing and imminent threats: habitat loss, fragmentation, and degradation because of the conversion of natural habitats and vegetation to croplands and urbanization (Factors A and E), and poaching for consumption, personal use, and trade (Factor B), which are all exacerbated by rapid human population growth and the effects from climate change (including the inter-related effects such as civil unrest and human food insecurity) (Factor E). We have further determined that the reticulated giraffe and Masai giraffe are threatened due to the following threats: habitat loss, fragmentation, and degradation because of the conversion of natural habitats and vegetation to croplands and urbanization (Factors A and E), and poaching for consumption, personal use, and trade (Factor B), which are exacerbated by rapid human population growth and the effects from climate change (including the inter-related effects such as civil unrest and human food insecurity) (Factor E).

We have determined that both Angolan giraffe and South African giraffe are not warranted as endangered or threatened species due to the following threats: habitat loss, fragmentation, and degradation because of the conversion of natural habitats and vegetation to croplands and urbanization (Factors A and E), and poaching for consumption, personal use, and trade (Factor B), which are exacerbated by rapid human population growth and the effects from climate change (including the inter-related effects such as civil unrest and human food insecurity) (Factor E). Under the Act's section 4(e), we may treat any species as an endangered or threatened species based on its similarity of appearance to a species listed as an endangered or threatened species. This "similarity of appearance" listing is intended to protect listed species by facilitating the enforcement and furthering the policy of the Act. Our proposal to list the Angolan giraffe and South African giraffe as threatened species under the authority of section 4(e) of the Act is based on their similarity of appearance to the West African giraffe, Kordofan giraffe, Nubian giraffe, reticulated giraffe, and Masai giraffe.

Information Requested

We intend that any final action resulting from this proposed rule will be based on the best scientific and commercial data available and be as accurate and as effective as possible. Therefore, we request comments or information from other governmental agencies (including foreign governments within the range of any giraffe species), Native American Tribes, the scientific community, industry, or any other interested parties concerning this proposed rule. We particularly seek comments concerning:

(1) The species' or subspecies' biology, range, and population trends, including:

(a) Biological or ecological requirements of the species or subspecies, including habitat requirements for feeding, breeding, and sheltering;

(b) Genetics and taxonomy;

(c) Historical and current range, including distribution patterns and the locations of any additional populations of these species or subspecies;

(d) Historical and current population levels, and current and projected trends; and

(e) Past and ongoing conservation measures for these species or subspecies, their habitats, or both.

(2) Threats and conservation actions affecting these species or subspecies, including:

(a) Factors that may be affecting the continued existence of these species or subspecies, which may include habitat destruction, modification, or curtailment; overutilization for commercial, recreational, scientific, or educational purposes; disease; predation; the inadequacy of existing regulatory mechanisms; or other natural or manmade factors;

(b) Biological, commercial trade, or other relevant data concerning any threats (or lack thereof) to these species or subspecies; and

(c) Existing regulations or conservation actions that may be addressing threats to these species or subspecies.

(3) Additional information concerning the historical and current status of these species or subspecies.

(4) Information to assist with applying or issuing protective regulations under section 4(d) of the Act that may be necessary and advisable to provide for the conservation of any threatened species of giraffe. In particular, we seek information concerning:

(a) The extent to which we should include any of the section 9 prohibitions in the 4(d) rule; or

(b) Whether we should consider any additional or different prohibitions or exceptions from the prohibitions in the proposed 4(d) rule, such as:

(i) A prohibition on importing threatened species of giraffes without a permit issued under title 50 of the Code of Federal Regulations (CFR) at section 17.32 (50 CFR 17.32) for a threatened species.

(ii) A requirement for an enhancement of propagation or survival finding or other criteria to import or export any specimen of a threatened species of giraffe.

(iii) A requirement for a similarity of appearance permit to import or export any specimen of a giraffe species or subspecies treated as endangered or threatened based on similarity of appearance.

(iv) An exception associated with our captive-bred wildlife program (see 50 CFR 17.21(g)) to conduct otherwise prohibited activities under certain circumstances to enhance the propagation or survival of giraffe species.

(v) An exception for interstate commerce from a public institution to another public institution, specifically commerce between museums, zoological parks, and scientific or educational institutions that meet the definition of "public" at 50 CFR 10.12.

(vi) Any specific provisions for intercrosses between threatened species or subspecies of giraffe (hybrid giraffes), which would otherwise be considered "offspring" under the definition of "fish or wildlife" (16 U.S.C. 1532(8)) and protected accordingly.

(5) Information regarding legal killing (hunting) or illegal killing (poaching) or any other taking of the West African, Kordofan, Nubian, reticulated, Masai, Angolan, or South African giraffe.

(6) Information regarding domestic and international trade of the West African, Kordofan, Nubian, reticulated, Masai, Angolan, or South African giraffe.

(7) Information regarding threats to one or more species or subspecies of giraffe from hunting, poaching, or any other taking or trade involving one or more other species or subspecies of giraffe, such as threats to the West African, Kordofan, Nubian, reticulated, or Masai giraffe from hunting, poaching, or any other taking or trade involving the Angolan giraffe or South African giraffe.

(8) Information regarding the ability and any methodology to differentiate, without substantial difficulty, among different giraffe species or subspecies of giraffe and their parts and products, including at ports of import and export,

and what documentation should be provided to the Service to assist in making species or subspecies determinations for issuance of permits.

(9) Information regarding the role of private lands, particularly game farms, reserves, and conservancies, in conserving any of the giraffe species or subspecies in the wild.

(10) For the Angolan giraffe and South African giraffe, we ask the public to submit to us at any time new information relevant to the subspecies' status or its habitat including threats or conservation measures.

(11) Information on whether listing giraffes at the species or subspecies level is most appropriate for giraffes.

Please include sufficient information with your submission (such as scientific journal articles or other publications) to allow us to verify any scientific or commercial information you include.

Please note that submissions merely stating support for, or opposition to, the action under consideration without providing supporting information, although noted, do not provide substantial information necessary to support a determination. Section 4(b)(1)(A) of the Act directs that determinations as to whether any species is an endangered or a threatened species must be made solely on the basis of the best scientific and commercial data available.

You may submit your comments and materials concerning this proposed rule by one of the methods listed in **ADDRESSES**. We request that you send comments only by the methods described in **ADDRESSES**.

If you submit information via <https://www.regulations.gov>, your entire submission—including any personal identifying information—will be posted on the website. If your submission is made via a hardcopy that includes personal identifying information, you may request at the top of your document that we withhold this information from public review. However, we cannot guarantee that we will be able to do so. We will post all hardcopy submissions on <https://www.regulations.gov>.

Comments and materials we receive, as well as supporting documentation we used in preparing this proposed rule, will be available for public inspection on <https://www.regulations.gov>.

Our final determinations may differ from this proposal because we will consider all comments we receive during the comment period as well as any information that may become available after this proposal. Based on the new information we receive (and, if relevant, any comments on that new information), we may conclude that any

of the northern giraffe subspecies are threatened instead of endangered, or that the reticulated giraffe is endangered instead of threatened, or that the Masai giraffe is endangered instead of threatened, or we may conclude that one or more of the species proposed for listing does not warrant listing as either an endangered species or a threatened species. We may also conclude that either subspecies of southern giraffe may be endangered or threatened instead of not warranted for listing, which would prompt our consideration of a new proposed rule for the subspecies. In addition, we may change the parameters of the prohibitions or the exceptions to those prohibitions in the protective regulations under section 4(d) of the Act if we conclude it is appropriate in light of comments and new information received. For example, we may expand the prohibitions if we conclude that the protective regulation as a whole, including those additional prohibitions, is necessary and advisable to provide for the conservation of the threatened species. Conversely, we may establish additional or different exceptions to the prohibitions in the final rule if we conclude that the activities would facilitate or are compatible with the conservation and recovery of the threatened species. In our final rule, we will clearly explain our rationale and the basis for our final decision, including why we made changes, if any, that differ from this proposal.

Public Hearing

Section 4(b)(5) of the Act provides for a public hearing on this proposal, if requested. Requests must be received by the date specified in **DATES**. Such requests must be sent to the address shown in **FOR FURTHER INFORMATION CONTACT**. In order to facilitate public comment with the large number of range countries of giraffe, we plan to schedule at least one public hearing on this proposal, and announce the date, time, and place of the hearing, as well as how to obtain reasonable accommodations, in the **Federal Register** at least 15 days before the hearing. We may hold the public hearing in person or virtually via webinar. We will announce any public hearing on our website, in addition to the **Federal Register**. The use of virtual public hearings is consistent with our regulations at 50 CFR 424.16(c)(3).

Previous Federal Actions

We received a petition on April 19, 2017, from the Center for Biological Diversity, Humane Society International, The Human Society of the United States, International Fund for

Animal Welfare, and Natural Resources Defense Council to list the giraffe (*Giraffa camelopardalis*) as endangered or threatened under the Act. Because of ongoing changes in taxonomy (see Taxonomy section) of the giraffe species and subspecies at the time of the petition, the petitioners included an alternate request to list all giraffe subspecies or distinct population segments at least as threatened, with qualified subspecies or distinct population segments listed as endangered if taxonomic consensus changes or if the Service decides to list an entity below the species level. On April 26, 2019, we published in the **Federal Register** (84 FR 17768) a 90-day finding that the petition presented substantial scientific or commercial information indicating that the petitioned action may be warranted. This document serves as our 12-month finding on the April 19, 2017, petition.

Peer Review

A species status assessment (SSA) team prepared SSA reports for the currently recognized species of giraffe (northern giraffe, reticulated giraffe, Masai giraffe, and southern giraffe). The SSA team was composed of Service biologists, in consultation with other species experts. The SSA reports represent a compilation of the best scientific and commercial data available concerning the status of the species, including the impacts of past, present, and future factors (both negative and beneficial) affecting the species.

In accordance with our joint policy on peer review published in the **Federal Register** on July 1, 1994 (59 FR 34270), and our August 22, 2016, memorandum updating and clarifying the role of peer review in listing and recovery actions under the Act (<https://www.fws.gov/sites/default/files/documents/peer-review-policy-directors-memo-2016-08-22.pdf>), we are soliciting independent scientific review of the information contained in the northern, reticulated, Masai, and southern giraffe SSA reports. We will seek peer review of the SSA reports from at least three independent peer reviewers. We will ensure that the opinions of peer reviewers are objective and unbiased by following the guidelines set forth in the Director's Memo, which updates and clarifies Service policy on peer review (Service 2016, entire). The purpose of peer review is to ensure that our decisions are based on scientifically sound data, assumptions, and analysis. Accordingly, our final decisions may differ from this proposal. Comments from peer reviewers will be posted at <https://www.regulations.gov>, incorporated, as

appropriate, into the SSA reports, and included in the decision file for the final rule.

Taxonomy

Until recently, giraffe was classified as a single species (*Giraffa camelopardalis*) with nine subspecies based on its geographic distribution, morphology, and skin pattern (Dagg 1971, entire; Fennessy et al. 2016, p. 2543; Muller et al. 2018, p. 1; Brown et al. 2021, p. 3). Dagg (1971) was the authority most relied upon for giraffe taxonomy. In 2016, new analysis of data from all nine recognized subspecies concluded that giraffe should be split into four separate and distinct species (Fennessy et al. 2016, entire). One result of this analysis was that Thornicroft's giraffe (*G. c. thornicrofti*) was found to be indistinguishable from Masai giraffe (*G. c. tippelskirchi*), and Rothschild's giraffe (*G. c. rothschildi*) was found to be indistinguishable from Nubian giraffe (*G. c. camelopardalis*). Thus, these subspecies were subsumed accordingly (Fennessy et al. 2016, entire; Bock et al. 2014, p. 2). The best available information, therefore, indicates giraffes are classified as four separate and distinct species, as follows: (1) the northern giraffe (*Giraffa camelopardalis*) is a species that consists of three subspecies—the Nubian giraffe (*G. c. camelopardalis*), Kordofan giraffe (*G. c. antiquorum*), and West African giraffe (*G. c. peralta*); (2) the reticulated giraffe (*Giraffa reticulata*) is its own species; (3) the Masai giraffe (*Giraffa tippelskirchi*) is its own species; and (4) the southern giraffe (*Giraffa giraffa*) is a species that consists of two subspecies—the South African giraffe (*G. g. giraffa*), and Angolan giraffe (*G. g. angolensis*) (Fennessy et al. 2016, entire; Winter et al. 2018a, entire; Coimbra et al. 2021, entire; ITIS 2024, unpaginated). The Integrated Taxonomic Information System (ITIS) also recognizes four separate and distinct species of giraffe with the same subspecies as the valid taxonomic classification of giraffe (ITIS 2024, unpaginated).

The International Union for Conservation of Nature (IUCN) Species Survival Commission (SSC) Giraffe and Okapi Specialist Group (GOSG) recognizes giraffe as one species with nine subspecies, based on the classification in Dagg (1971) (Muller et al. 2018, p. 1). The GOSG is composed of a group of technical experts from around the world; it was established in March 2013, in recognition of widespread threats to giraffe and okapi and to address their conservation needs (GOSG 2023, unpaginated). The GOSG

has not, however, undertaken a formal assessment of the taxonomic status of giraffe since information indicating a revised taxonomy has become available (Dunn et al. 2021, p. 2). The IUCN Red List assessment also classifies giraffe as a single species with nine subspecies based on Dagg (1971) (Muller et al. 2018, p. 1). CITES lists all giraffes as one species (*Giraffa camelopardalis*) (CITES 2019a, p. 2; CITES 2019b, p. 3; CITES 2024, unpaginated). Even though the GOSG and IUCN Red List recognize the giraffe as one species with nine subspecies, the best available information indicates that there are four separate and distinct species of giraffe, and we use the best available information to inform this proposed rule.

I. Finding for the Angolan Giraffe and South African Giraffe

Under section 4(b)(3)(B) of the Act, we are required to make a finding on whether or not a petitioned action is warranted within 12 months after receiving any petition that we have determined contains substantial scientific or commercial information indicating that the petitioned action may be warranted (“12-month finding”). We must make a finding that the petitioned action is: (1) Not warranted; (2) warranted; or (3) warranted but precluded.

Summary of Information Pertaining to the Five Factors

Section 4 of the Act (16 U.S.C. 1533) and the implementing regulations in title 50 of the Code of Federal Regulations set forth the procedures for determining whether a species is an endangered species or a threatened species, and issuing or applying protective regulations for threatened species.

The Act defines an “endangered species” as a species that is in danger of extinction throughout all or a significant portion of its range, and a “threatened species” as a species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. The Act requires that we determine whether any species is an endangered species or a threatened species because of any of the following factors:

(A) The present or threatened destruction, modification, or curtailment of its habitat or range;

(B) Overutilization for commercial, recreational, scientific, or educational purposes;

(C) Disease or predation;

(D) The inadequacy of existing regulatory mechanisms; or

(E) Other natural or manmade factors affecting its continued existence.

These factors represent broad categories of natural or human-caused actions or conditions that could have an effect on a species' continued existence. In evaluating these actions and conditions, we look for those that may have a negative effect on individuals of the species, as well as other actions or conditions that may ameliorate any negative effects or may have positive effects.

We use the term “threat” to refer in general to actions or conditions that are known to or are reasonably likely to negatively affect individuals of a species. The term “threat” includes actions or conditions that have a direct impact on individuals (direct impacts), as well as those that affect individuals through alteration of their habitat or required resources (stressors). The term “threat” may encompass—either together or separately—the source of the action or condition or the action or condition itself.

condition exist. However, the mere identification of any threat(s) does not necessarily mean that the species meets the statutory definition of an "endangered species" or a "threatened species." In determining whether a species meets either definition, we must evaluate all identified threats by considering the species' expected response and the effects of the threats—in light of those actions and conditions that will ameliorate the threats—on an individual, population, and species level. We evaluate each threat and its expected effects on the species, then analyze the cumulative effect of all of the threats on the species as a whole. We also consider the cumulative effect of the threats in light of those actions and conditions that will have positive effects on the species, such as any existing regulatory mechanisms or conservation efforts. The Secretary determines whether the species meets the definition of an "endangered species" or a "threatened species" only after conducting this cumulative analysis and describing the expected effect on the species.

The Act does not define the term “foreseeable future,” which appears in the statutory definition of “threatened species.” Our implementing regulations at 50 CFR 424.11(d) set forth a framework for evaluating the foreseeable future on a case-by-case basis, which is further described in the 2009 Memorandum Opinion on the foreseeable future from the Department of the Interior, Office of the Solicitor (M-37021, January 16, 2009; “M-Opinion,” available online at <https://www.doi.gov/eis>)

www.doi.gov/sites/doi.opengov.ibmcloud.com/files/uploads/M-37021.pdf). The foreseeable future extends as far into the future as the U.S. Fish and Wildlife Service and National Marine Fisheries Service (hereafter, the Services) can make reasonably reliable predictions about the threats to the species and the species' responses to those threats. We need not identify the foreseeable future in terms of a specific period of time. We will describe the foreseeable future on a case-by-case basis, using the best available data and taking into account considerations such as the species' life-history characteristics, threat projection timeframes, and environmental variability. In other words, the foreseeable future is the period of time over which we can make reasonably reliable predictions. "Reliable" does not mean "certain"; it means sufficient to provide a reasonable degree of confidence in the prediction, in light of the conservation purposes of the Act.

In conducting our evaluation of the five factors provided in section 4(a)(1) of the Act to determine whether the Angolan giraffe or South African giraffe currently meets the definition of "endangered species" or "threatened species," we considered and thoroughly evaluated the best scientific and commercial data available regarding threats, regulatory mechanisms, conservation measures, current condition, and future condition. We reviewed the petition, information available in our files, and other available published and unpublished information. This evaluation includes information from recognized experts; foreign Federal, State, and Tribal governments; academic institutions; private entities; and other members of the public. After comprehensive assessment of the best scientific and commercial data available, we determine that the Angolan giraffe and South African giraffe each do not meet the Act's definition of an endangered species or a threatened species.

In accordance with the regulations at 50 CFR 424.14(h)(2)(i), this document announces the not-warranted findings on a petition to list the Angolan giraffe and South African giraffe. We have also elected to include brief summaries of the analyses on which these findings are based. We provide the full analyses, including the reasons and data on which the findings are based, in the decision file for each of the not-warranted findings included in this document. The following is a description of the documents containing these analyses:

The species assessment form for the southern giraffe contains more detailed biological information, a thorough analysis of the listing factors, conservation measures and existing regulatory mechanisms, a list of literature cited, and an explanation of why we determined that the southern giraffe's subspecies (the Angolan giraffe and South African giraffe) do not meet the Act's definition of an "endangered species" or a "threatened species." To inform our status reviews, we completed a species status assessment (SSA) report for the southern giraffe. The SSA report for the southern giraffe contains a thorough review of the taxonomy, life history, and ecology of the Angolan giraffe and South African giraffe; a thorough description of the factors influencing the viability of these subspecies; and the current and future conditions of these subspecies (Service 2024d, entire). This supporting information can be found on the internet at <https://www.regulations.gov> under docket number FWS-HQ-ES-2024-0157. The following is a summary of our determination for the Angolan giraffe and South African giraffe.

Summary of Findings for Angolan Giraffe and South African Giraffe

The southern giraffe consists of two subspecies: Angolan giraffe and South African giraffe (Fennessy et al. 2016, p. 2545; Winter et al. 2018b, p. 10159). Angolan giraffes mainly occur in three geographic areas (Angolan giraffe units): Namibia, central Botswana, and southern Zimbabwe (Brown et al. 2021, p. 12). By the late 1990s, giraffes were assumed to be extirpated in Angola (East 1999, p. 98); recent reintroductions have reestablished very small populations of the Angolan giraffe in southern Angola. The exact range of the Angolan giraffe is uncertain because numerous translocations of Angolan giraffes from Namibia have occurred throughout southern Africa, and Angolan giraffes now occur even in areas with no record of translocations. Additionally, extralimital populations of Angolan giraffes were introduced to the Democratic Republic of Congo (DRC), South Africa, Nigeria, and Zambia (Brown et al. 2021, p. 12).

The South African giraffe occurs in Angola, Botswana, Eswatini, Malawi, Mozambique, Namibia, South Africa, Zambia, and Zimbabwe. Most South African giraffes occur in northern Botswana around the Okavango Delta and North West, Chobe, and Central Districts, and in northern South Africa in the Limpopo Province and Kruger National Park. Both these regions are part of Transfrontier Conservation Areas

(TFCAs). The Kavango Zambezi (KAZA) TFCA supports approximately 25 percent of the total population of southern giraffe including populations or partial populations in Angola, Botswana, Namibia, Zambia, and Zimbabwe. The Great Limpopo TFCA includes the Great Limpopo Transfrontier Park, which links national parks in South Africa, Zimbabwe, and Mozambique, as well as a wildlife corridor on communal land; and Banhine and Zinave National Parks in Mozambique and bordering private- and state-owned conservation areas (Peace Parks Foundation 2024, unpaginated). South African giraffes have been translocated within their native range and introduced into several countries outside of their native range. Giraffes were reintroduced to Limpopo National Park and Zinave National Park in Mozambique after having been previously extirpated. In Malawi and Eswatini, the historical occurrence of South African giraffes is uncertain, and no references are made of them historically occurring in these countries (East 1999, p. 95; Dagg 1962, pp. 500–503; Sidney 1965, p. 155). However, giraffes have been translocated to Malawi and Eswatini, where small populations currently exist (Marais et al. 2020a, p. 3; Hoffman et al. 2022, p. 3). Small, extralimital populations of South African giraffes also occur in Angola, the DRC, and Senegal (Brown et al. 2021, p. 13).

Several populations of giraffes in northern Botswana, northwest Zimbabwe, northeastern Namibia, southwestern Zambia, and central South Africa are Angolan or South African giraffes, and there is potentially hybridization between the two subspecies in this area (Muller et al. 2018, p. 1; Bock et al. 2014, p. 7; Deacon and Parker et al. 2016, p. 3). Additionally, both Angolan giraffes and South African giraffes are held on private lands (e.g., game farms, conservancies, and reserves) (Deacon and Parker 2016, pp. 5–7; Giraffe Conservation Foundation (GCF) 2016, unpaginated; du Raan 2016, p. 3). When referring to private lands that are game farms, reserves, and conservancies, we consider the giraffes in these private lands to be wild giraffes because they are not in enclosures, are not supplemented with food, are not captive bred, and are mostly kept on adequately sized properties; however, some of these areas are as small as 0.2 square kilometers (Deacon and Parker 2016, p. 4). While private lands are often fenced, giraffes on private lands are otherwise generally free-roaming. We do not

consider giraffe on these private lands to be in an environment that is intensively manipulated, thus distinguishing them from the definition of “captivity” in 50 CFR 17.3. Additionally, southern giraffe on these private lands are managed as wild under the laws and management practices in the range countries of Angolan giraffe and South African giraffe, which rely on private game farms, reserves, and conservancies to conserve wild giraffes in suitable habitat for giraffe.

Giraffes live in a complex society characterized by loose subgroup composition, a pattern of sexual segregation, and longer-term relationships that are typical in fission-fusion societies (Bercovitch et al. 2006, p. 314; Carter et al. 2013, p. 390; Dagg 2019, p. 39). This type of structured society involves the formation and dissolution of subgroups within a larger social network based upon preferential associations within a larger community that rarely coalesces into a single unit (Dagg 2019, p. 43; Bercovitch and Berry 2012, p. 2). Herds tend to be small and average 3 to 5 animals with female-female associations more common than male-male or male-female associations (Dagg 2019, p. 45; Bercovitch and Berry 2012, p. 6). Male giraffes are nonterritorial and mostly solitary individuals that adopt a roaming reproductive strategy and become increasingly more solitary as they age (Bercovitch and Berry 2014, p. 172; Leuthold 1979, p. 29). Females are seldom alone and are often in groups with other females and any young born to those females (nursing groups).

The giraffe's primary activity is feeding, and they consume a variety of leaves, stems, flowers, and fruits (Dagg 2019, p. 24; Muller et al. 2016, p. 6). Because giraffes have high metabolic and reproductive requirements, they need to consume large quantities of food throughout the year (Parker and Bernard 2005, p. 207). Giraffes have been noted to forage on at least 100 different plant species, although *Acacia*, *Commiphora*, and *Terminalia* species are major staples (Kingdon 1997, p. 494; Muller et al. 2016, p. 6). *Acacia* trees or bushes are a preferred resource and are fed on in high proportions wherever giraffes occur (Dagg 2019, p. 25).

Giraffes need high-quality forage year-round to maintain their high-energy budget, particularly females that are pregnant for most of their adult lives. Each population has a diverse diet, and food that giraffes select throughout the year largely depends on the seasonal changes in the phenology of plant species (Pellew 1984, p. 74) or, for females, whether they are nursing

(Caister et al. 2003, p. 209; Saito and Idani 2018, p. 15). Anthropogenic influences strongly affect giraffe's use of space (Brown et al. 2023, p. 8) as do physical and geographic barriers such as rivers, fencing, and urbanization (Fennessy et al. 2009, p. 324; Le Pendu and Ciofolo 1999, p. 350; Perry 1978, p. 80). Generally, giraffes do not show large-scale seasonal migrations, but within individual home ranges, small-scale seasonal movements occur primarily based on food resources (Pellew 1984, p. 65; Brown et al. 2023, p. 7; Fennessy 2009, p. 324). Because giraffes engage in small-scale seasonal movements based on changes in the distribution of food resources, they need adequate space within which to move and find high-quality food that meets their metabolic needs. Within their home ranges, giraffes also need access to mates.

Giraffes, in some regions of sub-Saharan Africa, are affected by civil unrest and political instability. Most wars in sub-Saharan Africa have been civil conflicts fought within the boundaries of a single sovereign country (State Failure 2001, cited in Glew and Hudson 2007, p. 141). However, internal conflicts may overspill defined boundaries, affecting both a country and its neighbors for substantial lengths of time (Commission for Africa, 2005, cited in Glew and Hudson 2007, p. 141). Civil unrest does not usually directly target ecological resources in pursuit of a military outcome, but impacts to wildlife occur because of resource exploitation during periods of lawlessness (Glew and Hudson 2007, p. 7, citing many authors; Dudley et al. 2002, p. 326). However, large mammals (when available) are often a vital food source for isolated military or paramilitary groups operating within war zones and disputed territories (Plumptre et al. 1997, p. 271; Dudley et al. 2002, p. 322). Additionally, wildlife products are often sold or bartered for food, arms, ammunition, or other goods and services (Dudley et al. 2002, p. 322). Civil unrest also causes significant displacement of people (Badiora 2017, p. 316; Davis 2019, p. 180; Glew and Hudson 2007, p. 141). Refugee encampments are often associated with severe environmental degradation from the use of slash-and-burn agriculture and the overharvesting of vegetation for fuel, food, and construction materials. This, in turn, results in widespread deforestation and erosion, and takes a heavy toll on wildlife and habitats in affected areas (Plumptre et al. 1997, p. 326; Pech 1995, in Dudley et al. 2002, p. 322). Relative political stability

within the range of the Angolan and South African giraffe reduces the likelihood that these subspecies of giraffe are affected by poaching and other effects of civil unrest, and increases the ability of range country governments to enact and enforce regulatory protections.

At the subspecies level, Angolan and South African giraffes require multiple populations with high population abundances, large effective population sizes, and sufficient, high-quality (nutritious and unfragmented) habitat distributed across heterogeneous environments.

Determination of Status: Background

Section 4 of the Act and its implementing regulations at 50 CFR part 424 set forth the procedures for determining whether a species meets the Act's definition of an endangered species or a threatened species. The Act requires that we determine whether a species meets the definition of an endangered species or a threatened species because of any of the following factors: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. We consider these five factors and the species' responses to these factors when making these determinations.

Section 3 of the Act defines “endangered species” and “threatened species.” An endangered species is a species that is in danger of extinction throughout all or a significant portion of its range, and a threatened species is a species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. Both definitions include not only the phrase “throughout all,” but also the phrase “or a significant portion of its range.” Thus, there are ultimately four bases for listing a species under the Act (in danger of extinction throughout all of its range, in danger of extinction throughout a significant portion of its range, likely to become an endangered species within the foreseeable future throughout all of its range, or likely to become an endangered species within the foreseeable future throughout a significant portion of its range). These four bases are made up of two classifications (*i.e.*, endangered or threatened) and two components (*i.e.*,

throughout all of its range or throughout a significant portion of its range).

Beginning in 2001, a number of judicial opinions addressed our interpretation of the phrase “or a significant portion of its range” (the SPR phrase) in these statutory definitions. The seminal case was *Defenders of Wildlife v. Norton*, 258 F.3d 1136 (9th Cir. 2001) regarding the flat-tailed horned lizard (*Phrynosoma mcallii*). The court in that case held that the SPR phrase in the Act was “inherently ambiguous,” finding that it was something of an oxymoron to speak of a species being at risk of extinction in only a portion of its range (*id.* at 1141); because the Act does not define a “significant portion, the Secretary has wide discretion to delineate it (*id.* at 1145). However, the court found that, even with wide discretion, the interpretation we had applied in analyzing the status of the flat-tailed horned lizard was unacceptable because it would allow for a species to warrant listing throughout a significant portion of a species’ range only when the species “is in danger of extinction everywhere” (*id.* at 1141). The court held that the SPR phrase must be given independent meaning from the “throughout all” phrase to avoid making the SPR phrase in the statute superfluous.

In an attempt to address the judicial opinions calling into question our approach to evaluating whether a species is endangered or threatened throughout a significant portion of its range, the Services jointly published the “Final Policy on Interpretation of the Phrase ‘Significant Portion of Its Range’ in the Endangered Species Act’s Definitions of ‘Endangered Species’ and ‘Threatened Species’” (2014 SPR Policy; 79 FR 37578, July 1, 2014). The December 9, 2011, notice announcing the draft policy and requesting public comments on it provides more detail about litigation before 2014 regarding the SPR phrase (76 FR 76987). The 2014 SPR Policy includes four elements:

(1) Consequence—that the consequence of determining that a species warrants listing based on its status in a significant portion of its range is to list the species throughout all of its range;

(2) Significance—a definition of the term “significant”;

(3) Range—that the species’ “range” is the current range of the species; and

(4) Distinct population segment (DPS)—that, if a species is endangered or threatened in an SPR, and the population in that SPR is a distinct population segment (DPS), the Service will list just the DPS.

Subsequently, two district courts vacated the definition of “significant” contained in the 2014 SPR Policy (*Ctr. for Biological Diversity v. Jewell*, 248 F. Supp. 3d 946, 959 (D. Ariz. 2017) (“*CBD v. Jewell*”), and *Desert Survivors v. U.S. Dep’t of the Interior*, 321 F. Supp. 3d 1011, 1070–74 (N.D. Cal. 2018) (“*Desert Survivors*”). The courts found that the definition in the 2014 SPR Policy set too high a threshold and rendered the SPR language in the statute superfluous, failing to give it independent meaning from the “throughout all” phrase.

In 2020, another court (*Ctr. for Biological Diversity v. Everson*, 435 F. Supp. 3d 69 (D.D.C. 2020) (“*Everson*”)) also vacated the specific aspect of the 2014 SPR Policy under which, “if the Services determine that a species is threatened throughout all of its range, the Services will not analyze whether the species is endangered in a significant portion of its range” (*id.* at 98). This was an extension of the definition of “significant,” which required that for a portion of the range of a species to be significant, the species must not be currently endangered or threatened throughout its range. In an extension of the earlier rulings from *CBD v. Jewell* and *Desert Survivors*, the court found that this aspect of the definition of the 2014 SPR Policy was not only inconsistent with the statute because it “rendered the ‘endangered in a significant portion of its range’ basis for listing superfluous,” but also “inconsistent with ESA principles” and “not a logical outgrowth from the draft policy.” Under this ruling, if we find a species is not in danger of extinction throughout all of its range, we must evaluate whether the species is in danger of extinction throughout a significant portion of its range, even in cases where we have determined that the species is likely to become in danger of extinction within the foreseeable future (*i.e.*, it meets the Act’s definition of a threatened species) throughout all of its range. The remaining three elements of the 2014 SPR Policy remain intact and have not been invalidated or questioned by the courts.

In short, courts have directed that the definition of “significant” must afford the phrase “or a significant portion of its range” an independent meaning from the “throughout all of its range” phrase. Therefore, to determine whether any species warrants listing, we determine for each classification (endangered and threatened) the appropriate component to evaluate (throughout all of its range or throughout a significant portion of its range).

We make this determination based on whether the best scientific and

commercial data indicate that the species has a similar extinction risk in all areas across its range (at a scale that is biologically appropriate for that species). When a species has a similar extinction risk in all areas across its range, we analyze its regulatory status using the component “throughout all of its range.” For example, in some cases, there is no way to divide a species’ range in a way that is biologically appropriate. This could be because the range is so small that there is only one population or because the species functions as a metapopulation such that effects to one population directly result in effects to another population. On the other hand, when the species’ extinction risk varies across its range, we analyze its regulatory status using the component “throughout a significant portion of its range.”

For either classification (endangered or threatened), we consider the five factors and the species’ responses to those factors regardless of which component (throughout all of its range or throughout a significant portion of its range) we have determined is appropriate for that classification. When assessing whether a species is endangered or threatened throughout a significant portion of its range, we address two questions because we must determine whether there is any portion of the species’ range for which both (1) the portion is “significant” (the significance question) and (2) the species is in danger of extinction or likely to become in danger of extinction within the foreseeable future throughout that portion (the status question). We may address the significance question or the status question first. Regardless of which question we address first, if we reach a negative answer with respect to the first question that we address, we do not need to evaluate the other question for that portion of the species’ range.

Determination of Status: Angolan Giraffe

The Angolan giraffe does not meet the Act’s definition of an endangered species or a threatened species. As stated above, we determine a species’ classification based upon its regulatory status throughout all of its range when the species has similar extinction risk in all areas across its range at a scale that is biologically appropriate for that species. Conversely, if the extinction risk varies across its range, we determine a species’ classification based upon its regulatory status throughout a significant portion of its range. Either way, we begin by determining the scale that is biologically appropriate for that species. For many species, we can

divide the range in an infinite number of ways. As discussed above, Angolan giraffe populations primarily occur in three Angolan giraffe units (Namibia, Botswana, and Zimbabwe) and while Angolan giraffe may periodically interact within these units, we do not expect interactions among giraffes among these units given their geographic separation. Although information on the smaller, introduced populations of Angolan giraffe is limited, the best available information indicates that threats and the subspecies' responses to those threats are similar in any introduced small populations for which we lack information. In summary, the "Angolan giraffe unit" is the unit that provides the most appropriate scale at which to assess extinction risk for the Angolan giraffe.

Endangered Species Classification

We evaluated whether the Angolan giraffe has a similar risk of extinction in all areas across its range by assessing its extinction risk in each Angolan giraffe unit. Our review indicated that the Angolan giraffe's extinction risk is similar in all areas across its range. Therefore, we evaluated whether it may be endangered based upon the "throughout all of its range" component. In undertaking this analysis of whether the Angolan giraffe is endangered throughout all of its range, we reviewed the best scientific and commercial data available regarding threats to the subspecies, the subspecies' responses to those threats, and any associated conservation measures; we then assessed the cumulative effects of those threats and conservation measures under the Act's section 4(a)(1) factors. We examined the following threats: habitat loss, degradation, and fragmentation (Factor A), predation and disease (Factor C), and hunting and poaching (Factor B), all of which may be exacerbated by increasing human populations, effects from climate change (including the inter-related effects such as civil unrest and human food insecurity) and low genetic diversity (Factor E), as well as cumulative effects. Additionally, the maintenance of private lands for activities such as personal use, tourism, and hunting (Factor E) impacts the subspecies because private lands in southern Africa comprise large proportions of the respective populations.

Angolan giraffes need multiple healthy, resilient populations that are distributed across the subspecies' range to reduce the risk of extinction. After evaluating threats to the subspecies and

assessing the cumulative effect of the threats under the Act's section 4(a)(1) factors, we found that habitat loss, degradation, and fragmentation, and poaching, all of which may be exacerbated by ongoing and near-term effects of human population growth, climate change, as the threats with the greatest potential to affect the subspecies' near-term viability. We also considered potential threats such as predation and disease, and while individuals are affected by these threats, there is no information to suggest population-level or subspecies-level effects.

The best estimate of current population size for the Angolan giraffe is approximately 18,626 individuals (20,192 including extralimital populations) (Brown et al. 2021, p. 11). The current estimated population size is approximately 124 percent of the estimated historical population size (15,000 individuals), and the population has increased from about 5,000 individuals in the 1970s to about 10,000 individuals in 2004 to 18,626 individuals in 2020, or by approximately 0.7–2.7 percent per year. Because there is uncertainty in the range of Angolan giraffe, there are discrepancies in the historical data. For the purposes of the historical population estimate, we added both historical estimates for Angolan giraffe from Muller et al. 2018 (supplement, p. 2) that equate to 15,000 individuals.

Large populations occur in all three Angolan giraffe units: Namibia (*e.g.*, Etosha National Park), Botswana (Central Kalahari Game Reserve and adjacent Khutse Game Reserve), and Zimbabwe (Bubye Valley Conservancy). Namibia holds approximately 78 percent of the population (14,500 individuals), with approximately half of these occurring on private lands (du Raan et al. 2016, pp. 10–11). Populations in central Botswana and Zimbabwe are smaller and comparable to each other (approximately 2,000 in Botswana and 2,000–4,000 individuals in Zimbabwe) (Brown et al. 2021, pp. 11–12).

While best available information indicates the subspecies is increasing overall, the population trends vary among the three units (Brown et al. 2021, p. 12). Angolan giraffes are increasing in Namibia. In Botswana, the population is stable based on data since 1989 indicating that populations of giraffes in protected areas are stable or have increased in recent years (KAZA Secretariat 2022, p. 7; Chase 2015, p. 75; Chase et al. 2018, p. 86; Ferguson et al. 2021, p. 7). In Zimbabwe, while populations continue to decline in

certain populations (Bubye Valley Conservancy), they are increasing in other populations, such as the Save Valley and Nuanetsi Conservancies, that have adequate resources for management and enforcement (KAZA Secretariat 2022, p. 11; GCF 2022a, unpaginated).

Large, connected populations remain within each of the three analysis units (AUs) where Angolan giraffes can meet their needs. The best available information indicates that any combined effects of habitat loss, degradation, and fragmentation and of poaching are not causing declines in resiliency or redundancy of wild populations in the near term in any of the three AUs. While some Zimbabwe populations have experienced recent declines, these populations continue to be large in abundance, and GCF has partnered with ZimParks and landowners in the country to conserve giraffe populations. Angolan giraffes are also managed by range countries where hunting is legal to sustain ecotourism and trophy-hunting activities, which in turn are managed to produce revenues that may be used by range countries and local communities for giraffe conservation activities such as anti-poaching, reintroduction, and habitat preservation and restoration to benefit giraffes in the country. The private sector has contributed significantly to the increase in the subspecies' population through management and by helping restore the subspecies to many parts of its former range (du Raan 2016, p. 3; GCF 2016, unpaginated; Marais et al. 2020b, entire).

Although the Angolan giraffe has experienced some declines in habitat and area of occupancy outside of the three Angolan giraffe units (*e.g.*, within Angola), resiliency and redundancy are increasing since the 1970s with increasing abundance in several populations. The subspecies occurs throughout much of its historical range and maintains ecological representation, including large, connected populations in each of the Angolan giraffe units (Namibia, Botswana, and Zimbabwe). With the recent and near-term projected increasing population trend, expansion of range in Namibia and stable ranges in Botswana and Zimbabwe, and existence of multiple healthy, resilient populations (at least one in each Angolan giraffe unit), the Angolan giraffe exhibits representation, redundancy, and resiliency such that the subspecies is not in danger of extinction. Overall, while threats are ongoing, given the large population sizes for the three Angolan giraffe units in the near term, these threats are not of

such a magnitude that the subspecies is in danger of extinction in any of the Angolan giraffe units.

In summary, we find that the Angolan giraffe is not in danger of extinction in any of the Angolan giraffe units. Thus, there is no portion of the range where the Angolan giraffe may be endangered. After assessing the best scientific and commercial data available, we conclude that because there is no portion of the range in which the Angolan giraffe is endangered, it is necessarily not in danger of extinction throughout all of its range. Because we have determined that there is no portion of the range where the subspecies may be endangered (*i.e.*, the subspecies is also not in danger of extinction throughout a significant portion of its range), we proceed with determining whether Angolan giraffe is threatened (*i.e.*, is likely to become endangered within the foreseeable future throughout all or a significant portion of its range).

Threatened Species Classification

The statutory difference between an endangered species and a threatened species is the timeframe in which the species becomes in danger of extinction. An endangered species is in danger of extinction, and a threatened species is not in danger of extinction but is likely to become so within the foreseeable future. We evaluated whether the Angolan giraffe has a similar risk of extinction within the foreseeable future in all areas across its range by assessing its extinction risk within each Angolan giraffe unit. Because our review indicated that the Angolan giraffe's extinction risk is similar in all areas across its range, we then evaluated whether it may be threatened based upon the "throughout all of its range" component. In undertaking this analysis of whether the Angolan giraffe is threatened throughout all of its range, we reviewed the best scientific and commercial data available regarding threats to the subspecies, the subspecies' responses to those threats, and any associated conservation measures; we then assessed the cumulative effects of those threats and conservation measures under the Act's section 4(a)(1) factors. For the threatened species determination, we examined the same threats that we evaluated for the endangered species determination.

As mentioned above, Angolan giraffes need multiple healthy, resilient populations that are distributed across the subspecies' range to reduce the risk of extinction. After evaluating threats to the subspecies and assessing the cumulative effect of the threats under

the Act's section 4(a)(1) factors, we found that habitat loss, degradation, and fragmentation, and poaching, all of which may be exacerbated by human population growth and climate change, and low genetic diversity are the threats with the greatest potential to affect the subspecies' viability within the foreseeable future.

Habitat loss, fragmentation, or alteration is unlikely on protected lands (government or private) and is otherwise expected to continue in parts of each Angolan giraffe unit. Drought duration, frequency, and intensity are projected to increase within the range of the Angolan giraffe similarly in each Angolan giraffe unit. By 2100, across the subspecies' range, human population size is projected to just more than double under the lower scenario, and to increase almost ninefold under the upper scenario. In turn, Angolan giraffes may face reductions in food quality and availability, and restriction of their movement patterns and ability to access necessary resources. Additionally, although we were unable to quantify potential future increases in poaching, we anticipate that poaching will likely continue in each Angolan giraffe unit with increased food insecurity associated with rapid human population growth and climate change. While plausible future conditions indicate that habitat conditions will decline, human populations will increase, and climate change will increase the duration, frequency, and intensity of drought, there is no evidence suggesting that the subspecies' response to any of these threats will differ in the future.

The overall Angolan giraffe population has increased to 18,626 individuals (20,192 including extralimital populations), which represents an increase of approximately 0.7–2.7 percent per year since the 1970s. The population increase includes populations in formally protected areas such as Etosha National Park and private lands. The population is unlikely to continue growing into the future at the recent rate, given the low starting abundances. Additionally, population trends in the future are dependent upon the continued protections afforded the subspecies by private lands such as those used for ecotourism and sport-hunting. Population trends may be stable or increasing if private landowners continue to conserve Angolan giraffe at their current extent or increase. We find it most likely based on the best available data and past and present trends that private landowners will continue to conserve giraffe at rates comparable to the present. However, protections from

these sources are not guaranteed, and giraffe abundance may decline if those do not continue and/or climate change impacts are not sufficiently mitigated.

Even should populations decline, the Angolan giraffe occurs in three units with populations that are large, connected, and with adequate resiliency to sustain some reductions. Poaching, which is a driving factor in the decline of other giraffe species across the African continent, may be tempered by the relative political stability in the range of the Angolan giraffe. Habitat loss, degradation, and fragmentation are not likely to cause population-level declines to the point that the subspecies is likely to become in danger of extinction within the foreseeable future due to the Angolan giraffe's versatility and diverse diets, as well as to the future decisions of how southern African countries in how giraffes are managed. Angolan giraffes are also managed by range countries where hunting is legal to sustain ecotourism and trophy-hunting activities, which in turn may be managed to produce revenues that are used by range countries and local communities for giraffe conservation activities such as anti-poaching, reintroduction, and habitat preservation and restoration to benefit and address threats to giraffes in the country. The private sector has contributed significantly to the increase in the subspecies' population through management, including by helping restore the subspecies to many parts of its former range (du Raan 2016, pp. 3–11; GCF 2016, unpaginated; Marais et al. 2020b, entire). The subspecies is expected to continue to occur throughout much of its historical range and maintain ecological representation in each of the Angolan giraffe units (Namibia, Botswana, and Zimbabwe). Overall, while threats are projected to increase in magnitude over time, given the large, connected populations in each Angolan giraffe unit, the threats are not of such a magnitude that the subspecies is likely to become in danger of extinction within the foreseeable future in any of the Angolan giraffe units.

In summary, we find that the Angolan giraffe is not likely to become in danger of extinction within the foreseeable future in any areas (*i.e.*, in any of the Angolan giraffe units). Thus, there is no portion of the range where the Angolan giraffe may be threatened. Based on the best scientific and commercial data available, we determine that the Angolan giraffe is not likely to become in danger of extinction within the foreseeable future throughout all or a significant portion of its range.

Determination of Status

Based on the best scientific and commercial data available, we determine that the Angolan giraffe does not meet the definition of an endangered species or a threatened species in accordance with sections 3(6) and 3(20) of the Act. Therefore, we find that listing the Angolan giraffe under the Act's section 4(a)(1) factors is not warranted at this time.

Determination of Status: South African Giraffe

The South African giraffe does not meet the Act's definition of an endangered species or a threatened species. As stated above, we determine a species' classification based upon its regulatory status throughout all of its range when the species has similar extinction risk in all areas across its range at a scale that is biologically appropriate for that species. Conversely, if the extinction risk varies across its range, we determine a species' classification based upon its regulatory status throughout a significant portion of its range. Either way, we begin by determining the scale that is biologically appropriate for a classification determination for that species. For many species, we can divide the range in an infinite number of ways. As discussed above, South African giraffe populations primarily occur in six South African giraffe units (KAZA TFCA, South Africa/Zimbabwe/Mozambique, Malawi, Eswatini, Zinave National Park, and Maputo Special Reserve), and while South African giraffes may periodically interact within these countries, we do not expect interactions among these units because there is no connectivity between the units. While information about any South African giraffe populations other than these six South African giraffe units is limited, the best available data indicate that threats and the subspecies' response to those threats are similar in any other populations for which we lack information. In summary, the South African giraffe unit is the unit that provides the appropriate scale to assess extinction risk for the South African giraffe.

Endangered Species Classification

We evaluated whether the South African giraffe has a similar risk of extinction in all areas across its range by assessing its extinction risk in each South African giraffe unit. Our review indicated that the South African giraffe's extinction risk is similar in all areas across its range. Therefore, we evaluated whether it may be endangered based upon the "throughout all of its

range" component. In undertaking this analysis of whether the South African giraffe is endangered throughout all of its range, we reviewed the best scientific and commercial data available regarding threats to the subspecies, the subspecies' responses to those threats, and any associated conservation measures; we then assessed the cumulative effects of those threats and conservation measures under the Act's section 4(a)(1) factors. For the endangered species determination, we examined the following threats: habitat loss, degradation, and fragmentation (Factor A), predation and disease (Factor C), and poaching and hunting (Factor B), all of which may be exacerbated by increasing human populations, effects from climate change (including the inter-related effects of civil unrest and human food insecurity), and low genetic diversity (Factor E), as well as cumulative effects. Additionally, the maintenance of private lands for activities such as personal use, tourism, and hunting (Factor E) impacts the subspecies because private lands with wild giraffes in southern Africa comprise large proportions of the respective populations.

South African giraffes need multiple healthy, resilient populations that are distributed across the subspecies' range to reduce the risk of extinction. After evaluating threats to the subspecies and assessing the cumulative effect of the threats under the Act's section 4(a)(1) factors, we found that habitat loss, degradation, and fragmentation, and poaching, all of which may be exacerbated by ongoing and near-term effects of human population growth and climate change, are the threats with the greatest potential to affect the subspecies' near-term viability. We also considered potential threats such as predation and disease, and while individuals are affected by these threats, there is no information to suggest population-level or subspecies-level effects.

The current total population size is approximately 29,390 individuals, which is 367 percent of the population size of 8,000 in 1979 (Muller et al. 2018, supplement, p. 2). This represents an increase of approximately 2.7–3.2 percent per year since 1979. The private sector has been largely responsible for restoring giraffes to many parts of their former natural range in South Africa (Deacon and Parker 2016, p. 5), in which thousands of private farms account for about 50 percent of the total South African giraffe population (Deacon and Tutchings 2018, p. 46; Deacon and Parker 2016, pp. 3–5). However, population increases have

also occurred on formally protected areas as well over the last few decades (Deacon and Parker 2016, p. 1).

Large, connected populations remain within the KAZA TFCA and South Africa/Zimbabwe/Mozambique units, and smaller populations occur on protected lands in the Malawi, Eswatini, Zinave National Park, and Maputo Special Reserve units, where the South African giraffe can meet its needs. The best available information indicates that any combined effects from habitat loss, degradation, and fragmentation, and from poaching, are not causing population-level declines in the near term. South African giraffes are also managed by range countries where hunting is legal to sustain ecotourism and trophy-hunting activities, which in turn may be managed to produce revenues that are used by range countries and local communities for giraffe conservation activities such as anti-poaching, reintroduction, and habitat preservation and restoration to benefit and address the threats to giraffes in the country.

Although the South African giraffe has experienced some declines in habitat and area of occupancy, the resiliency and redundancy of the subspecies has increased from historical levels with introduced populations and increasing abundance in all South African giraffe units. The subspecies occurs throughout much of its historical range and maintains ecological representation, including large, connected populations in the KAZA TFCA and South Africa/Zimbabwe/Mozambique units. With the recent and near-term projected increasing population trend, expansion of range in the South Africa/Zimbabwe/Mozambique unit and Eswatini and Malawi units, reintroduction of giraffes into the Zinave and Maputo units, the stable range in KAZA TFCA, and the existence of multiple healthy, resilient populations (at least one in each South African giraffe unit), the South African giraffe exhibits representation, redundancy, and resiliency such that the subspecies is not in danger of extinction. Overall, while threats are ongoing, given the large population sizes for two South African giraffe units and protected nature of the remaining four units, in the near term, these threats are not of such a magnitude that the subspecies is in danger of extinction in any of the South African giraffe units.

In summary, we find that the South African giraffe is not in danger of extinction in any of the South African giraffe units. Thus, there is no portion of the range where the South African giraffe may be endangered. After

assessing the best scientific and commercial data available, we conclude that because there is no portion of the range in which the South African giraffe is endangered, it is necessarily not in danger of extinction throughout all of its range. Because we have determined that there is no portion of the range where the subspecies may be endangered (*i.e.*, the species is also not in danger of extinction throughout a significant portion of its range), we proceed with determining whether South African giraffe is threatened (*i.e.*, is likely to become endangered within the foreseeable future throughout all or a significant portion of its range).

Threatened Species Classification

The statutory difference between an endangered species and a threatened species is the timeframe in which the species becomes in danger of extinction. An endangered species is in danger of extinction, and a threatened species is not in danger of extinction but is likely to become so within the foreseeable future. We evaluated whether the South African giraffe has a similar risk of extinction within the foreseeable future in all areas across its range by assessing its extinction risk within each South African giraffe unit.

For the threatened classification, we evaluated whether the South African giraffe has a similar risk of extinction within the foreseeable future in all areas across its range by assessing its extinction risk within each South African giraffe unit. Because our review indicated that the South African giraffe's extinction risk varies across its range, we then evaluated whether it may be threatened based upon the "throughout a significant portion of its range" component. We evaluated the portion of the range that includes the South African giraffe units where the South African giraffe may be threatened—the Malawi, Eswatini, Zinave National Park, and Maputo Special Reserve units. In the remaining South African giraffe units of KAZA TFCA and South Africa/Zimbabwe/Mozambique, the South African giraffe is not likely to become in danger of extinction within the foreseeable future, because the populations are large, interconnected, and have increasing population trends, so we are not including those units in the portion that we are evaluating for the threatened classification.

As mentioned above, South African giraffes need multiple healthy, resilient populations that are distributed across the subspecies' range to reduce the risk of extinction. After evaluating threats to the subspecies and assessing the

cumulative effect of the threats under the Act's section 4(a)(1) factors, we found that habitat loss, degradation, and fragmentation, and poaching, all of which may be exacerbated by human population growth, climate change, and low genetic diversity, are the threats with the greatest potential to affect the subspecies' viability within the foreseeable future.

Habitat loss, fragmentation, or degradation is unlikely on protected lands (government or private) and is otherwise expected to continue in parts of each South African giraffe unit. Drought duration, frequency, and intensity are projected to increase within the range of the South African giraffe similarly in each South African giraffe unit. Human population size is projected to increase by approximately 27 percent under the lower scenario and to increase almost sixfold under the upper scenario across the subspecies' range by 2100. In turn, South African giraffes may face reductions in food quality and availability, and restriction of their movement patterns and ability to access necessary resources. Additionally, although we were unable to quantify potential future increases in poaching, we anticipate that poaching will likely continue in each South African giraffe unit with increased food insecurity associated with rapid human population growth and climate change. While plausible future conditions indicate that habitat conditions will decline, human populations will increase, and climate change will increase the duration, frequency, and intensity of drought, there is no evidence suggesting a change in the subspecies' past response to any of these threats in the future.

The overall South African giraffe population has increased to 29,390 individuals, 367 percent of the population size of 8,000 in 1979, which represents an increase of approximately 2.7–3.2 percent per year over this time. The population is unlikely to continue growing into the future at the recent rate given the low starting abundances. Additionally, population trends in the future are dependent upon the continued protections afforded the subspecies by private lands such as those used for tourism and private game farms. The population outside of private lands has increased since the 1970s, and population trends may be stable or increasing if private landowners continue to conserve South African giraffe at their current extent or increase. We find it most likely based on the best available data and past and present trends that private landowners will continue to conserve giraffe at rates

comparable to the present. However, protections from these sources are not guaranteed, and giraffe abundance may decline if those do not continue and/or climate change impacts are not sufficiently mitigated.

Even should populations decline, both the KAZA TFCA and South Africa/Zimbabwe/Mozambique units have populations that are large, connected, and that have adequate resiliency to sustain some reductions. Poaching, which is a driving factor in the decline of other giraffe species across the African continent, may be tempered by the relative political stability in the range of the South African giraffe. Habitat loss, degradation, and fragmentation are not likely to cause population-level declines to the point that the subspecies is likely to become in danger of extinction within the foreseeable future due to the South African giraffe's versatility and diverse diets, as well as to the future decisions of southern African countries in how giraffes are managed. South African giraffes are also managed by range countries where hunting is legal to sustain ecotourism and trophy-hunting activities, which in turn may be managed to produce revenues that are used by range countries and local communities for giraffe conservation activities such as anti-poaching, reintroduction, and habitat preservation and restoration to benefit and address the threats to giraffes in the country. The private sector has contributed significantly to the increase in the subspecies' population through management, including by helping restore the subspecies to many parts of its former range. Overall, while continued threats are projected, given the large population sizes for the KAZA TFCA and South Africa/Zimbabwe/Mozambique units, the threats are not of such a magnitude that the subspecies is likely to become in danger of extinction within the foreseeable future. However, the rest of the range contains much smaller populations that are more vulnerable to these threats into the future. In summary, we find that the South African giraffe is not likely to become in danger of extinction within the foreseeable future in either the KAZA TFCA or the South Africa/Zimbabwe/Mozambique units, but it may be threatened in a portion of the range—the Malawi, Eswatini, Zinave National Park, and Maputo Special Reserve units.

When assessing whether a species is endangered or threatened throughout a significant portion of its range, we address two questions because we must determine whether there is any portion

of the species' range for which both (1) the portion is "significant" (the significance question) and (2) the species is in danger of extinction or likely to become in danger of extinction within the foreseeable future throughout that portion (the status question). We first addressed the significance question. In undertaking this analysis of whether any portion of the range is significant based on its conservation value for the subspecies, we considered whether (1) the portion is a sufficiently large proportion of the current range such that it necessarily provides an important conservation value for the subspecies or (2) the portion otherwise contributes an important conservation value for the subspecies. The combined geographical size of the Malawi, Eswatini, Zinave National Park, and Maputo Special Reserve units is a very small proportion (approximately 2 percent) of the current range of the South African giraffe. This portion of the range also does not otherwise contribute an important conservation value for the subspecies. The portion does not currently or recently contain high abundance or density of individuals or populations of the subspecies relative to its geographic size. Additionally, the populations in Malawi and Eswatini are likely extralimital populations introduced outside of the historical range. The reintroduced populations at Zinave National Park and Maputo Special Reserve are still quite small (fewer than 50 giraffes at each location). The portion of the range does not contain important habitat features for the subspecies' conservation that are not found elsewhere within the range. The portion of the range does not connect other more significant populations and does not increase genetic diversity because these populations were reintroduced from other populations of southern giraffe. Among the similar habitat features, across the range, the portion does not contain geographical areas of any specific higher or unique value. We therefore find that the Malawi, Eswatini, Zinave National Park, and Maputo Special Reserve units portion is not significant. As a result of our finding that this portion of the range is not "significant," we do not need to determine whether the South African giraffe is likely to become in danger of extinction within the foreseeable future throughout this portion of the range.

Because no portion of the subspecies' range is significant, there is no basis to determine that the subspecies is likely

to become in danger of extinction within the foreseeable future throughout a significant portion of its range. In reaching this conclusion, we did not apply the aspects of the 2014 SPR Policy, including the definition of "significant," that courts have held to be invalid.

Determination of Status

Based on the best scientific and commercial data available, we determine that the South African giraffe does not meet the definition of an endangered species or a threatened species in accordance with sections 3(6) and 3(20) of the Act. Therefore, we find that listing the South African giraffe under the Act's section 4(a)(1) factors is not warranted at this time.

II. Proposed Listing Determinations for the West African Giraffe, Kordofan Giraffe, Nubian Giraffe, Reticulated Giraffe, and Masai Giraffe

Background

A thorough review of the taxonomy, life history, and ecology of the northern giraffe (which consists of three subspecies: West African giraffe, Kordofan giraffe, and Nubian giraffe), reticulated giraffe, and Masai giraffe is presented in each species' respective SSA report (Service 2024a, entire; Service 2024b, entire; Service 2024c, entire).

Giraffes are the tallest living terrestrial animal and the largest ruminant on Earth. Life-history traits of multiple giraffe species have been reported from several locations across their ranges and demonstrate both a strong degree of consistency of traits across regions as well as a large amount of individual variation (Bercovitch and Berry 2009, p. 535). No difference in behavior or development among species has been reported (San Diego Zoo Wildlife Alliance (SDZWA) 2023, unpaginated). Therefore, we consider all giraffes to have similar needs and life-history traits.

The giraffe's primary activity is feeding, and they consume a variety of leaves, stems, flowers, and fruits (Dagg 2019, p. 24; Muller et al. 2016, p. 6). Because giraffes have high metabolic and reproductive requirements, they need to consume large quantities of food throughout the year (Parker and Bernard 2005, p. 207). Giraffes have been noted to forage on at least 100 different plant species, although *Acacia*, *Commiphora*, and *Terminalia* species are major staples (Kingdon 1997, p. 494; Muller et al. 2016, p. 6). *Acacia* trees or bushes are

a preferred resource and are fed on in high proportions wherever giraffes occur (Dagg 2019, p. 25).

Giraffes need high-quality forage year-round to maintain their high-energy budget; this is particularly true for females, which have long gestation periods and are pregnant for most of their adult lives. Each population has a diverse diet, and the food that the giraffes select throughout the year largely depends on the seasonal changes in the phenology of plant species (Pellew 1984, p. 74) or, for females, whether they are nursing (Caister et al. 2003, p. 209; Saito and Idani 2018, p. 15). Generally, giraffes do not show large-scale seasonal migrations, but within individual home ranges, small-scale seasonal movements occur primarily based on food resources (Pellew 1984, p. 65; Brown et al. 2023, p. 7; Fennessy 2009, p. 324). Additionally, because giraffes engage in small-scale seasonal movements based on changes in the distribution of food resources, they need adequate space within which to move and find high-quality food that meets their metabolic needs. Within their home ranges, giraffes also need access to mates.

Giraffes live in a complex society characterized by loose subgroup composition, a pattern of sexual segregation, and longer-term relationships that are typical in fission-fusion societies (Bercovitch et al. 2006, p. 314; Carter et al. 2013, p. 390; Dagg 2019, p. 39). Females are sexually mature at around 4–5 years old, and the average gestation period is about 15 months; thus, females produce their first offspring at around 5 to 6 years old (Pratt and Anderson 1982, p. 481; Berry and Bercovitch 2012, p. 159; Dagg 2019, p. 140). The calving interval can be highly variable, with a mean of 20 months, and is influenced by survival of the first calf and food quality (Pellew 1983, pp. 280–281; Lee and Strauss 2016, p. 5, citing many authors).

Giraffes are versatile and have adapted to a variety of habitats, ranging from desert landscapes to woodland and savanna ecosystems, forming a wide arc across sub-Saharan Africa covering west, central, east, and southern Africa (Muller et al. 2016, p. 2; O'Connor et al. 2019, p. 286). Giraffes are most often found in savanna and woodland habitats and always near trees or bushes (Dagg 1971, p. 4). Northern, reticulated, Masai, and southern giraffes occur in multiple countries in sub-Saharan Africa (see table 1).

TABLE 1—FOUR SPECIES OF GIRAFFES AND THE COUNTRIES IN WHICH THEY OCCUR IN AFRICA

Northern giraffe	Reticulated giraffe	Masai giraffe	Southern giraffe
Cameroon	Ethiopia	Kenya	Angola.
Central African Republic	Kenya	Rwanda	Botswana.
Chad .....	.....	Tanzania	Eswatini.
Democratic Republic of the Congo .....	.....	Zambia	Malawi.
Ethiopia .....	.....	.....	Mozambique.
Kenya .....	.....	.....	Namibia.
Niger .....	.....	.....	South Africa.
South Sudan .....	.....	.....	Zambia.
Uganda .....	.....	.....	Zimbabwe.

Regulatory and Analytical Framework

Regulatory Framework

Section 4 of the Act (16 U.S.C. 1533) and the implementing regulations in title 50 of the Code of Federal Regulations set forth the procedures for determining whether a species is an endangered species or a threatened species, and issuing protective regulations for threatened species.

The Act defines an “endangered species” as a species that is in danger of extinction throughout all or a significant portion of its range, and a “threatened species” as a species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. The Act requires that we determine whether any species is an endangered species or a threatened species because of any of the following factors:

- (A) The present or threatened destruction, modification, or curtailment of its habitat or range;
- (B) Overutilization for commercial, recreational, scientific, or educational purposes;
- (C) Disease or predation;
- (D) The inadequacy of existing regulatory mechanisms; or
- (E) Other natural or manmade factors affecting its continued existence.

These factors represent broad categories of natural or human-caused actions or conditions that could have an effect on a species’ continued existence. In evaluating these actions and conditions, we look for those that may have a negative effect on individuals of the species, as well as other actions or conditions that may ameliorate any negative effects or may have positive effects.

We use the term “threat” to refer in general to actions or conditions that are known to or are reasonably likely to negatively affect individuals of a species. The term “threat” includes actions or conditions that have a direct impact on individuals (direct impacts), as well as those that affect individuals through alteration of their habitat or required resources (stressors). The term

“threat” may encompass—either together or separately—the source of the action or condition or the action or condition itself.

However, the mere identification of any threat(s) does not necessarily mean that the species meets the statutory definition of an “endangered species” or a “threatened species.” In determining whether a species meets either definition, we must evaluate all identified threats by considering the species’ expected response and the effects of the threats—in light of those actions and conditions that will ameliorate the threats—on an individual, population, and species level. We evaluate each threat and its expected effects on the species, then analyze the cumulative effect of all of the threats on the species as a whole. We also consider the cumulative effect of the threats in light of those actions and conditions that will have positive effects on the species, such as any existing regulatory mechanisms or conservation efforts. The Secretary determines whether the species meets the definition of an “endangered species” or a “threatened species” only after conducting this cumulative analysis and describing the expected effect on the species.

The Act does not define the term “foreseeable future,” which appears in the statutory definition of “threatened species.” Our implementing regulations at 50 CFR 424.11(d) set forth a framework for evaluating the foreseeable future on a case-by-case basis, which is further described in the 2009 Memorandum Opinion on the foreseeable future from the Department of the Interior, Office of the Solicitor (M–37021, January 16, 2009; “M–Opinion,” available online at <https://www.doi.gov/sites/doi.opengov.ibmcloud.com/files/uploads/M-37021.pdf>). The foreseeable future extends as far into the future as the Services can make reasonably reliable predictions about the threats to the species and the species’ responses to those threats. We need not identify the foreseeable future

in terms of a specific period of time. We will describe the foreseeable future on a case-by-case basis, using the best available data and taking into account considerations such as the species’ life-history characteristics, threat projection timeframes, and environmental variability. In other words, the foreseeable future is the period of time over which we can make reasonably reliable predictions. “Reliable” does not mean “certain”; it means sufficient to provide a reasonable degree of confidence in the prediction, in light of the conservation purposes of the Act.

Analytical Framework

The SSA reports document the results of our comprehensive biological review of the best scientific and commercial data regarding the status of the species, including an assessment of the potential threats to the species. The SSA reports do not represent our decision on whether these species should be proposed for listing as an endangered or threatened species under the Act. However, they do provide the scientific basis that informs our regulatory decisions, which involve the further application of standards within the Act and its implementing regulations and policies.

To assess the viability of northern giraffe, reticulated giraffe, Masai giraffe, and southern giraffe, we used the three conservation biology principles of resiliency, redundancy, and representation (Shaffer and Stein 2000, pp. 306–310). Briefly, resiliency is the ability of the species to withstand environmental and demographic stochasticity (for example, wet or dry, warm or cold years); redundancy is the ability of the species to withstand catastrophic events (for example, droughts, large pollution events); and representation is the ability of the species to adapt to both near-term and long-term changes in its physical and biological environment (for example, climate conditions, pathogens). In general, species viability will increase with increases in (and decrease with

decreases in) resiliency, redundancy, and representation (Smith et al. 2018, p. 306). Using these principles, we identified these species' ecological requirements for survival and reproduction at the individual, population, and species levels, and described the beneficial and risk factors influencing these species' viability.

The SSA process can be categorized into three sequential stages. During the first stage, we evaluated these individual species' life-history needs. The next stage involved an assessment of the historical and current condition of these species' demographics and habitat characteristics, including an explanation of how these species arrived at their current condition. The final stage of the SSA involved making predictions about these species' responses to positive and negative environmental and anthropogenic influences. Throughout all of these stages, we used the best available information to characterize viability as the ability of a species to sustain populations in the wild over time, which we then used to inform our regulatory decision.

The following is a summary of the key results and conclusions from the SSA reports; the full SSA reports can be found at Docket FWS-HQ-ES-2024-0157 on <https://www.regulations.gov>.

Summary of Biological Status and Threats

In this discussion, we review the biological condition of the West African giraffe, Kordofan giraffe, Nubian giraffe, reticulated giraffe, Masai giraffe, and their resources, and the threats that influence these species' current and future condition, to assess their overall viability and the risks to that viability. We analyze these factors both individually and cumulatively to determine the current condition of these species and project their future condition under plausible future scenarios.

Species Needs

We consider all giraffe species to have similar needs because no difference in behavior or development among species has been reported (SDZWA 2023, unpaginated). Therefore, West African, Kordofan, and Nubian, reticulated, and Masai giraffes have the same requirements to have high viability; they need to maintain representation (adaptive capacity) by having multiple, robust populations broadly distributed across diverse environments with spatial heterogeneity.

Giraffes need high-quality forage year-round to maintain their high-energy

budget, this is particularly true for females, which have long gestation periods and are pregnant for most of their adult lives. Each population has a diverse diet, and the food that giraffes select throughout the year largely depends on the seasonal changes in the phenology of plant species (Pellew 1984, p. 74) or, for females, whether they are nursing (Caister et al. 2003, p. 209; Saito and Idani 2018, p. 15). Anthropogenic influences strongly affect the giraffe's use of space (Brown et al. 2023, p. 8), physical and geographic barriers such as rivers, fencing, and urbanization (Fennessy et al. 2009, p. 324; Le Pendu and Ciofolo 1999, p. 350; Perry 1978, p. 80). Because giraffes engage in small-scale seasonal movements based on changes in the distribution of food resources, they need adequate space to move and find high-quality food that meets their metabolic needs. Within their home ranges, giraffes also need access to mates.

Giraffe populations with robust abundances, population growth rates, and quality habitat are more resilient than populations that are less genetically or demographically healthy. Populations of giraffes that are distributed broadly across varying ecological conditions are more resilient to regional-scale environmental stochasticity; a broad distribution also reduces the chance that all populations (individuals) will experience catastrophic events concurrently. Giraffe evolutionary potential is maximized in large, connected populations (Coimbra et al. 2021, p. 2935), and a broad distribution of giraffe populations facilitates the development of unique ecological adaptations in different populations. Maintaining connectivity between populations fosters population-level genetic diversity (heterozygosity) via gene flow and increased evolutionary potential of these species.

The combination of life-history traits of giraffes that enhance their adaptive capacity also limits their reproductive output and creates a complex dynamic. Giraffes can utilize diverse food resources and cover large areas as resource availability becomes more variable (Dagg 2019, pp. 26–27; Muller et al. 2016, p. 6; Pellew 1984, p. 78; McQualter et al. 2015, p. 3), but their slow reproductive rates (Pratt and Anderson 1982, p. 481; Berry and Bercovitch 2012, p. 159; Dagg 2019, p. 140; Pellew 1983, pp. 280–281; Lee and Strauss 2016, p. 5, citing many authors) may prevent them from effectively responding to rapid environmental changes. Thus, giraffe viability requires high population abundances, large effective population sizes, and

sufficient, high-quality (nutritious and unfragmented) habitat distributed across heterogeneous environments.

Factors Influencing Giraffe Viability

In this discussion, we first review the factors that influence the condition of all giraffe species, which are changing habitat conditions (causing habitat loss, degradation, and fragmentation) and poaching; these factors are exacerbated by rapid human population growth and climate change. We then review any additional details regarding these threats and any additional factors (e.g., disease) that influence each species' or subspecies' current and future condition, to assess overall viability and the risks to that viability.

Changing Habitat Conditions

Changing habitat conditions affect giraffes directly or indirectly through reduced food availability and reduced or obstructed movements to find necessary resources, which negatively affect giraffe's survival and recruitment. The sources of habitat loss, degradation, and fragmentation are conversion of natural habitats and natural vegetation to croplands and rangelands, urbanization, deforestation, production of fuelwood, and climate change. Changing habitat conditions also result in increased risk of human conflict (e.g., war) and human-wildlife conflict (e.g., retaliation and poaching).

Africa is the fastest growing region in the world (Sakho-Jimbira and Hathie 2020, p. 3). In sub-Saharan Africa, the human population is approximately 1.2 billion people (WorldBank 2023, unpaginated). Annual population growth has ranged from 2.5 to 2.9 percent over the last 35 years, and the sub-Saharan African population is projected to double by 2050 and triple by 2100 (Intergovernmental Panel on Climate Change (IPCC) 2022, p. 1294). The exponential growth of the human population and the demand for land and resources are causing giraffes to explore new areas in search of food (Suraud et al. 2012, p. 581; Ferguson et al. 2020, p. 5). Conversion of natural habitats into farmlands and urban development not only affects giraffes through loss of food, but also contributes to the fragmentation of their habitats, making it more difficult for giraffes to find suitable feeding, drinking, breeding, and sheltering areas (Ali et al. 2023, p. 178). Because of habitat fragmentation, giraffes need to find alternative routes, often traversing through farmlands, feeding on crops, and increasing the risk of human-wildlife conflict (Ali et al. 2023, entire).

Giraffes always occur near trees and/or bushes and rely on them for food. Therefore, forest loss, while not a direct measure of impacts to giraffe habitat, can be considered a reasonable surrogate for changing habitat conditions for giraffes. The rate of net forest loss has increased in Africa in each of the three decades since 1990, and Africa had the highest global annual rate of forest loss from 2010 to 2020 at 3.9 million hectares (ha) (Food and Agricultural Organization of the United Nations (FAO) 2020, p. 15). Large declines in “other wooded land” (canopy cover of 5 to 10 percent) were also recorded from 1990–2020 in all African subregions (FAO 2020, p. 24).

One source of habitat loss is charcoal production. One billion people—roughly four of every five—in sub-Saharan Africa rely on cooking fuels used in open fires or basic stoves (IEA 2023, p. 14). Wood removal associated with fuelwood increased in all regions of Africa between 1990 and 2018 (FAO 2020, pp. 112–113). Woody vegetation, particularly Acacia trees, is the main source of charcoal production in the giraffe’s range (Kiruki et al. 2017, p. 476; Abera et al. 2022, p. 10; Abate and Abate 2017, p. 9). Acacia trees also are a preferred food source of giraffes; therefore, a reduction of Acacia trees due to the demand for fuelwood reduces the availability of high-quality food resources for giraffes. Charcoal production also results in overall woodland degradation because it exacerbates vegetation loss, soil erosion, and creation of associated access roads (Kiruki et al. 2017, pp. 476, 478).

Related effects from increased human population growth and land use changes—With a rapidly increasing human population, pastoralists (livestock farmers) across Africa are experiencing large-scale loss of rangeland access because of agriculture expansion, private ranches, wildlife reserves, and urbanization (Holechek et al. 2017, p. 275; Brottem 2021, p. 2). The threat to the livelihood of pastoralists intensifies human conflicts, and this breakdown of traditional pastoral and subsistence agricultural systems is a principal factor of civil unrest in Africa (Holechek et al. 2017, p. 275, citing many authors).

Most wars in sub-Saharan Africa have been civil conflicts fought within the boundaries of a single sovereign country (State Failure 2001, cited in Glew and Hudson 2007, p. 141). However, internal conflicts may overspill defined boundaries, affecting both a country and its neighbors for substantial lengths of time (Commission for Africa, 2005, cited in Glew and Hudson 2007, p. 141). Civil

unrest does not usually directly target ecological resources in pursuit of a military outcome, but impacts to wildlife occur because of resource exploitation during periods of lawlessness (Glew and Hudson 2007, p. 7, citing many authors; Dudley et al. 2002, p. 326). However, large mammals (when available) are often a vital food source for isolated military or paramilitary groups operating within war zones and disputed territories (Plumptre et al. 1997, p. 271; Dudley et al. 2002, p. 322). Additionally, wildlife products are often sold or bartered for food, arms, ammunition, or other goods and services (Dudley et al. 2002, p. 322). Civil unrest also causes significant displacement of people (Badiora 2017, p. 316; Davis 2019, p. 180; Glew and Hudson 2007, p. 141). Refugee encampments are often associated with severe environmental degradation from the use of slash-and-burn agriculture and the overharvesting of vegetation for fuel, food, and construction materials. This, in turn, results in widespread deforestation and erosion, and takes a heavy toll on wildlife and habitats in affected areas (Plumptre et al. 1997, p. 326; Pech 1995, in Dudley et al. 2002, p. 322).

Poaching

Poaching is a primary threat to the giraffe’s overall survival throughout Africa (Giraffe Conservation Foundation 2022, p. 22; Lee et al. 2023, p. 346; Muller et al. 2018, p. 7). The reasons for illegally killing giraffes vary greatly across Africa, with local context playing a significant role in shaping human-giraffe interactions (Ruppert 2020, chapter 2). Poverty, tradition, and lack of economic opportunity drives wildlife poaching (Knapp 2012, p. 443; Lindsey et al. 2012, p. 33). Poaching also tends to spike when food shortages are severe, and when the demand for agricultural labor is low (Lindsey et al. 2012, p. 5), a common impact of drought (Vicente-Serrano et al. 2022, p. 9, Engelbrecht et al. 2024, p. 178). Additionally, highly organized poachers, individuals linked to international criminal networks, and military personnel are involved in the killing or theft of wildlife resources, including giraffes (Douglas and Alie 2014, p. 273, citing many authors; Humphreys and Smith 2011, pp. 131–137; Wildlife Justice Commission 2023, p. 7; Interpol 2024, unpaginated). The COVID–19 pandemic caused a large reduction in tourism worldwide and resulted in economic hardship for many people throughout Africa. The loss of income in an already poverty-stricken area resulted in increased poaching of

giraffe for bushmeat to feed families (Krein 2021, p. 75).

Bushmeat is preferred in rural areas because it is normally cheaper than domesticated meat alternatives, whereas in urban areas bushmeat is considered a luxury (Lindsey et al. 2012, p. 6; Bowen-Jones et al. 2002, p. 11; Wilkie and Carpenter 1999, p. 940; Petrozzi et al. 2016, p. 546). Bushmeat consumption is consistently more prevalent closer to human settlements, although increasing national and international demand is driving commercialization of bushmeat (Lindsey et al. 2012, p. 6). Killing for bushmeat is more severe in poorer countries, in those countries with high human population densities, and during periods of political instability (Lindsey et al. 2011, p. 97).

In summary, the primary threats of changing habitat conditions and poaching are directly influenced by rapid human population growth and climate change, which also influence these threats through increased human-wildlife conflicts. The combination of these threats works synergistically to affect all giraffe species.

Factors Influencing Northern Giraffe

Factors that influence West African, Kordofan, and Nubian giraffes (the three subspecies of northern giraffe), are generally similar within and among populations, with differences in magnitude. Those factors include a combination of human actions that threaten the northern giraffe’s viability as well as conservation efforts and regulatory measures that aim to benefit and protect northern giraffes. Because northern giraffes overlap with humans and domesticated livestock, they rely on the same natural resources. Human-wildlife conflicts occur when wildlife and humans compete for the same resources (Uganda Wildlife Authority (UWA) 2018, p. 49).

The primary threats to the northern giraffe include changing habitat conditions caused by habitat loss, fragmentation, and degradation, and poaching, all of which are exacerbated by rapid human population growth as well as climate change through drought and extreme rainfall (Huho and Mugalavai 2010, entire; Lam et al. 2023, entire; Scholte et al. 2018, p. 2). However, other threats affect northern giraffes directly or compound these primary threats, such as low genetic diversity. We also considered potential threats such as predation and disease, and while individuals may be affected by these two threats, the best available information does not indicate population-level or species-level effects.

Multiple studies show concurrent deforestation or loss of woody cover (giraffe foraging habitat and cover) with increases in cropland and settlements directly within the range of the northern giraffe. The degree of forest loss from 2001–2023 was variable across the subspecies of the northern giraffe. West African giraffe lost minimal (less than 1 ha) forest area from 2001–2023, but already had low forest cover by 2000. However, in non-forested areas the subspecies experienced a high degree of cropland development within and between its two populations from 2003 to 2019 (Potapov et al. 2021, p. 19). Most of the forest loss within the range of the northern giraffe occurred in the range of the Nubian giraffe subspecies (29.3 kha of tree cover, equivalent to a 2.5 percent decrease). Across the full range of the Nubian giraffe, the primary driver of forest loss was shifting agriculture, defined as small- to medium-scale forest and shrubland conversion for agriculture (Curtis et al. 2018, p. 1108). Similarly, the primary driver of forest loss for Kordofan giraffe was shifting agriculture (Curtis et al. 2018, p. 1108), equating to a loss of tree cover across its range from 2001–2023, or a 0.55 percent decrease (GFW 2024, unpaginated). Substantial crop development has also occurred between populations for all three subspecies from 2003–2019, which can limit dispersal and gene flow between populations, and can restrict access to water resources (Potapov et al. 2021, p. 19).

Civil unrest is a longstanding and significant ongoing concern throughout the range of the northern giraffe. Armed conflicts have been ongoing for years in Niger. There was a coup in July 2023, and military authorities continue to run the government (British Broadcasting Corporation (BBC) 2024, entire). Insecurity is also caused from neighboring countries; in the border area between Burkina Faso, Mali, and Niger, attacks by non-state armed groups affiliated with either al-Qaeda or the Islamic State continue to force thousands of people to flee (United Nations Security Council 2023, p. 1; United Nations Refugee Agency (UNHCR) 2021, entire).

In the range of the Kordofan giraffe, ethnic conflicts have increased insecurity in the region and wildlife populations suffered heavy losses due to the widespread proliferation of guns in this region (Wildlife Conservation Society (WCS) 2017, unpaginated; Bouché et al. 2011, p. 7008; Ruggiero 1984, p. 12). Waza National Park in Cameroon, Garamba National Park in the DRC, and the Northern Central

African Republic (CAR) are situated in areas with hostilities, with armed poachers and various rebel groups (Bouché et al. 2009, p. 995; Elkan et al. 2015, p. 4; Bouché et al. 2011, p. 7008; Ruggiero 1984, p. 12). Waza National Park in Cameroon, which contains the second largest population of Kordofan giraffes, has suffered from the rise of the Boko Haram insurgency that has caused a major security threat to the northern regions of the country and has effectively halted any wildlife conservation or surveillance in the park since 2015 (Roland 2018, cited in Marias et al. 2019, p. 3; Elkan et al. 2015, p. 4). While terrorist activities currently remain relatively far from Zakouma National Park, where 50 percent of the Kordofan giraffe population exists, they do pose threats to other regions that may have remnant giraffe populations (Marais et al. 2020c, p. 3).

This pattern of destabilization across regions, combined with refugee migration, is characteristic of armed conflicts in west, central, and east Africa (Dudley et al. 2002, p. 322). As stated above, refugee encampments are often associated with severe environmental degradation from the use of slash-and-burn agriculture and the overharvesting of vegetation for fuel, food, and construction materials. This, in turn, results in widespread deforestation and erosion, and takes a heavy toll on wildlife and habitats in affected areas (Plumptre et al. 1997, p. 326; Pech 1995, in Dudley et al. 2002, p. 322).

In summary, changing habitat conditions because of habitat loss, degradation, and fragmentation, primarily due to agriculture expansion, urbanization, and fuelwood production, are considered historical, ongoing, and imminent threats to the West African, Kordofan, and Nubian giraffes. Changing habitat conditions reduce the availability of high-quality food and reduce foraging habitat, protective cover, and connectivity for giraffes, and these threats are anticipated to continue in the future, exacerbated by the increased pressure placed on land use and natural resources from a rapidly increasing human population and climate change (including the inter-related effects such as civil unrest and human food insecurity).

Poaching

The reasons for illegally killing giraffes vary greatly across Africa, with local context playing a significant role in shaping human-giraffe interactions (Ruppert 2020, chapter 2). Poaching has reduced the numbers of West African,

Kordofan, and Nubian giraffes. Many populations have been extirpated or have been severely reduced by poaching. Currently, there has been limited effectiveness in reducing poaching with a few successes, like the West African population in Niger and Zakouma National Park in Chad.

Illegal killing drove local extirpations of the West African giraffe in the 1970s and 1980s, which culminated with only an estimated 49 individuals remaining by 1996 in a single area in Niger (Gašparová et al. 2024, p. 2). This population has increased, partially because of the launch of several community projects that effectively reduced poaching of giraffe by locals (Gašparová et al. 2024, p. 5). The Government of Niger made concerted efforts to enforce legislation preventing the illegal killing of giraffes in the mid-1990s, further supported by a community education and awareness campaign (Suraud et al. 2012, p. 577; Ferguson et al. 2020, pp. 2–4).

For the Kordofan giraffe, poaching has resulted in severe reductions in giraffe populations (D'haen et al. 2019, p. 11403; Bouche et al. 2011, pp. 6–11). In countries where there is significant political and social instability, such as in CAR and the DRC, funding and management of protected areas is insufficient to eliminate poaching. One of the few exceptions is Zakouma National Park in Chad, which is the only park in central Africa with increasing numbers of megaherbivores (including giraffes) because of a high number of rangers, long-term European Union funding, and political support (Scholte 2021, pp. 4–6). The population of Kordofan giraffe is 2,297 individuals (Brown et al. 2021, p. 6). Zakouma National Park holds approximately 50 percent of the population of Kordofan giraffes (Brown et al. 2021, p. 6; Marais et al. 2020c, p. 4).

Populations of Nubian giraffe in Uganda have declined as much as 90 percent from the 1960s due to increased poaching because of political and social instability across their historical range (UWA 2018, p. 43). Overall, only a few small and isolated populations of Nubian giraffe remain in Kenya, Uganda, South Sudan, and Ethiopia (Wube et al. 2018, p. 1; Fennessy et al. 2018, pp. 1–2; Muneza et al. 2024, p. 1275). The Nubian giraffe's total population is 3,022 giraffes (Brown et al. 2021, pp. 4, 7). Murchison Falls National Park in Uganda holds approximately 60 percent (2,250 individuals) of the total population of Nubian giraffes. While populations have rebounded in areas where there is better security and management (*i.e.*, in the

protected areas in Uganda and Kenya where most of the giraffes occur), poaching remains a threat where populations are smallest, such as in South Sudan. In Kenya, Nubian giraffes have rebounded from near extirpation in the 1970s to roughly 1,000 individuals distributed among 13 populations. This rebound is attributed to better security and management in protected areas that has reduced poaching (Muneza et al. 2024, p. 1279). Poaching remains a threat in South Sudan, where Nubian giraffe populations are smallest and less protected; however, poaching has been reduced in the areas with the most Nubian giraffes in Uganda and Kenya.

Climate Change

The mechanisms by which climate change can affect the giraffe's fitness are complex, multifaceted, and contingent on a range of interacting factors. The primary influence of climate change on the viability of the West African, Kordofan, and Nubian giraffes is changes in precipitation patterns, notably drought and extreme precipitation pattern. Drought reduces water availability and food quality for giraffes. Giraffes are generally less able to access high-quality browse during times of drought due to an increase in tree mortality and a decline in browse abundance (Vicente-Serrano et al. 2022, p. 9, Engelbrecht et al. 2024, p. 178), as well as increased competition with other browsing species (Birkett and Stevens-Wood 2005, entire). Less access to high-quality food leads to giraffes needing to expand their home range, which in turn increases the relative proportion of time searching for food and can lead to human-wildlife conflicts and the increased risk of poaching. Giraffes can also be affected by extreme precipitation. High precipitation events were correlated with reduced survival in both adult and subadult giraffes, as higher rainfall can increase cover for predators, increase parasite and disease prevalence, and reduce food quality (Bond et al. 2023, pp. 3185–3193).

Indirectly, human food insecurity, brought on by both drought and heavy precipitation events, affects the giraffe's viability. Drought impacts pasture quality, livestock survival and production, crop yields, and malnutrition rates (Lam et al. 2023, p. entire). Heavy precipitation and flooding events in Kenya resulted in crop damages and impacts to 5 million people (1997); losses of life, property, and crops leading to human displacement (2002); and impacts to 112,000 people and crops (2013) (Kogo et al. 2021, p. 36). Impacts to current crops or livestock leads to changes in

farming practices (Huho and Mugalavai 2010, pp. 66–70). Many of these changes may result in the loss, degradation, or fragmentation of giraffe habitat.

In summary, climate change directly affects giraffes through reduced forage and competition with other browsing species. Decreased availability of high-quality forage may cause giraffes to expand their home range in search of high-quality forage, which increases the risks of poaching and human-wildlife conflict because of changing habitat conditions. Indirectly, drought affects giraffes because human food insecurity leads to changing land-use practices that in turn affect habitat conditions. Extreme precipitation events influence predation, disease, and food quality, the consequences of which can lead to direct mortality of, and reduced recruitment for, giraffes.

We note that, by using the SSA framework to guide our analysis of the scientific information documented in the SSA report, we have analyzed the cumulative effects of identified threats and conservation actions on the species. To assess the current and future condition of the species, we evaluate the effects of all the relevant factors that may be influencing the species, including threats and conservation efforts. Because the SSA framework considers not just the presence of the factors, but to what degree they collectively influence risk to the entire species, our assessment integrates the cumulative effects of the factors and replaces a standalone cumulative-effects analysis.

Conservation Efforts and Regulatory Mechanisms

Our evaluation of the status of the species takes into account the extent to which threats are reduced or removed as a result of conservation efforts or existing regulatory mechanisms. Across Africa and throughout the ranges of the West African, Kordofan, and Nubian giraffe, many conservation organizations are dedicated to the conservation of giraffes in the wild. National wildlife departments, nongovernmental organizations, and international organizations aid with conservation efforts for giraffes that include a multitude of actions such as translocations, anti-poaching efforts, capacity building and education, and technical and financial assistance. The conservation efforts that are ongoing within the range of the West African, Kordofan, and Nubian giraffes focus on enforcement of anti-poaching laws, minimizing human-wildlife conflicts and commercial trade, and working with communities where these

subspecies occur. However, these efforts are not likely to counter the ongoing and anticipated changes in land use and associated effects to the West African, Kordofan, and Nubian giraffe from human population growth and climate change because of the magnitude of the impacts in these areas, the small population sizes for these subspecies, and/or the currently downward trajectory of giraffes' abundance.

West African Giraffe

There are two primary conservation efforts for the West African giraffe in Niger: the Giraffe Zone and the re-establishment of a population in the Gadabedji Biosphere Reserve. The Giraffe Zone occurs in the arid Sahelian scrubland east of the capital Niamey and is part of the transition zone of Niger's W National Park Biosphere Reserve, which includes: (1) the central zone of Kouré, (2) the Dallol Bosso, and (3) the Fakara Plateau (Ferguson et al. 2020, p. 5; Ciofolo 1995, p. 579; Le Pendu and Ciofolo 1999, p. 342). The Giraffe Zone is an unprotected and unfenced area where giraffes move freely between the three areas and migrate based on seasonal availability of forage, giraffe carrying capacity in the core area, and increasing pressure from a growing human population (Ferguson et al. 2020, p. 5). Giraffes share their living space with local villagers and livestock, and their movements are synchronized with human activities based on habitat and forage availability (Pendu and Ciofolo 1999, p. 351).

The Giraffe Zone does not provide any formal protections for West African giraffes, but poaching currently appears to be rare. The West African giraffe is fully protected under Niger's "Loi N° 82–002 du 28 Mai 1982 portant réglementation de la chasse" (as amended by Law 98–07 of April 29, 1998, regulating hunting and wildlife protection) and may not be hunted (Food and Agriculture Organization database of national legislation (FAOLEX) 2024, unpaginated; Republic of Niger 1998). The Government of Niger made concerted efforts to enforce legislation preventing the illegal killing of giraffes in the mid-1990s, further supported by a community education and awareness campaign (Suraud et al. 2012, p. 577; Ferguson et al. 2020, pp. 2–4). Since 2000, incidents of poaching have been rare (Suraud et al. 2012, p. 577; GCF 2019, entire; Ferguson et al. 2020, p. 5). However, within the Giraffe Zone, habitat loss (including land degradation and habitat fragmentation) is well documented and continues to occur (Morou 2011, in Gašparová et al.

2020, p. 4; Abdou 2005, in Suraud et al. 2012, p. 581).

Starting in 2018, 12 West African giraffes were translocated to reestablish the Gadabedji Biosphere Reserve population. The population has expanded, with five calves born, showing early signs of success in the first 5 years after the initial translocation (Gašparová et al. 2024, p. 8). This is a protected area, but the current population size is very small and long-term post-translocation monitoring is crucial to evaluate the translocation success and advise on future translocations to the Reserve and other sites in the country or regionally (Gašparová et al. 2024, p. 8).

Kordofan Giraffe

Most individuals (approximately 80 percent) of the Kordofan giraffe currently occur in Zakouma National Park in southern Chad (approximately 1,200 giraffes) and Waza National Park in northern Cameroon (approximately 500 giraffes). In the near term, only the population in Zakouma National Park appears protected from habitat loss and poaching within a larger, intact, protected area. Zakouma National Park is part of the 28,162-square-kilometer (km²) Greater Zakouma Ecosystem, managed by African Parks in partnership with the Government of Chad. In 2022, the Government of Chad signed a revised agreement with African Parks, which extends until 2027. Zakouma National Park is the only park in Central Africa with increasing numbers of large herbivores because of its unique long-term European Union funding, many rangers, and political support (Scholte et al. 2021, pp. 4–6). The current management agreement for Zakouma only extends until 2027. The situation is quite different in Waza National Park in Cameroon. In Waza National Park and other protected areas in Cameroon, threats to the Kordofan giraffe remain and have been documented in multiple instances, such as lack of enforcement, tree removal, livestock grazing, and events of civil unrest (Kelly 2014, pp. 737–738; Scholte et al. 2021, entire; Garcia et al. 2022, p. 62). Political support for Waza National Park ended in the mid-1980s; thus, funding for the park was drastically reduced (Kelly 2014, p. 737). All the other national parks where Kordofan giraffes occur have very few giraffes remaining, largely due to poaching and a lack of management.

Nubian Giraffe

Rangewide, 60 percent of Nubian giraffes occur at Murchison Falls National Park in Uganda, a 3,840-km²

park managed by the Uganda Wildlife Authority. The park (3,840 km²), Karuma Wildlife Reserve (678 km²), and Bugungu Wildlife Reserve (474 km²) are part of the Murchison Falls Protected Area, the largest landscape of protected areas in Uganda (Plumptre et al. 2015, p. 4). The protected area (and its wildlife) has been described as likely the hardest hit of any of Uganda's protected areas during the civil unrest of the 1970s and 1980s (UWA 2018, pp. 5, 43). It was only following the political stabilization associated with establishment of the current government in Uganda that protection measures have increased large mammal populations, including giraffes (Plumptre et al. 2015, p. 4; UWA 2018, p. 53).

Since the 1990s, the Murchison Falls population has gradually increased to approximately 2,250 individuals. However, the park is becoming increasingly isolated. Settlement around the park has reduced potential wildlife corridors to other parks or available habitat (Fuda 2015, p. 26). In addition, oil and gas development is ongoing within Murchison Falls (Africa Institute for Energy Governance (AFIEGO) 2024, entire; Akisiimire et al. 2022, pp. 21–23).

There are four other small populations (fewer than 100 individuals each) in eastern and southern Uganda, and the rest of Nubian giraffes occur in small populations in Kenya, South Sudan, and Ethiopia.

The Boma-Jonglei ecosystem of South Sudan is a largely intact savanna and woodland habitat that includes Boma and Badingilo National Parks linked by wildlife movement corridors and key transboundary biodiversity areas (WCS 2019, unpaginated; Morjan et al. 2017, p. 367). Both Boma and Badingilo National Parks are proposed United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Sites (African Parks 2024, unpaginated). Nubian giraffes only exist in small populations around these two national parks in South Sudan. The ecosystem has a direct transboundary linkage with Gambella National Park in Ethiopia (WCS 2019, unpaginated). The small population of Nubian giraffes in Ethiopia currently reside in and around Gambella National Park, and there may be a small population existing in the Omo-Tama regions (Marais et al. 2020d, p. 3; Brown et al. 2021, p. 7). Several of Ethiopia's parks are designated protected areas but lack enforcement and management to achieve their stated conservation purposes (Jacobs and Schloeder 2001, p. 10).

The Ethiopian Wildlife Conservation Authority (EWCA), established in 2008, is the country's primary wildlife protection agency that oversees the protection, administration, and sustainable use of Ethiopia's fauna. Their principal goals are the conservation of endangered species, the repair and extension of protected areas, and the development of wildlife-based tourism that does not deplete natural resources (EWCA 2024, pp. 1–3). Giraffes are protected species in Ethiopia (Council of Ministers Regulations No. 163/2008, p. 35). However, the few trained staff and field-based wildlife rangers that the EWCA currently has are not enough to combat illegal wildlife trade and poaching even within the protected areas (Tessema 2017, p. 36). To help build enforcement capacity, the EWCA is supported by international organizations. For example, community members around the Gambella National Park were selected and trained on wildlife crime interventions, wildlife crime information collection techniques, and conservation awareness skills (Tessema 2017, p. 38).

The last remaining endemic population of Nubian giraffes in Kenya at Soi Ranch supplied giraffes for countrywide translocations in the 1960s and 1970s (Brenneman 2009, p. 712; Muruana et al. 2021, p. 8). Nubian giraffes have been translocated to national parks, private reserves, and other protected areas in western Kenya (Fennessy et al. 2018, p. 2; Muruana et al. 2021, p. 7), and now they occur in 13 locations (Muneza et al. 2024, table 1; Muruana et al. 2021, pp. 13–15, citing many authors). Most of the introductions were into private fenced wildlife areas (Brenneman et al. 2009, p. 712; Muruana et al. 2021, p. 4).

Kenya has developed a National Recovery and Action Plan for Giraffe in Kenya (2018–2022) (Kenya Wildlife Service (KWS) 2018, entire) and a national Wildlife Strategy 2030 (Ministry of Tourism and Wildlife 2018, entire). The National Recovery and Action Plan for Giraffe in Kenya is aimed at having viable, free-ranging populations of three giraffe species in Kenya (Masai, reticulated, and northern giraffe (including Nubian giraffe)) and addressing challenges for sustainable conservation and management of these species (KWS 2018, entire). One of the strategic objectives of the National Recovery and Action Plan for Giraffe in Kenya is to reduce the proportion of giraffe illegally killed by 50 percent within 5 years of 2018 (KWS 2018, p. 31).

As discussed above, in Kenya, the Nubian giraffe has rebounded from near extirpation in the 1970s to roughly 1,000 individuals distributed among 13 populations. This rebound is attributed to better security and management in protected areas that has reduced poaching (Muneza et al. 2024, p. 1279). Population estimates by KWS have increased with these efforts to increase penalties on crimes related to threatened species such as giraffes, although this increase is also attributed to the inclusion of more updated data in the 2021 report (Waweru et al. 2021, p. 110). The National Wildlife Strategy 2030 outlines a vision for wildlife conservation and describes Kenya's needs for wildlife conservation strategies because human population pressure, habitat loss, rapid development in key wildlife areas, poaching, insecurity, and overexploitation have accelerated the decline of wildlife populations and habitat degradation (Ministry of Tourism and Wildlife 2018, p. 7).

Additionally, the National Human-Wildlife Coexistence Strategy and Action Plan 2024–2033 is aimed at fostering sustainable wildlife conservation while effectively mitigating human-wildlife conflicts (KWS 2024, unpaginated). The KWS has a security division with an overall goal and primary mandate to strengthen law enforcement, protect wildlife and their habitats, enhance tourist security in protected areas, and safeguard KWS assets. Population estimates by KWS have increased with these efforts to increase penalties on crimes related to threatened species, although this increase is attributed to the inclusion of more updated data in the 2021 report (Waweru et al. 2021, p. 110).

Giraffes are also protected by international mechanisms that include protections, regulation of international trade, and awareness of giraffe conservation efforts in Africa. These mechanisms include the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Convention on Conservation of Migratory Species of Wild Animals (Convention), and the African Union, all of which are international agreements where member countries agree to implement measures to minimize illicit trade of wildlife including giraffes. Trade is not the primary cause of the decline of wild giraffe populations; however, trade has an additive effect when combined with the main causes of decline (habitat loss and poaching). Giraffes have historically been sought for their hair and tails, and their parts have been used for medicinal purposes,

but, more recently, giraffes have been increasingly hunted and poached for bushmeat. Giraffe parts are frequently in international commercial trade, but their country of origin, the subspecies (or species), and whether the specimens in trade were legally acquired can be uncertain (CITES 2019a, pp. 5–6).

Current Condition of Northern Giraffe

We describe the current condition of the northern giraffe and its three subspecies in terms of the primary influences affecting population abundance and trends, as well as the range contraction of the subspecies. The three subspecies are genetically distinct and separated by geographical or physical barriers and thus demographically distinct. The northern giraffe only remains in a small fraction of its historical range with small, isolated populations scattered across west, central, and east Africa with no connectivity between populations.

The population of the northern giraffe was estimated at 5,919 in 2020 (at least 600 West African, 2,297 Kordofan, and 3,022 Nubian) (Brown et al. 2021, p. 5). A historical estimate for the northern giraffe is not readily available; however, the combined estimate of the historical (*i.e.*, 1985) populations of the subspecies that comprise the northern giraffe places the historical population at 25,653 individuals (Muller et al. 2018, p. 6). Thus, the current population represents a 77 percent decline from the historical population.

The reason for the decline of the northern giraffe is primarily related to changing habitat conditions and poaching. Converting natural habitats has resulted in habitat loss and degradation of natural vegetation; fragmentation of the giraffe's range, which has historically been a more connected landscape of suitable habitat for northern giraffes; and increased risk of human-wildlife conflict, including poaching. Changing habitat conditions affect giraffes directly or indirectly through reduced food availability and reduced or obstructed movements to find necessary resources, which negatively affect survival and recruitment. Land use pressures within the range of the northern giraffe to meet the demands of the human population for their livelihoods, including agriculture, pastoralism, and other uses, come at the detriment of the giraffe's requirements for food and space. Poaching directly reduces the giraffe's condition through mortality, mainly reducing adult survival. In addition, the three northern subspecies have the second highest levels of genetic diversity among giraffe species and

subspecies (the reticulated giraffe has the highest levels). However, compared to other mammal species, their levels of heterozygosity are low, and levels of inbreeding are moderately high, especially for the West African and Nubian subspecies.

The influences on the three subspecies of the northern giraffe (West African, Kordofan, and Nubian) are generally similar within and among their populations, with differences in magnitude. All three subspecies are impacted by changing habitat conditions. The West African giraffe is less impacted by poaching pressure than the Kordofan and Nubian giraffes, although the Nubian giraffe is less impacted by poaching in its range in Kenya and Uganda than in the remainder of its range in Ethiopia and South Sudan. Except for the Giraffe Zone in Niger, all populations are in protected areas; however, enforcement is higher in Kenya and Uganda.

West African Giraffe

Historically, the West African giraffe was distributed widely from Senegal to Nigeria but has been extirpated across most of its range because of changing habitat conditions, drought, and poaching (Fennessy et al. 2018, p. 2; Gašparová et al. 2024, p. 2). The drastic decline in abundance and redundancy of the West African giraffe has limited the subspecies to two remaining populations in Niger. Giraffes in Niger are not currently experiencing population declines (since near extirpation by the mid-1990s). The population has steadily increased since 1996, which is attributed to reduced poaching pressure on the population. Most giraffes occur in the Giraffe Zone (Brown et al. 2021, p. 8; Ferguson et al. 2020, p. 6). The current population size of 690 is an increase of 1,308 percent from the 1995 population size of 49. The populations in Niger are currently not subject to poaching; however, they are currently affected by habitat loss, land degradation, and habitat fragmentation (Morou 2011, in Gašparová et al. 2020, p. 4; Abdou 2005, in Suraud et al. 2012, p. 581). The primary factors influencing the viability of the West African giraffe are the continuation of conservation initiatives, as well as threats from ongoing and imminent habitat loss and fragmentation, civil unrest, human food insecurity, poaching, and exacerbation of these threats with increasing human populations and climate change. Overall, the resiliency and redundancy of the West African giraffe are reduced due to declines in abundance and the subspecies being limited to two small areas in Niger. The two remaining

populations are small and isolated, and this lack of redundant healthy populations increases the risk of effects of catastrophic drought.

While some giraffe traits (*e.g.*, mobility, flexible diet) provide adaptive ability, other traits (*e.g.*, long lifespan, low reproductive output, high energetic demands, and limited gene flow) strongly constrain the giraffe's ability to respond to the rapidly changing conditions associated with human population growth and climate change. Similarly, the West African giraffe's ability to shift its range in response to changing environmental conditions is highly unlikely because populations are mostly confined to protected areas isolated from other populations. Therefore, West African giraffes have limited options to avoid the risks associated with habitat loss and poaching, and threats associated with rapidly increasing human populations and climate change.

Kordofan Giraffe

The Kordofan giraffe was formerly widespread across central African countries in the northern savanna woodlands and Sahel zone (Fennessy et al. 2018, p. 2; East 1999, pp. 95–97). The Sahel is a band of territory in Africa that stretches from the Atlantic coast of Senegal and Mauritania to the four countries bordering Lake Chad (United Nations Development Programme 2024, unpaginated). The Sahel acts like a buffer or transition zone between the Sahara Desert to the north and the fertile savannahs to the south. While the Kordofan giraffe currently occurs in its historical range countries of Cameroon, CAR, Chad, DRC, and South Sudan, population abundance has been declining over the last 40 to 60 years, the area of occupancy is greatly reduced, and the subspecies is restricted to small, disjunct populations.

In the 1950s, there were an estimated 6,360 to 7,360 individuals of the Kordofan giraffe across the DRC, Cameroon, Chad, and CAR; please note that South Sudan is not included in this estimate. Currently, the best estimate of current population size for the Kordofan giraffe is 2,297 individuals (Brown et al. 2021, p. 6) spread across five countries in central Africa. Thus, Kordofan giraffe is only 31–36 percent of the population size in the 1950s, a decline of approximately 1.5 to 7.0 percent per year. Approximately 80 percent of the remaining individuals now occur within just two populations (approximately 1,200 in Zakouma National Park in Chad, and approximately 500 in Waza National Park in Cameroon) (Brown et al. 2021, p. 6). The remaining

populations are small with little interaction between groups (Brown et al. 2021, p. 6; Marais et al. 2019, p. 4).

The primary causes of this historical and ongoing decline include poaching, giraffe-human conflict (via civil unrest), and habitat loss, degradation, and fragmentation, all of which are strongly driven by the rapidly increasing human population and climate change. While the Kordofan giraffe exhibits traits that provide adaptive ability, its long lifespan, low reproductive output, high energetic demands, dietary needs, and limited gene flow strongly constrain its ability to evolutionarily respond to rapidly changing conditions associated with human population growth and climate change. Similarly, the ability of Kordofan giraffes to shift their range in response to deteriorating habitat and climate conditions is highly unlikely. There are limited options for giraffes to avoid the risks associated with habitat loss, poaching, and threats associated with rapidly increasing human populations and climate change threats.

The continued reductions in the availability and quality of food resources, coupled with increased mortality due to intensifying human conflicts, place additional pressure on already stressed giraffe populations. To date, conservation efforts have been insufficient to address ongoing threats, and the best available information indicates that such efforts will not halt the declining trends. Given the degree of isolation among populations, the likelihood of demographic rescue following such events appears minimal. Reductions in the health, number, and distribution of populations, in turn, diminish the subspecies' capacity to withstand normal environmental stochasticity and recover from disturbances and catastrophic events.

Nubian Giraffe

The historical distribution of Nubian giraffe was north of the Nile River and ranged from the Rift Valley of central-west Kenya across Uganda, and northward into South Sudan and Ethiopia (Marais et al. 2017, p. 3, citing many authors; Brown et al. 2021, p. 7). Nubian giraffes were historically more widely distributed than they are currently (Sidney 1965, pp. 149, 151; Dagg 1962, p. 502). Murchison Falls National Park in Uganda holds approximately 2,250 individuals, or 60 percent of the total population of Nubian giraffes (GCF 2023, p. 1). Overall, only a few small and isolated populations of the Nubian giraffe remain in Kenya, Uganda, South Sudan, and Ethiopia (Wube et al. 2018, p. 1; Fennessy et al. 2018, pp. 1–2). There is

little or no potential for dispersal between sites and limited capacity for expansion (Fennessy et al. 2018, p. 1).

The current population size (3,022) of the Nubian giraffe is 14 percent of the population size of approximately 22,000 individuals in the 1960s–1980s (Brown et al. 2021, p. 7; Muller et al. 2018, supplement, p. 2). The population has declined from about the 1960s to 2020 at approximately 4.0–4.9 percent per year. The primary causes of decline are poaching and civil unrest. These threats are compounded by rapid human population growth and climate change. Poaching led to near extirpation of Nubian giraffes in Uganda, Kenya, and South Sudan in the 1970s and 1980s, as poaching increased due to widespread political and social instability. Poaching rates have been reduced in Uganda and Kenya, although poaching pressure remains as human food sources are currently less secure due to ongoing human population growth and climate change and inter-related effects of civil unrest. Other threats include extensive land use changes, disease, and low genetic diversity.

While some giraffe traits (*e.g.*, mobility, flexible diet) provide adaptive ability, other traits (*e.g.*, long lifespan, low reproductive output, high energetic demands, and limited gene flow) strongly constrain the Nubian giraffe's ability to respond to rapidly changing conditions associated with human population growth and climate change. Similarly, the subspecies' ability to shift its range in response to changing environmental conditions is highly unlikely because populations are confined to protected areas isolated from other populations. Therefore, Nubian giraffes have limited options to avoid the risks associated with habitat loss, poaching, and threats associated with rapidly increasing human populations and climate change.

Overall, the resiliency and redundancy of the Nubian giraffe are reduced due to declines in abundance and area of occupancy. Only one population of the Nubian giraffe (Murchison Falls National Park) appears resilient; this resiliency stems from protective measures (conservation initiatives to reduce poaching and habitat conversion) that allowed this population to gradually increase since the 1990s. However, this population is still vulnerable to habitat loss, degradation, and alteration from ongoing oil and gas development; climate change impacts; and increased isolation as habitat conversion continues around and within the park. Poaching also continues to be documented within the park.

The remaining populations of the Nubian giraffe throughout the subspecies' range are small and isolated, and vulnerable to normal environmental stochasticity, disturbances, and catastrophic drought events. Given the degree of isolation among populations, the likelihood of demographic rescue following such events appears minimal. Reductions in the health, number, and distribution of populations, in turn, diminish the subspecies' capacity to withstand normal environmental stochasticity and recover from disturbances and catastrophic events. To date, the population in Murchison Falls National Park has gradually increased as did the population in Kenya, but, for the most part, conservation efforts across the range of the Nubian giraffe have been insufficient to address ongoing threats. The limited capacity of the Nubian giraffe to cope with and adapt to rapidly changing environmental conditions exacerbates the risks posed by its declining resiliency and redundancy.

Summary of the Northern Giraffe's Current Condition

Resiliency and redundancy for the three subspecies of the northern giraffe is reduced from historical conditions. The overall population has declined approximately 77 percent since 1985, from 25,653 individuals to 5,919 individuals, and the species has been extirpated from numerous countries in west Africa. The reason for the historical, ongoing, and imminent decline of the northern giraffe is primarily related to changing habitat conditions and poaching, exacerbated by rapid human population growth and climate change. The sources of changing habitat conditions that are causing habitat loss, fragmentation, and degradation are ongoing. Because of rapid human population growth and climate change-induced droughts and extreme rainfall events, the pressure on available land and natural resources in west, central, and east Africa has produced and is expected to continue to produce changes to the northern giraffe's natural habitat. The influences for the three subspecies of northern giraffe are generally similar within and among their populations with some differences in magnitude. All three subspecies are impacted by changing habitat conditions, although poaching pressure is lower for the West African giraffe than for the Kordofan and Nubian giraffes. Most populations are in protected areas or afforded anti-poaching measures; however, enforcement is higher in Niger, Kenya, and Uganda, and limited to Zakouma

National Park in Chad. There are limited options for northern giraffes to avoid the risks associated with habitat loss, poaching, and threats associated with rapidly increasing human populations and the effects of climate change, particularly as populations are small and isolated.

Future Condition of Northern Giraffe

We developed two future condition scenarios for the northern giraffe to capture the plausible range of uncertainties regarding the primary threats and projected responses by the three subspecies of northern giraffe. These scenarios were the same for the three subspecies of the northern giraffe. We projected a lower and upper scenario with habitat condition based on historical rates of forest loss, projected moderate and higher human population increases, and climate change scenarios as described below. In one scenario, we assume that poaching will remain similar to current conditions and anti-poaching efforts continue, while in the other, we assume an increase in poaching. We also assume civil unrest will continue under both scenarios.

A climate scenario describes possible future climate conditions associated with a specific set of assumptions about societal actions and how the climate system will respond. For our climate scenarios, we used both the current generation of IPCC climate scenarios (shared socio-economic pathways or SSPs) and the previous generation of IPCC climate scenarios (representative concentration pathways or RCPs), depending on availability for each type of projected data (e.g., temperature projections vs. drought projections). RCPs reflect different levels of emissions and climate change, and SSPs reflect different socio-economic development pathways. We used SSP2–4.5/RCP4.5 and SSP5–8.5/RCP8.5 scenarios out to 2100. More information on these pathways is available at <https://apps.ipcc.ch/glossary/>. Because we determined that the current condition of the West African, Nubian, and Kordofan giraffes is consistent with the Act's definition of an endangered species (see the determination of status for each of the three subspecies of northern giraffe, below), we are not presenting the results of future scenarios for these subspecies in this proposed rule.

Factors Influencing Reticulated Giraffe

Factors that affect the reticulated giraffe in Kenya and Ethiopia are the same in each country and include a combination of human actions that

threaten the giraffe's viability as well as conservation efforts and regulatory measures that aim to benefit and protect giraffes. The primary threats to the reticulated giraffe include changes to the species' habitat condition resulting from habitat loss, fragmentation, and degradation, and poaching, all of which are exacerbated by rapid human population growth and effects from climate change (including the interrelated effects such as civil unrest and human food insecurity).

Changing Habitat Conditions

The sources of the changing habitat conditions in east Africa, including Ethiopia and Kenya where reticulated giraffes occur, are conversion of natural habitats and natural vegetation to croplands and rangelands, urbanization, deforestation, and production of fuelwood. Converting natural habitats and vegetation results in the loss, degradation, and fragmentation of suitable habitat, and increased human-wildlife conflict, including poaching. Changing conditions affect giraffes directly or indirectly through reduced food availability and reduced or obstructed movements to find necessary resources, which negatively affect survival and recruitment. Because reticulated giraffes overlap with humans and domesticated livestock, they rely on the same natural resources. Human-wildlife conflicts occur when wildlife and humans compete for the same resources (UWA, p. 49). Additionally, reticulated giraffes have been known to feed on cash crops (such as mangoes), causing economic losses for farmers and exacerbating conflict between humans and wildlife in Kenya (Ali et al. 2023, p. 175). Changing habitat conditions increase the risk of human conflicts and human-wildlife conflicts.

In Kenya, the agricultural sector employs more than 40 percent of the total population and more than 70 percent of Kenya's rural population (FAO 2024a, unpaginated). The rural population accounts for 71.5 percent of Kenya's population, increasing from 19.5 to 39.2 million people, or by approximately 100 percent, between 1990 and 2020 (FAOSTAT 2024a, unpaginated). In Ethiopia, the rural population is 77 percent of the total population in 2023, increasing from 41.8 million people in 1990 to 97.2 million people in 2023 (FAOSTAT 2024c, unpaginated). Because of human population growth, towns are overpopulated, causing people to relocate to rural areas (Ali et al. 2023, p. 178). Conversion of natural habitats into farmlands and urban development not only affects giraffes through loss of

food, but also contributes to the fragmentation of their habitats, making it more difficult for giraffes to find suitable feeding, drinking, breeding, sheltering areas (Ali et al. 2023, p. 178).

In northeastern Kenya, expansion of agricultural activities has led to the clearing of bushy woodlands, a vital ecosystem for giraffes and other wildlife (Ali et al. 2023, p. 178). Between 2001 and 2019, the 57 percent loss of *Acacia-Commiphora* trees within the reticulated giraffe's range in Kenya and Ethiopia was primarily because of cropland expansion (Abera et al. 2022, p. 10). Woody vegetation, particularly *Acacia* trees, are also the main source of charcoal production in Kenya and Ethiopia (Kiruki et al. 2017, p. 476; Abera et al. 2022, p. 10; Abate and Abate 2017, p. 9). *Acacia* trees are a preferred food source of giraffes; therefore, reduction of *Acacia* trees for fuelwood reduces the availability of high-quality food resources for giraffes. Charcoal production also results in overall woodland degradation because it exacerbates vegetation loss, soil erosion, and the creation of associated access roads (Kiruki et al. 2017, pp. 476, 478).

In east Africa (Ethiopia, Kenya, Uganda, Malawi, Rwanda, Tanzania, and Zambia), remote sensing over 20 years (1988 to 2017) showed increases of cropland and settlement of 35 percent and 43 percent, respectively, while all other land-use classes decreased, including a decline of 18.9 million (+/-1.6 million) ha in naturally vegetated land uses (grasslands, forests, and vegetated wetland) (Bullock et al. 2021, pp. 5–6). This trend is emblematic of sub-Saharan Africa as a whole, in which the growing demand for food is forcing agricultural expansion into historically less developed savannas and woodlands (Bullock et al. 2021, p. 12).

Livestock grazing is another important agricultural land use in Kenya. Because reticulated giraffes overlap with humans and domesticated livestock, they rely on the same natural resources. Kenya-wide surveys over a 40-year period (1977 to 2016) show that the increase in human population and domesticated livestock abundance correlates with a substantial decline of the reticulated giraffe in Kenya. Reticulated giraffe abundance declined by 65 percent over that 40-year period (Ogutu et al. 2016, supporting figures). Laikipia County in central Kenya represents an example of private lands where wildlife, people, and livestock co-occur. The human population has increased 137 percent over a 30-year period (1989–2019), and historically larger ranches are being subdivided and sometimes fenced. This subdivision of land has led to human-

wildlife conflicts as migratory corridors have been blocked (Litoroh et al. 2010, p. 9). The reticulated giraffe population in Laikipia County decreased by 27 percent over the last 40 years.

In the Borana region, including Borana National Park where reticulated giraffes occur in Ethiopia, there has been an increase in human-wildlife conflict because of competition for limited resources as the human population in the area rapidly grows. Borana National Park is bordered on all sides by agrarian and pastoralist communities that largely exploit it in search of arable land, pastureland, and fuelwood (Bussa 2023, p. 544, citing many authors; Wassie 2020, p. 19). Many national parks and protected areas in Ethiopia are under similar pressure (Wassie 2020, p. 19).

In summary, changing habitat conditions from habitat loss, degradation, and fragmentation because of agriculture expansion, urbanization, and fuelwood production are considered an historical and ongoing threat to the reticulated giraffe. These threats are anticipated to continue in the future and to be exacerbated by effects from increasing human population growth and climate change.

Poaching

The reasons for killing giraffes vary greatly across Africa, with local context playing a significant role in shaping human-giraffe interactions (Ruppert 2020, chapter 2). Poaching of the reticulated giraffe varies across the species' range in both reason for killing and the magnitude/level of killing over time. While bushmeat is likely the primary reason for killing giraffes, the demand for giraffe parts, including their skin, bones, and tails, fuels illegal activities (Ali et al. 2023, p. 175; Muller 2008, pp. 1–4; Khalil et al. 2016, pp. 1–5; Dunn et al. 2021, pp. 9–10). Giraffes are also hunted and killed in retaliation for crop damage that leads to economic hardship for farmers (Ali et al. 2023, p. 175). Poaching affects adult giraffes more than subadults or calves (Lee et al. 2016, p. 1021). Additionally, population structure may shift so that there are fewer adults relative to immatures, fewer adult males relative to adult females and more calves per adult female (Lee et al. 2023, p. 349).

Local opinions of giraffes and law enforcement are important to conservation efforts and dictate actions when there is a human-wildlife conflict. Local conservation programs in Kenya have increased the conservation of giraffes (Ruppert 2020, pp. 29, 84). However, the best available information suggests that rangewide poaching has

not been eliminated or even reduced in the range of the reticulated giraffe over time.

Historically, poaching caused a marked decrease in Ethiopia's giraffe populations (East 1999, p. 97; Yalden et al. 1984, p. 81). Giraffes are primarily hunted in Ethiopia for their tail, which is used in highly prized traditional necklaces, and for their meat (Wube 2013, p. 3; Abate and Abate 2017, p. 9). In Kenya, the hunting or killing of any species of giraffe is illegal (Republic of Kenya 2013, pp. 1304–1305). Giraffe meat, hides, and tail hair are valued commodities in Kenya (East 1999, pp. 97–98; Ali et al. 2023, p. 175). Reticulated giraffes were severely poached by the tribesmen of the Northern Province, who use giraffe hide and hair from giraffes' tails (J. Doherty pers. obs., cited in Muneza et al. 2018, p. 5). Poaching can be widespread during the dry season, and there were several reports of giraffes being found injured or dead because of poaching-related injuries (Muller 2008, p. 7).

Armed conflicts have plagued northern Kenya for decades because of civil unrest and terrorist activities originating from the neighboring countries of Ethiopia and Somalia (Murwana et al. 2021, p. 4). Civil unrest does not usually directly target ecological resources in pursuit of a military outcome, but impacts to wildlife occur because of resource exploitation during periods of lawlessness (Glew and Hudson 2007, p. 7, citing many authors; Dudley et al. 2002, p. 326). While human conflict can directly result in the killing of wildlife, it can also result in indirect negative impacts on wildlife, such as weakened protections or enforcement of protections and the proliferation of guns, which can increase poaching (Beyers et al. 2011, p. 6; Dudley et al. 2002, p. 322). Wildlife products are also often sold or bartered for food, arms, ammunition, or other goods and services (Dudley et al. 2002, p. 322). Civil unrest remains a significant concern in Kenya, Ethiopia, and Somalia; these countries have current U.S. State Department travel advisories in each country due to crime, terrorism, kidnapping, and civil unrest (U.S. Department of State, 2024, unpaginated).

Climate Change

The mechanisms by which climate change can affect the giraffe's fitness are complex, multifaceted, and contingent on a range of interacting factors. The primary influence of climate change on the reticulated giraffe's viability is changes in precipitation patterns,

notably drought and extreme precipitation patterns. Drought reduces water availability and food quality for giraffes. Giraffes are generally less able to access high-quality browse during times of drought due to an increase in tree mortality and a decline in browse abundance (Vicente-Serrano et al. 2022, p. 9, Engelbrecht et al. 2024, p. 178), as well as increased competition with other browsing species (Birkett and Stevens-Wood 2005, entire). Less access to high-quality food leads to giraffes needing to expand their home range, which in turn increases the relative proportion of time searching for food and can lead to human-wildlife conflicts and increase the risk of poaching.

Indirectly, drought affects the giraffe's viability via human food insecurity. Drought impacts pasture quality, livestock survival and production, crop yields, and malnutrition rates (Lam et al. 2023, p. entire). Impacts to current crops or livestock leads to changes in farming practices (Huho and Mugalavai 2010, pp. 66–70), many of which result in loss, degradation, or fragmentation of giraffe habitat. While only about 20 percent of Kenyan land is suitable for farming (United States Agency for International Development (USAID) 2022, unpaginated), agriculture supports up to 75 percent of the Kenyan population and generates almost all the country's food requirements. In arid and semi-arid areas of Kenya, livestock accounts for 90 percent of employment and 95 percent of family incomes (Huho and Mugalavai, 2010, pp. 63, 68). An increasing number of households are losing the capacity to participate economically and to grow their own food through the practice of rain-fed agriculture (Huho and Mugalavai, 2010, p. 62). Effects of increased population growth, climate change, food security, and human conflict are interrelated. These influences link to the habitat, human-wildlife conflict, and poaching.

Giraffes can also be affected by extreme precipitation. High precipitation events were correlated with reduced survival in both adult and subadult giraffes, as higher rainfall can increase cover for predators, increase parasite and disease prevalence, and reduce food quality (Bond et al. 2023, pp. 3185–3193). Heavy precipitation events can also contribute to food insecurity. Heavy precipitation and flooding events resulted in crop damages and impacts to 5 million people (1997); losses of life, property, and crops, leading to human displacement (2002); and impacts to 112,000 people and crops (2013) (Kogo et al. 2021, p. 36).

In summary, climate change directly affects giraffes through reduced forage and competition with other browsing species. Decreased availability of high-quality forage may cause giraffes to expand their home range in search of high-quality forage, which increases the risk to poaching and human-wildlife conflict. Indirectly, drought affects giraffes because human food insecurity leads to changing land use practices that in turn affect habitat conditions and food insecurity. Extreme precipitation events influence predation, disease, and food quality, the consequences of which can lead to direct mortality and competition for resources.

We note that, by using the SSA framework to guide our analysis of the scientific information documented in the SSA report, we have analyzed the cumulative effects of identified threats and conservation actions on the species. To assess the current and future condition of the species, we evaluate the effects of all the relevant factors that may be influencing the species, including threats and conservation efforts. Because the SSA framework considers not just the presence of the factors, but to what degree they collectively influence risk to the entire species, our assessment integrates the cumulative effects of the factors and replaces a standalone cumulative-effects analysis.

Conservation Efforts and Regulatory Mechanisms

Conservation measures for the reticulated giraffe include anti-poaching efforts and population monitoring, and many organizations provide human, financial, and/or logistical resources to support these efforts. As mentioned above, Kenya has developed a National Recovery and Action Plan for Giraffe in Kenya (2018–2022) (KWS 2018, entire) and a national Wildlife Strategy 2030 (Ministry of Tourism and Wildlife 2018, entire). Objectives of the National Recovery and Action Plan for Giraffe in Kenya are to have viable, free-ranging populations of all three giraffe species in Kenya (including reticulated giraffe) and reduce the proportion of giraffes illegally killed by 50 percent within 5 years (of 2018) (KWS 2018, p. 31). The National Wildlife Strategy 2030 outlines a vision for wildlife conservation because human population pressure, habitat loss, rapid development in key wildlife areas, poaching, insecurity, and overexploitation have accelerated the decline of wildlife populations and habitat degradation (Ministry of Tourism and Wildlife 2018, p. 7). The National Human-Wildlife Coexistence Strategy and Action Plan 2024–2033 is

aimed at fostering sustainable wildlife conservation while effectively mitigating human-wildlife conflicts (KWS 2024, unpaginated). The KWS has a security division with an overall goal and primary mandate to strengthen law enforcement, protect wildlife and their habitats, enhance tourist security in protected areas, and safeguard KWS assets. Wildlife population estimates by KWS have increased with these efforts, although this increase is attributed to the inclusion of more updated data in the 2021 report (Waweru et al. 2021, p. 110).

Other community-owned and privately owned reserves and conservancies have been successful in preserving giraffe habitats and connectivity in the region, by increasing security and anti-poaching efforts, protecting habitat, and raising awareness among local communities (O'Connor et al. 2019, pp. 294–295). The Hirola Conservation Programme monitors population trends and mortalities of giraffes in eastern Kenya. San Diego Zoo Global, in collaboration with KWS, Northern Rangelands Trust, Loisaba Conservancy, Lewa Conservancy, The Nature Conservancy, and the Giraffe Conservation Foundation, established the Twiga Walinzi team (giraffe guards), composed of locals who monitor giraffe populations, and engage in work involving human dimensions, and community engagement and education in Loisaba and Namunyak Wildlife conservancies (Muneza et al. 2018, p. 5). Additionally, even though giraffes no longer occur in Somalia, the Somali Giraffe Project contributes to the conservation of reticulated giraffes in eastern Kenya through anti-poaching efforts, and community engagement (Somali Giraffe Project 2024, unpaginated).

As mentioned earlier, the EWCA is Ethiopia's primary wildlife protection agency that oversees the protection, administration, and sustainable use of Ethiopia's fauna. The EWCA's principal goals are the conservation of endangered species, the repair and extension of protected areas, and the development of wildlife-based tourism that does not deplete natural resources (EWCA 2024, pp. 1–3). Giraffes are protected species in Ethiopia (Council of Ministers Regulations No. 163/2008, p. 35). However, the few trained staff and field-based wildlife rangers that the EWCA currently has are not enough to combat illegal wildlife trade and poaching even within the protected areas (Tessema 2017, p. 36).

In summary, the conservation efforts that are ongoing within the range of the

reticulated giraffe focus on enforcing anti-poaching laws, minimizing human-wildlife conflicts and commercial trade, and working with communities where reticulated giraffes occur. However, these efforts are not likely to counter the ongoing and anticipated future changes in land use and associated effects to the reticulated giraffe from human population growth and climate change because of the anticipated magnitude of the impacts within the species range and the projected downward trajectory of giraffes' abundance.

Current Condition of Reticulated Giraffe

We describe the current condition of the reticulated giraffe based on population abundance and trends, historical range contraction, habitat quality, influences affecting these metrics, and life-history traits of the species that determine its ability to rapidly recover from disturbances and population losses.

Until the early 2000s, the rangewide population was above 30,000 giraffes, but since then the population has been declining. The most recent population estimate is 15,985 individuals, with 99 percent of the population in Kenya (Brown et al. 2021, p. 10). Based on these population estimates, the current population of the reticulated giraffe has declined 3.2–4.4 percent annually and is 33–44 percent of the historical population size, meaning the population has declined 56–67 percent.

Reticulated giraffes have always had a relatively limited range, occupying portions of three countries: Kenya, Ethiopia, and southern Somalia. Currently, most individuals occur in northern Kenya, with a small population persisting in Borana National Park in southern Ethiopia on the border with northern Kenya. Giraffes still occur within their historical range in Kenya, and in southern Ethiopia; however, giraffes no longer occur in Somalia (Gedow et al. 2017, p. 23).

The decline in abundance and redundancy of reticulated giraffe populations is primarily related to changing habitat conditions and poaching. Because of rapid human population growth and the pressure on available land and natural resources, east Africa (including Ethiopia and Kenya) has undergone changes to its natural habitat. Since 1985, human populations in Kenya and Ethiopia have increased by 183 percent and 214 percent, respectively. Most of the human population in these countries live in rural areas (71.5 percent in Kenya; 77 percent in Ethiopia) and is agricultural and reliant on natural resources. Thus, the conversion of

natural vegetation to croplands, rangelands, urbanization, and fuelwood results in the loss, degradation, and fragmentation of habitats across the historical range of the reticulated giraffe. The increase in anthropogenic habitats also increased the risk of human-wildlife conflict, including poaching. Therefore, changing habitat conditions that affect resource availability negatively affect the reticulated giraffe's survival and recruitment.

Poaching is another main threat to reticulated giraffes. Giraffes are killed for bushmeat, hides, tails, and hair. Killing of giraffes is illegal in Kenya, yet it continues in the northern rangelands because this region has minimal enforcement. Poaching more commonly targets adults than juveniles or calves. Giraffe population growth is most sensitive to adult survival; thus, poaching strongly affects the rate of population growth.

Changes in precipitation patterns, notably drought and extreme precipitation patterns, are the primary mechanism through which climate change affects giraffes. Drought reduces food availability for giraffes, particularly juveniles that compete with other herbivores for resources. Drought also affects human food security, which in turn increases the risk of poaching and increases the risk of civil unrest. Civil unrest has been and remains a concern in Kenya, Ethiopia, and Somalia, and has increased poaching and overexploitation of natural resources.

In summary, multiple threats are interacting to affect the reticulated giraffe. Threats associated with habitat loss, fragmentation, and degradation are ongoing and projected to continue to escalate because of rapid human population growth. Land use within the range of the reticulated giraffe will need to meet the demands of the human population to the detriment of the giraffe's requirements for food and space. The threat of poaching will continue, but KWS is anticipated to continue its efforts to reduce poaching of reticulated giraffes.

Conservation measures for the reticulated giraffe include anti-poaching efforts, population monitoring, and the efforts of numerous organizations that provide human, financial, and/or logistical resources to support these efforts. However, conservation measures for giraffes may not adequately address climate change or the rapid human population growth that exacerbates the primary threats of changing habitat condition and poaching.

While some giraffe traits (e.g., mobility, flexible diet) provide adaptive ability, other traits (e.g., long lifespan,

low reproductive output, high energetic demands, and limited gene flow) strongly constrain the giraffe's ability to evolutionarily respond to the rapidly changing conditions associated with human population growth and climate change. Similarly, the species' ability to shift its range in response to changing environmental conditions is highly unlikely. There are limited options for reticulated giraffes to avoid the risks associated with habitat loss, poaching, and threats associated with rapidly increasing human populations and climate change.

Future Condition of Reticulated Giraffe

We now describe our analysis of the future conditions of the reticulated giraffe, considering how the past and current influences, and any additional influences, will act on the species into the future.

We developed two future condition scenarios for the reticulated giraffe to capture the plausible range of uncertainties regarding threats, and we projected responses by the reticulated giraffe to those threats. We projected a lower scenario and upper scenario with habitat conditions based on historical rates of forest loss, projected human population increases in east Africa, and lower bound (SSP2–4.5/RCP4.5) and upper bound (SSP5–8.5/RCP8.5) climate change scenarios as described below. In one scenario, we assume that poaching will remain similar to current conditions and anti-poaching efforts continue, while in the other, we assume an increase in poaching. We also assume civil unrest will continue under both scenarios (Service 2024b, p. 47). When possible, we report the magnitude of change under a lower bound climate change scenario (SSP2–4.5/RCP4.5) and an upper bound climate change scenario (SSP5–8.5/RCP8.5) at different time steps in the future. In cases where studies report only a single time step (end of century), a single scenario, or a specific temperature increase (e.g., 1.5 degrees Celsius (°C)), we provide a qualitative description of expected change into the future.

The ongoing threats associated with habitat loss, degradation, and fragmentation are ongoing and projected to escalate because of projected human population growth and the effects of climate change. Changes to the reticulated giraffe's habitat condition were projected as forest loss within the range of the species based on the historical lowest and highest rates observed between 2000 and 2023. Forest loss, while not a direct measure of impacts to giraffe habitat, can be considered a reasonable surrogate for

changing habitat conditions for giraffes because giraffes always occur near trees and/or bushes and rely on them for food.

Human population size in Kenya is projected to increase from 56 million in 2024 to 104 million people in 2100 (United Nations, Department of Economic and Social Affairs, Population Division, 2024). In Ethiopia, the population is projected to increase from 132 million in 2024 to 367 million people in 2100 (United Nations, Department of Economic and Social Affairs, Population Division, 2024).

Africa continues to be a hot spot for climate change (Nooni et al. 2021, p. 2). Temperature increases are expected to occur faster in Africa than the global average, and many African countries are expected to experience a large increase in the frequency of daily temperature extremes sooner than other nations (Trisos et al. 2022, pp. 1320–1321). There is high confidence that mean and maximum annual temperatures will increase across the entire continent in the future (Trisos et al. 2022, p. 1322). Surface temperatures are projected to continue to increase across the range of the reticulated giraffe, with divergence among future climate scenarios becoming discernible around mid-century (WorldBank 2024, unpaginated). As temperature continues to rise, drought extent, frequency, duration, and intensity increase as well. For example, the current increasing trend in percent of area affected by drought (extent) continues under both RCP4.5 and 8.5, and despite high inter-annual variability, the signal of an increasing trend over time is clear (Haile et al. 2020, p. 6). Additionally, drought duration and intensity are projected to increase. Drought frequency is projected to continually increase to the end of the century under RCP4.5 and 8.5, with higher drought frequency under RCP8.5 (Haile et al. 2020, p. 14). Drought duration is projected to increase from an average of 8 months during the historical baseline (1981–2010), with a slight decrease to 4–7 months during the 2020 decade, to 10–32 months at mid-century and 29–108 months at late-century under RCP4.5 and 8.5, respectively (Haile et al. 2020, pp. 10, 12–13). The projected frequency, duration, and intensity of drought events is variable across east Africa, with drought trends within southeastern Ethiopia and Kenya projected lower than elsewhere (Haile et al. 2020, p. 14). However, increasing drought trends are still apparent in areas occupied by reticulated giraffes. While droughts are projected to be more frequent, an increase in extreme rainfall events is

also expected to occur across most of the continent (Trisos et al. 2022, p. 1320; Seneviratne et al. 2021, p. 1565).

Multiple agencies and conservation organizations are working to reduce the threat to reticulated giraffes of poaching; however, poaching will likely continue. With human population size and drought projections, the human population will likely live under chronic and increasing food insecurity. Therefore, we expect that under the lower plausible scenario it is likely that current and ongoing conservation efforts can maintain or somewhat reduce poaching levels, while the upper scenario expectation is an increase in poaching rates due to the expected human population and drought increases.

We do not attempt to project the prevalence or severity of future occurrences of civil unrest; however, it is expected that civil unrest will likely occur in the future. Climate-induced displacement is widespread in Africa because poor conditions for agricultural and pastoral livelihoods cause people to relocate in search of better opportunities (Trisos et al. 2022, pp. 1350, 1360). Relatedly, the risk of violent conflict increases because of reduced economic opportunities caused by increased temperature and extreme weather events (Trisos et al. 2022, p. 1394; Elias and Abdi 2010, pp. 4–20; Pica-Ciamarra et al. 2007, pp. 10–11).

We describe the future condition of the reticulated giraffe given the plausible projections of threats described above. We summarize the influences driving future conditions and the expected trends in population abundance and range. The primary factors influencing the viability of the reticulated giraffe (habitat changes and poaching) are expected to continue with increasing magnitude.

Human population growth is projected to increase through 2060 under the lower bound scenario, and through 2100 or later in the upper bound scenario in Kenya, but the increase will be steady through 2100 under both scenarios in Ethiopia. The projected changes in drought extent, frequency, intensity, and duration, coupled with human population growth, are likely to increasingly limit the sustainability of the drought-coping strategies in Kenya's arid landscapes. Therefore, most of the Kenyan populace is expected to live under chronic food shortages (Huho and Mugalavai 2010, p. 70). Risks associated with food insecurity lead to changing habitat conditions and human-wildlife conflicts, including poaching and civil unrest; these risks are likely to increase

given continued human population growth and worsening climate conditions and their impacts on livelihoods in the range of the reticulated giraffe.

Human population growth and climate change will lead to further habitat loss, degradation, and fragmentation through the loss of forest and woody cover. Projecting this rate of loss into the future, there is expected to be an additional 8 to 38 kha (1.9 to 8.9 percent) loss of forest cover across the lower and upper bound scenarios. The continued habitat loss, degradation, and fragmentation will result in further reduced food quality and availability for reticulated giraffes, and further restrict their movement patterns and ability to access necessary resources. These reductions in food quality and need for greater movement or larger home ranges reduce reproduction and survival rates, especially in times of drought, which will increase in the future.

Apart from Kenya, only a small population of reticulated giraffes persists on the border of Kenya and Ethiopia in Borana National Park. With increasing habitat loss, degradation, and fragmentation, this population is at increasing risk of extirpation in the future. Therefore, it is likely the reticulated giraffe population will be restricted to Kenya in the future. In Kenya, increasing habitat loss, degradation, and fragmentation in the foreseeable future will likely lead to a continued decrease in density of reticulated giraffe populations and greater distances between them (Directorate of Resource Surveys and Remote Sensing (DRSRS), cited in KWS 2018, p. 44; Service 2024b, p. 11).

We simulated future population trajectories based on the current population size and upper and lower growth rate estimates for the reticulated giraffe. We assessed the potential change in future population size if historical trends and conditions continue unchanged. On average, the population is projected to decline to less than 5 percent (across the two growth rate scenarios, mean = 1.3–4.1 percent, 95 percent confidence interval (CI) = 0.7–6.8 percent) of the historical size by 2100 (Service 2024b, p. 49), or an estimated mean population size of 624–1,459 (95 percent CI = 333–2,451) individuals. The projections of giraffe populations are based on historical rates of decline and do not incorporate the full range of biological complexity, uncertainty, or anticipated increases in the magnitude of threats facing reticulated giraffes in the future. Nevertheless, we anticipate that the rate of decline in reticulated giraffe

populations will increase over time because the ongoing threats are increasing in magnitude, with increasing human population growth and climate change increasing the effects.

In summary, resiliency and redundancy for the reticulated giraffe will be further reduced from historical conditions. The overall population is projected to decline to less than 5 percent of its historical size by the end of the century. The reason for the decline of the reticulated giraffe population is primarily related to changing habitat conditions and poaching; however, other threats affect giraffes directly or compound the primary threats, which are expected to increase in the future because of human population growth and the effects of climate change, which will intensify. The magnitude of influences is the same across the range of the reticulated giraffe, and the species will have limited options to avoid the risks associated with habitat loss, poaching, and threats associated with rapidly increasing human populations and the effects of climate change.

Factors Influencing Masai Giraffe

Factors that affect the Masai giraffe across Kenya, Tanzania, Zambia, and Rwanda are generally similar in each country with differences in magnitude. The Masai giraffe faces minimal threats from poaching in Rwanda given its habitat is fenced and protected there; however, threats from climate change remain. In Kenya, Tanzania, and Zambia, Masai giraffes face similar threats and benefit from conservation efforts and regulatory measures to protect giraffes. However, populations in Zambia and Rwanda experience fewer impacts from changing habitat conditions and poaching. The threats to the Masai giraffe affect the species' habitat condition, resulting in habitat loss, fragmentation, and degradation, and affect the magnitude of poaching, but other threats, such as negative genetic effects from population bottleneck events, affect giraffes directly or compound the primary threats to Masai giraffes. The primary threats to the Masai giraffe are exacerbated by rapid human population growth and effects from climate change. We also considered the potential threats of predation, hunting, and disease, and while individuals may be affected by these threats, the best available information does not indicate population-level or species-level effects.

Changing Habitat Conditions

The sources of the changing habitat conditions (habitat loss, degradation, and fragmentation) in east Africa, including Kenya, Tanzania, and Zambia, are conversion of natural habitats and natural vegetation to croplands and rangelands, urbanization, deforestation, production of fuelwood, and climate change. Converting natural habitats results in habitat loss and degradation of natural vegetation; fragmentation of the giraffe's range, which has historically been a more open landscape of suitable habitat for Masai giraffes; and increased risk of human-wildlife conflict, including poaching. Changing habitat conditions affect giraffes directly or indirectly through reduced food availability and reduced or obstructed movements to find necessary resources, which negatively affect survival and recruitment. These changes also result in increased risk of effects from human conflict (*e.g.*, war) and human-wildlife conflict (*e.g.*, retaliation and poaching). Because Masai giraffes overlap with humans and domesticated livestock, they rely on the same natural resources. Human-wildlife conflicts occur when wildlife and humans compete for the same resources (UWA 2018, p. 49). Additionally, giraffes have been known to feed on cash crops (such as mangoes), causing economic losses for farmers and exacerbating conflict between humans and wildlife in Kenya (Ali et al. 2023, p. 175).

The agricultural sector employs more than 40 percent of the total population and more than 70 percent of Kenya's rural population (FAO 2024a, unpaginated). The rural population accounts for 71.5 percent of Kenya's population, increasing from 19.5 to 39.2 million people, or by approximately 100 percent, between 1990 and 2020 (FAOSTAT 2024a, unpaginated). More than 80 percent of the population in Tanzania is employed in agriculture, and 64 percent of the population is rural, which has increased from 20.6 to 41.4 million people between 1990 and 2020 (FAOSTAT 2024b, unpaginated). Almost 72 percent of the Zambian population is engaged in agricultural activities (FAO 2024b, unpaginated). Rwanda's economy remains predominantly dependent on agriculture, with 69 percent of rural households involved in small-scale farming on limited land.

Deforestation and loss of woody cover with increases in cropland and settlements is ongoing within the range of the Masai giraffe (Bullock et al. 2021, pp. 6–8). As mentioned above, this trend is emblematic of sub-Saharan

Africa as a whole: growing demand for food is forcing agricultural expansion in historically less developed savannas and woodlands (Bullock et al. 2021, p. 12).

In western Kenya (just west of the Masai giraffe's range), landcover changes within the Migori River watershed over the past 40 years (1980 to 2020) occurred with decreases in shrub land (40.6 percent), grassland (84.9 percent), forests (52.9 percent), water (82 percent), and wetland (38.4 percent) at the same time as increases occurred in cultivated land (34.3 percent), bare land (132.3 percent), and built-up area (461.2 percent) (Opiyo et al. 2022, pp. 223–224, 229). In southeastern Kenya, between 1985 and 2020 in the Tsavo landscape, Acacia woodland decreased by an average of 44 percent, with increases of settlement areas (55.6 percent), bare land (43.2 percent), and agricultural lands (35 percent) (Kabue 2021, p. 31). These land-use cover changes correspond to declining Masai giraffe populations in the same region (Kabue 2021, p. 41). One region with extensive woody cover loss in Kenya during this time (2002–2012) was near Tsavo East National Park and was mainly due to agricultural expansion (Abera et al. 2022, p. 8). In addition, between 1977 and 2016, Masai giraffes in southern Kenya decreased by 64 percent concurrent with an increase in numbers of domesticated livestock (sheep, goats, and camels) (Ogutu et al. 2016, pp. 10–14).

The landcover changes and uses in Tanzania are similar to those in Kenya. Agriculture is the backbone of the Tanzanian economy, and national campaigns have often involved promoting rural agricultural activities to improve incomes and standards of living (Noe 2003, p. 18). Additionally, Masai pastoralists traditionally have depended on livestock production, a type of agricultural practice that coexisted with wildlife. However, these pastoral areas are gradually shifting away from exclusive pastoralism towards both subsistence and commercial agriculture (Kiffner et al. 2015, p. 2; Noe 2003, p. 15). The growth in the agricultural sector from 2008 to 2014 was a result of increasing the land area under cultivation, from 8.3 million ha in 2008 to 13 million ha in 2014, representing a 9 percent annual growth rate (Wineman et al. 2020, p. 697).

Pastoralists and farmers in Tanzania have a long history of conflict over land and resources (Benjaminsen et al. 2009, pp. 436–438; Gwaleba and Silayo 2019, p. 2). Conflicts between farmers and pastoralists are most noticeable during drought seasons when resources are

limited (Mwalimu and Matimbwa 2019, p. 27). Because agriculture is the driver of the Tanzanian economy, the exclusion of pastoralists from their traditional grazing lands to expand agricultural lands has spurred conflicts with farming communities (Mwamfupe 2015, p. 1; Benjaminsen et al. 2009, p. 436). Traditionally, land use conflicts were on the margins between pastoral land and national parks. In recent decades, conflicts have increased in magnitude and spread southward and eastward (Mwamfupe 2015, p. 2). Civil unrest is a significant concern in Kenya and Tanzania, with current U.S. State Department travel advisories due to crime, terrorism, kidnapping, and civil unrest (U.S. Department of State 2024, unpaginated).

As mentioned above, cropland expansion was the main source of woody cover loss in east Africa in recent decades; however, fuelwood extraction was also a source of this loss (Abera et al. 2022, p. 10). Woody vegetation, particularly Acacia trees, is the main source of charcoal production in Kenya (Kiruki et al. 2017, p. 476; Abera et al. 2022, p. 10; Abate and Abate 2017, p. 9). Acacia trees are a preferred food source of giraffes, and reduction of Acacia trees because of the demand for fuelwood reduces the availability of high-quality food resources for giraffes. Charcoal production also results in overall woodland degradation because it exacerbates vegetation loss, soil erosion, and creation of associated access roads (Kiruki et al. 2017, pp. 476, 478).

Charcoal production is also a source of woody cover loss in Zambia, altering 197.4 km² of miombo woodlands annually (Sedano et al. 2022, p. 12). Remote-sensing-based analysis in Zambia identified that rather than agricultural expansion, charcoal production is the main driver of tree cover loss there (Sedano et al. 2022, p. 13). While Sedano et al. (2022, entire) focused their research in central Zambia, charcoal production also occurs in the Luangwa Valley (Lukama 2003, unpaginated).

Summary of Changing Habitat Conditions

In summary, changing habitat conditions from habitat loss, degradation, and fragmentation because of agriculture, urbanization, and fuelwood production are considered historical and ongoing threats to the Masai giraffe (in all populations except Rwanda). These threats are anticipated to continue in the future and to be exacerbated by effects from increasing human population growth and climate change.

Poaching

The reasons for killing giraffes vary greatly across Africa, with local context playing a significant role in shaping human-giraffe interactions (Ruppert 2020, chapter 2). Poaching of Masai giraffes varies across the species' range in both reason for killing and the magnitude/level of killing over time. While bushmeat is likely the primary reason for poaching, the demand for giraffe parts, including their skin, bones, and tails, fuels poaching activities (Ali et al. 2023, p. 175; Muller 2008, pp. 1–4; Khalil et al. 2016, pp. 1–5; Dunn et al. 2021, pp. 9–10). Giraffes are also killed in retaliation killings as a response to crop damage that leads to economic hardship for farmers (Ali et al. 2023, p. 175). Giraffe products are also used for traditional medicine. In northern Tanzania, some people believe that giraffe bone marrow and brains can be used to cure HIV (human immunodeficiency virus) and AIDS (acquired immunodeficiency syndrome), and tail-hair and other products are used to make bracelets and trinkets for tourists (GCF 2022b, unpaginated; Muneza et al. 2017, p. 2, citing many authors).

Local opinions regarding giraffes and of law enforcement are important to conservation efforts and dictate actions when there is a human-wildlife conflict. Local conservation programs and enforcement in Kenya increased conservation of giraffes and reduced poaching (Ruppert 2020, pp. 29, 84). However, the best available information suggests that rangewide poaching has not been eliminated or even reduced in the range of the Masai giraffe over time.

Poaching is rampant in Tanzania, particularly outside fully protected areas (Kiffner et al. 2015, p. 2). In northern Tanzania, the giraffe population declined in Serengeti National Park, and the major reasons for that decline are poaching, disease, and food limitations (Strauss et al. 2015, pp. 509–510; Muneza et al. 2017, p. 5). A 67–86 percent reduction in giraffe density in the Serengeti between 1975 and 2010 mirrors a 68–85 percent decline in giraffe abundance between 1977 and 2009 in the adjacent Masai Mara National Reserve in Kenya (Strauss et al. 2015, p. 512). Poaching also has had substantial impacts in parts of the Tarangire-Manyara ecosystem, Arusha National Park, and Mkomazi National Park in eastern Tanzania (Kiffner et al. 2015, p. 8; Muneza et al. 2017, p. 6; Lee et al. 2023, p. 350). Poaching is also reported to be widespread in the Katavi-Rukwa ecosystem in western Tanzania (Caro

2008, pp. 110–112) and in the Ruaha-Rungwa ecosystem in southern Tanzania (Muneza et al. 2017, p. 6, citing many authors). A study in the Serengeti National Park found that giraffe made up almost half of the animals being caught in illegal snares and observed that the number of giraffes live-snared increased dramatically after the first cell phone tower became operational in the park (Strauss et al. 2015, p. 513). Poaching more commonly targets adults than subadults or calves (Lee et al. 2016, p. 1021). Additionally, population structure may shift so that there are fewer adults relative to immature giraffes, fewer adult males relative to adult females, and more calves per adult female (Lee et al. 2023, p. 349). Giraffe consumption may be underreported in Tanzania because the giraffe is the country's national symbol and poachers face fines and jail time (Strauss et al. 2015, p. 514).

In Zambia, local people are not a substantial threat to the giraffe population (Bercovitch et al. 2018, p. 6). It seems unlikely that the giraffe was ever hunted purely for its meat, as the local Akunda people are apparently averse to eating it (Berry 1973, p. 78). The giraffe is not subjected to poaching in the Luangwa Valley, and its numbers are likely regulated by factors such as the availability of food (which is related to elephant density) (East 1999, p. 98). The hunting of giraffe in Zambia was illegal until 2015. Currently, professional hunters can obtain a license to hunt giraffes in “game management areas” and on private land in Zambia. However, the stronghold of giraffe in Zambia is the South Luangwa National Park, an area that prohibits hunting (Bercovitch et al. 2018, p. 6). Even though poaching and hunting pose potential threats to giraffe, these activities are not major threats influencing the Masai giraffe's population size in Zambia (Bercovitch et al. 2018, p. 6).

By the late 1970s in Rwanda, Akagera National Park was subject to massive levels of poaching (African Parks 2024, unpaginated). However, when African Parks assumed management of the park, the law enforcement strategy was overhauled, and reintroductions of wildlife took place (African Parks 2024, unpaginated). For example, Akagera National Park is surrounded by an electric fence with a canine unit trained to track and restrain poachers (Shabahat 2017, unpaginated). In addition, a team of more than 100 rangers (mainly local community members) patrol, track, and deter illegal activities. Engaging the local community has reduced poaching and prioritized conservation of wildlife

in the park (African Parks 2024, unpaginated). Since 2010, there have not been any recorded incidents of illegally killed giraffes, or carcasses found. However, giraffes have been sighted in snares and with other injuries; thus, poaching is still considered a threat (S. Hall pers. comm., cited in Marais et al. 2012, p. 2).

Disease

There are at least two known diseases that have been documented in giraffes (giraffe skin disease (GSD) and giraffe ear disease (GED)) that may pose a threat to the Masai giraffe, primarily in Tanzania. GSD is a disorder that is characterized by proliferative, crusty lesions. It manifests as chronic and severe scabs, wrinkled skin, encrustations, and dry or oozing blood on the legs, shoulders, or necks of giraffes (Epaphras et al. 2012, p. 62; Lee and Bond 2016, p. 753). GED causes wounds and lesions on the outer ear (Lyaru 2010, pp. 43–46). GED has only been observed in Tanzania and was first discovered in Mikumi National Park (Brown and Fennessy 2014, cited in Muneza et al. 2017, p. 3; Muneza et al. 2016, p. 146).

The causes of GSD have not been identified, and whether the spatial variation in GSD and manifestation of lesions across the giraffe's range is due to different infectious agents remains unknown (Muneza et al. 2016, pp. 153–155). The disease was first observed in 1999 in Tanzania (Mlengeya and Lyaru 2005, p. 52). Seven countries in sub-Saharan Africa have detected GSD: Uganda, Kenya, Tanzania, Zimbabwe, Botswana, Namibia, and South Africa. GSD is also present in zoos on six continents (Muneza et al. 2016, pp. 149–150). Thus, GSD affects wild and captive giraffes. In the most affected areas, about 10 percent of giraffes were observed with a severe form (Mlengeya and Lyaru 2005, p. 52; Lyaru 2010, p. 32).

Tanzania is a hotspot for GSD and has the highest reported rates in Africa (Muneza et al. 2016, p. 146). GSD was first observed in Ruaha National Park in 2000, and 86 percent of giraffes in this park have the disease (Epaphras et al. 2012, entire). Additionally, as many as 63 percent and 23 percent of the giraffe population in Tarangire National Park and Serengeti National Park, respectively, show signs of the skin disease (Muneza et al. 2017, p. 3). Unconfirmed reports also suggest that GSD affects giraffe populations in the Selous-Mikumi ecosystem (Brown and Fennessy 2014, unpublished report cited in Muneza et al. 2016, p. 150). In

Kenya, a few cases of GSD infections on Masai giraffes were observed.

Both GSD and GED present a potential threat to giraffes. However, no studies have been conducted to determine the extent to which these infections affect the giraffe's fitness and condition, and the best available information does not currently indicate that infections are fatal or having a population-level effect (Muneza et al. 2017, p. 3; Muneza et al. 2016, pp. 152, 155).

Climate Change

As mentioned above, the mechanisms by which climate change can affect the giraffe's fitness are complex, multifaceted, and contingent on a range of interacting factors. The primary influence of climate change on the Masai giraffe's viability is changes in precipitation patterns, notably drought and extreme precipitation pattern. Drought reduces water availability and food quality for giraffes. Giraffes are generally less able to access high-quality browse during times of drought due to an increase in tree mortality and a decline in browse abundance (Vicente-Serrano et al. 2022, p. 9, Engelbrecht et al. 2024, p. 178), as well as increased competition with other browsing species (Birkett and Stevens-Wood 2005, entire). Less access to high-quality food leads to giraffes needing to expand their home range, which in turn increases the relative proportion of time searching for food and can lead to human-wildlife conflicts and an increased risk of poaching. Giraffes can also be affected by extreme precipitation. High precipitation events were correlated with reduced survival in both adult and subadult giraffes, as higher rainfall can increase cover for predators, increase parasite and disease prevalence, and reduce food quality (Bond et al. 2023, pp. 3185–3193).

Indirectly, human food insecurity, brought on by both drought and heavy precipitation events, affects the giraffe's viability. Drought impacts pasture quality, livestock survival and production, crop yields, and malnutrition rates (Lam et al. 2023, p. entire). Heavy precipitation and flooding events in Kenya resulted in crop damages and impacts to 5 million people (1997); losses of life, property, and crops leading to human displacement (2002); and impacts to 112,000 people and crops (2013) (Kogo et al. 2021, p. 36). Impacts to current crops or livestock leads to changes in farming practices (Huho and Muglavai 2010, pp. 66–70). Many of these changes may result in loss, degradation, or fragmentation of giraffe habitat.

In summary, climate change directly affects giraffes through reduced forage and competition with other browsing species. Decreased availability of high-quality forage may cause giraffes to expand their home range in search of high-quality forage, which increases the risk of poaching and human-wildlife conflict. Indirectly, drought affects giraffes because human food insecurity leads to changing land use practices that in turn affect habitat conditions. Extreme precipitation events influence predation, disease, and food quality, the consequences of which can lead to direct mortality and competition for resources.

Genetic studies indicate Masai giraffes have among the lowest levels of heterozygosity and highest levels of inbreeding across the giraffe species and subspecies (Bertola et al. 2024, pp. 1578–1580; Coimbra et al. 2021, p. 2935; Coimbra et al. 2022, pp. 8–10; Lohay et al. 2023, pp. 10, 13). The high level of inbreeding has been attributed to past population bottleneck events between the 1890s to 1960s that resulted from recurring epidemics of rinderpest (an infectious viral disease of even-toed ungulates, including giraffes, which was characterized by fever, oral erosions, diarrhea, lymphoid necrosis, and high mortality). These epidemics affected giraffes directly through infection and indirectly through impacts on food availability (Lohay et al. 2023, p. 13). Inbreeding levels were slightly lower in the eastern Tanzanian populations than in the western Tanzanian populations (Lohay et al. 2023, p. 10). Overall, the low genetic diversity and high level of inbreeding suggest poor genetic health for this species.

Conservation Efforts and Regulatory Mechanisms

As mentioned above, Kenya has developed a National Recovery and Action Plan for Giraffe in Kenya (2018–2022) (KWS 2018, entire) and a national Wildlife Strategy 2030 (Ministry of Tourism and Wildlife 2018, entire). Objectives of the National Recovery and Action Plan for Giraffe in Kenya are to have viable, free-ranging populations of all three giraffe species in Kenya (including Masai giraffe) and reduce the proportion of giraffes illegally killed by 50 percent within 5 years (of 2018) (KWS 2018, p. 31). The National Wildlife Strategy 2030 outlines a vision for wildlife conservation because human population pressure, habitat loss, rapid development in key wildlife areas, poaching, insecurity, and overexploitation have accelerated the decline of wildlife populations and habitat degradation (Ministry of

Tourism and Wildlife 2018, p. 7). The National Human-Wildlife Coexistence Strategy and Action Plan 2024–2033 is aimed at fostering sustainable wildlife conservation while effectively mitigating human-wildlife conflicts (KWS 2024, unpaginated). The KWS has a security division with an overall goal and primary mandate to strengthen law enforcement, protect wildlife and their habitats, enhance tourist security in protected areas, and safeguard KWS assets. Wildlife population estimates by KWS have increased with these efforts, although this increase is attributed to the inclusion of more updated data in the 2021 report (Waweru et al. 2021, p. 110).

The Tanzania Wildlife Research Institute (TAWIRI), in collaboration with Tanzania National Parks, Tanzania Management Authority, Ngorongoro Conservation Area Authority, United States Agency for International Development, and Giraffe Conservation Foundation, developed the National Giraffe Conservation Plan (2020–2024) (TAWIRI 2019, entire). The giraffe is the national animal of Tanzania and, as such, is protected under the Wildlife Conservation Act No. 5 of 2009, which prohibits people from killing, wounding, capturing, or hunting giraffes (TAWIRI 2019, p. 6); however, TWRI recognizes that poaching remains an ongoing threat in Tanzania.

The core habitat area in Luangwa Valley, Zambia, is protected by several national parks and game management areas, with some giraffes also present on private game ranches. However, the level of protection provided by the parks and game management areas varies depending upon the ownership and the threat. The Zambia Wildlife Act of 1998 provided for establishment of the Zambia Wildlife Authority (ZAWA) (now renamed Department of National Parks and Wildlife), which is responsible for managing protected areas (Lindsey et al. 2014, p. 2). Nevertheless, there is a general ineffectiveness of these conservation areas for conserving wildlife (Freitsch et al. 2023, entire; Lindsey et al. 2014, entire). The Zambia Wildlife Act of 2015 banned hunting on national parks and controls hunting on game management areas (ZAWA 2015, entire). Well-managed trophy hunting and tourism can provide money for conserving wildlife and also bring resources to local communities. However, the Department of National Parks and Wildlife in Zambia remits a small proportion back to the communities but retains most of the income from hunting in game management areas. Income from wildlife is often paid late and does not

create a clear link between conservation and earnings, while the land is under customary tenure and belongs to the community (Lindsey et al. 2014, p. 7). Earnings for communities from trophy hunting are lower than estimated earnings from bushmeat and create weak incentives for the conservation of wildlife in this region (Lindsey et al. 2014, p. 7).

As mentioned above, Akagera National Park in Rwanda is managed by African Parks. One of the reasons for the incredible renewal of Akagera National Park and its wildlife is an effective conservation law enforcement strategy. A team of more than 100 rangers (mainly local community members) patrol, track, and deter illegal activities. Engaging the local community has reduced poaching and prioritized conservation of wildlife in the park (African Parks 2024, unpaginated).

In summary, the conservation efforts that are ongoing within the range of Masai giraffes focus on enforcing anti-poaching laws, minimizing human-wildlife conflicts and commercial trade, and working with communities where Masai giraffes occur. However, these efforts are not likely to counter the ongoing and anticipated future changes in land use and associated effects to Masai giraffe from future human population growth and climate change because of the anticipated magnitude of the impacts within the species range and the projected downward trajectory of giraffes' abundance.

Current Condition of Masai Giraffe

We describe the current condition of the Masai giraffe based on population abundance and trends, historical range contraction, habitat quality, influences affecting these metrics, and life-history traits of the species that determine its ability to rapidly recover from disturbances and population losses. Formal protection appears to influence Masai giraffe concentrations.

Given available population data, we identified five analysis units (AUs): (1) Kenya/Tanzania west—west of the Gregory Rift escarpment, (2) Kenya/Tanzania east—east of the Gregory Rift escarpment, (3) West Tanzania, (4) Zambia, and (5) Rwanda. Available information suggests limited connectivity among these units.

Resiliency and redundancy for the Masai giraffe are reduced from historical conditions. Before the 1980s, the rangewide population for the Masai giraffe was approximately 68,000 giraffes, but, since then, the population has been declining by approximately 1.0 to 3.3 percent per year for a total decline of 32 to 34 percent. Over a recent 40-

year period (1977–2016), the abundance of Masai giraffes in Kenya has declined (Ogututu et al. 2016, pp. 10–14, supplemental data), while the population of giraffes in Tanzania has also experienced a similar trend over a recent 30-year period (1986–2016). The population in Zambia has likely been stable or increasing since the 1950s (du Raan et al. 2015, pp. 5–7), and the population in Rwanda has been increasing since its introduction (Macpherson 2021, p. 5 and appendix 5; Brown and Bantlin 2023, cited in African Parks Network 2023, p. 9). The most recent population estimate for the species is 45,402 individuals (66 to 68 percent of its historical abundance), with most of the population in southern Kenya and northern Tanzania on both sides of the Gregory Rift escarpment.

By combining population assessments conducted for individual countries, counties, and parks, we estimated the proportion of total abundance in each analysis unit: Kenya/Tanzania east AU comprises approximately 42 percent of the total Masai giraffe population, Kenya/Tanzania west AU approximately 35 percent, West Tanzania AU approximately 21 percent, Zambia AU approximately 2 percent, and Rwanda AU less than 1 percent (Brown et al. 2021, p. 9; Ogutu et al. 2016, supplement table S1; TAWIRI 2019, pp. 31–40). It is difficult to quantify the exact rate of decline of the Masai giraffe population in the three Kenya/Tanzania AUs; however, these three Kenya/Tanzania AUs collectively comprise approximately 98 percent of the global Masai giraffe population, and it is likely each of these AUs is declining at a rate close to the rangewide rate of approximately 1.0 to 3.3 percent per year.

The Masai giraffe's historical range includes portions of three countries: Kenya, Tanzania, and Zambia. Currently, the Masai giraffe occurs throughout much of southern and eastern Kenya and central and northern Tanzania (East 1999, p. 98; Brown et al. 2021, p. 9; Bolger et al. 2019, p. 4). Masai giraffes are widely distributed in the southern part of Kenya (Dagg 1962, p. 6; Muruana et al. 2021, p. 6; Sidney 1965, p. 149) and occur both in protected areas and unprotected rangeland on public, private, and communal land (Brown et al. 2021, p. 9). In Tanzania, Masai giraffes are distributed throughout substantial parts of their historical range in Tanzania, which includes much of the country north of the Rufiji River (Dagg 1962, p. 6; East 1999, p. 98). While Masai giraffes remain widespread over much of their historical range, by the 1990s, they had

disappeared from extensive areas of central and coastal Tanzania (East 1999, p. 98). Therefore, the overall range is likely less than the historical range in Tanzania. Additionally, the area of occupancy and density in occupied areas has likely declined because of ongoing threats. In Zambia, the range is likely similar to its historical distribution in the Luangwa Valley. The species' current range also extends into Rwanda, as an extralimital population established via introduction in 1986. The only population of Masai giraffes in Rwanda occurs in Akagera National Park. The park represents the only protected savannah in Rwanda and the largest protected wetland in central Africa (African Parks Network 2023, p. 5).

The reason for the decline of the Masai giraffe population is primarily related to changing habitat conditions and poaching. Because of rapid human population growth, from 56 million to 157.2 million people over 40 years across the four countries where Masai giraffes occur, and recent droughts and extreme rainfall events, the pressure on available land and natural resources in east Africa in Kenya, Tanzania, Zambia, and Rwanda has produced changes to the Masai giraffe's natural habitat. Land use pressures within the range of the Masai giraffe to meet the demands of the human population for their livelihoods, including agriculture, pastoralism, and other uses, come at the detriment of the giraffe's requirements for food and space. Thus, the conversion of natural vegetation to croplands, rangelands, urbanization, and fuelwood results in the loss, degradation, and fragmentation of habitats across the historic range of the Masai giraffe. The increase in anthropogenic habitats also increased the risk of human-wildlife conflict, increasing poaching. Therefore, changing habitat conditions that affect resource availability negatively affect the Masai giraffe's survival and recruitment.

Poaching is another main threat to Masai giraffes. They are killed for bushmeat, hides, tails, and hair. Killing of giraffes is illegal in Kenya, Tanzania, and Rwanda, yet poaching continues. The Zambia Wildlife Act of 2015 banned killing giraffes on national parks and controls it on game management areas (ZAWA 2015, entire). Poaching targets adults more than juveniles or calves. Giraffe population growth is most sensitive to adult survival; thus, poaching strongly affects the rate of population growth.

Changes in precipitation patterns, notably drought and extreme precipitation patterns, are the

mechanisms through which climate change affects Masai giraffes. Drought reduces food availability for giraffes, particularly juveniles that compete with other herbivores for resources. Drought and heavy precipitation also affect human food security, which, in turn, increases the risk of poaching and further increases the risk of human conflict. High precipitation events were correlated with reduced survival in both adult and subadult giraffes (Bond et al. 2023, pp. 3185–3193), as higher rainfall can increase cover for predators, increase parasite and disease prevalence, and reduce forage nutrient concentration (food quality).

Civil unrest has been and remains a concern in Kenya and Tanzania and has resulted in increased poaching and overexploitation of natural resources. Pastoralists and farmers in Tanzania have a long history of conflict over land and resources. In addition, the Masai giraffe currently has low genetic diversity and high levels of inbreeding that likely result from past bottleneck events associated with rinderpest epidemics.

In summary, threats to the condition of the Masai giraffe's habitat work synergistically, exacerbating the primary threats to Masai giraffes of poaching and of habitat loss, habitat fragmentation, and degradation of natural vegetation. The threats associated with habitat loss and fragmentation are ongoing and projected to continue to escalate because of rapid human population growth and reliance of people within the range of the Masai giraffe on agriculture and pastoralism for their livelihoods. Thus, anthropogenic land use change within the range of the Masai giraffe to meet increasing human demands will negatively affect giraffe's requirements for food and space. Threats of poaching will continue, but KWS, the Tanzanian authorities, and African Parks will continue their efforts to reduce the incidents of poaching of Masai giraffes.

Conservation measures for Masai giraffes include anti-poaching efforts; monitoring of populations; and human, financial, and/or logistical resources provided by many organizations to support these efforts. Formal protection appears to influence Masai giraffe concentrations. However, conservation measures for giraffes may not adequately address climate change or the rapid human population growth that exacerbates the primary threats of changing habitat condition and poaching.

While some giraffe traits (e.g., mobility, flexible diet) provide adaptive ability, other traits (e.g., long lifespan,

low reproductive output, high energetic demands, and limited gene flow) strongly constrain the giraffe's ability to evolutionarily respond to the rapidly changing conditions associated with human population growth and climate change. Similarly, the species' ability to shift its range in response to changing environmental conditions is highly unlikely. In addition to physical (fencing, topography) and physiological barriers to large scale migration, there is limited habitat available nearby to avoid the anticipated risks from climate change. There are limited options for giraffes to escape the risks associated with habitat loss, poaching, and threats associated with rapidly increasing human populations and climate change.

Future Condition of Masai Giraffe

We now describe our analysis of the future conditions of the Masai giraffe, considering how the past and current influences, and any additional influences, will act on the species into the future.

We developed two future condition scenarios for the Masai giraffe to capture the plausible range of uncertainties regarding threats and projected responses to these threats by the Masai giraffe. We projected a lower scenario and upper scenario with habitat condition based on historical rates of forest loss, assumed human population increases in east Africa, and lower bound (SSP2–4.5/RCP4.5) and upper bound (SSP5–8.5/RCP8.5) climate change scenarios as described below. In one scenario, we assume that poaching will remain similar to current conditions and anti-poaching efforts continue, while in the other, we assume an increase in poaching. We also assume civil unrest will continue under both scenarios (Service 2024c, p. 47). When possible, we report the magnitude of change under a lower bound climate change scenario (SSP2–4.5/RCP4.5) and an upper bound climate change scenario (SSP5–8.5/RCP8.5) at different time steps in the future. In cases where studies report only a single time step (end of century), a single scenario, or a specific temperature increase (e.g., 1.5 °C), we provide a qualitative description of expected change into the future.

The ongoing threats associated with habitat loss, degradation, and fragmentation are ongoing and projected to escalate because of projected human population growth and the effects of climate change. Changes to the Masai giraffe's habitat condition were projected as forest loss within the range of the species based on the historical lowest and highest rates observed between 2000 and 2023. Forest loss,

while not a direct measure of impacts to giraffe habitat, can be considered a reasonable surrogate for changing habitat conditions for giraffes because giraffes always occur near trees and/or bushes and rely on them for food.

The median human population size in African countries within the range of the Masai giraffe is projected to nearly triple by 2100, from 160 million to 464 million people, with a 95 percent CI of 223 million to 1 billion people (United Nations, Department of Economic and Social Affairs, Population Division, 2024).

Africa continues to be a hot spot for climate change (Nooni et al. 2021, p. 2). Temperature increases are expected to occur faster in Africa than the global average, and many African countries are expected to experience a large increase in the frequency of daily temperature extremes sooner than other nations (Trisos et al. 2022, pp. 1320–1321). There is high confidence that mean and maximum annual temperatures will increase across the entire continent in the future (Trisos et al. 2022, p. 1322). Surface temperatures are projected to continue increasing across the range of the Masai giraffe, with divergence among future climate scenarios discernible around mid-century (WorldBank 2024, unpaginated). As temperature continues to rise across east Africa, drought extent, frequency, duration, and intensity increase as well. For example, the current increasing trend in percent of area affected by drought (extent) continues under both RCP4.5 and 8.5, and despite high inter-annual variability, the signal of an increasing trend is clear. Additionally, drought duration and intensity are projected to increase. Drought frequency is projected to continually increase to the end of the century under RCP4.5 and 8.5, with higher drought frequency under RCP8.5 (Haile et al. 2020, p. 14). Drought duration is projected to increase from an average of 8 months during the historical baseline (1981–2010), with a slight decrease to 4–7 months during the 2020 decade, to 10–32 months at mid-century and 29–108 months at late-century under RCP4.5 and 8.5, respectively (Hailie et al. 2020, pp. 10, 12–13). An increasing trend in frequency, coupled with increasing severity, portend worse droughts in the future (Haile et al. 2020, p. 17). Similarly, in the Zambia portion of the species' range, recent warming trends continue, with projected increases in drought magnitude, frequency, and severity across southern Africa, including in the range of the Masai giraffe (Engelbrecht et al. 2024, p. 171; Trisos et al. 2022, p. 1328 and

references within; Seneviratne et al. 2021, p. 1519). While droughts are projected to be more frequent, an increase in extreme rainfall events is also expected to occur across most of the continent (Trisos et al. 2022, p. 1320; Seneviratne et al. 2021, p. 1565).

Poaching in the future will be driven by the variety of factors mentioned above. As habitat conditions change from the effects of climate change and human population increases, poaching is likely to increase in many areas of Africa, including within the range of the Masai giraffe (Ruppert 2020, p. 45; Bond et al. 2023, p. 6694; Gašparová 2024, p. 8). However, a study using data including the Masai giraffe in Tanzania (Manyara Ranch and Tarangire National Park) showed that the strongest predictor for population decline was a reduction in law enforcement leading to more poaching (Bond et al. 2023, p. 6706).

While there are multiple agencies and conservation organizations working to reduce the threat of poaching for Masai giraffes, poaching will likely continue. As mentioned above, killing for bushmeat is more severe in poorer countries and in those areas with high human population densities, and it is consistently more prevalent closer to human settlements (Lindsey et al. 2011, p. 97). Poaching tends to spike when food shortages are severe, and when the demand for agricultural labor is low (Lindsey et al. 2012, p. 5). With the projections for human population size and drought, the human population is likely to live under chronic and increasing food insecurity. Therefore, we expect that under the lower plausible scenario it is likely that current and ongoing conservation efforts can maintain or somewhat reduce poaching levels, while the upper scenario expectation is an increase in poaching rates due to the expected increases in human population size and drought.

We do not attempt to project the prevalence or severity of future occurrences of civil unrest; however, it is expected that civil unrest will likely occur in the future. Climate-induced displacement is widespread in Africa because poor conditions for agricultural and pastoral livelihoods cause people to relocate in search of better opportunities (Trisos et al. 2022, pp. 1350, 1360). Relatedly, the risk of violent conflict increases because of fewer economic opportunities caused by increased temperature and extreme weather events (Trisos et al. 2022, p. 1394; Elias and Abdi 2010, pp. 4–20; Pica-Ciamarra et al. 2007, pp. 10–11).

We describe the future condition of the Masai giraffe given the plausible projections of threats described above. We summarize the influences driving future conditions and the expected trends in range and population abundance. The primary factors influencing the viability of the Masai giraffe (habitat changes and poaching) are expected to continue with increasing magnitude.

The median projected human population size in the four countries that contain the Masai giraffe's range is expected to nearly triple by 2100 (from 160 million in 2024 to 464 million people in 2100). Under the lower bound scenario, human population size by 2100 is projected to double in Tanzania and remain nearly stable in the other three nations. However, under the upper bound scenario, the population increases more than fivefold across the range of the species, with a fourfold increase in Kenya and a sevenfold to eightfold increase in the other nations. The projected changes in drought frequency and drought duration, coupled with human population growth, are likely to increasingly limit the sustainability of drought-coping strategies. With an increase in drought frequency and severity, most of the Kenyan populace is expected to live under chronic food shortages (Huho and Mugalavai 2010, p. 70). Similarly, more than 80 percent of the human population in Tanzania is employed in agriculture, and 64 percent of the population is rural (FAO 2024c, unpaginated); thus, climate change is likely to exacerbate household food insecurity in Tanzania (Randell et al. 2022, entire). Risks associated with food insecurity lead to changing habitat conditions; lead to human-wildlife conflicts, including poaching and civil unrest; and are likely to increase given continued human population growth, worsening climate conditions, and their impacts on livelihoods in the range of the Masai giraffe.

Human population growth and climate change will lead to further habitat loss, degradation, and fragmentation for the Masai giraffe. Forest and woody cover are expected to continue to decline. Assuming the rate of forest cover loss between 2000 and 2023 continues (approximately 10 percent), an additional 9 to 64 percent (697–5305 kha, lower and upper bound scenarios, respectively) loss of forest cover would occur by 2100. The continued habitat loss, degradation, and fragmentation will further reduce food quality and availability for the Masai giraffe and further restrict the species' movement patterns and ability to access

necessary resources. These reductions in food quality and the increased need for longer movements or larger home ranges will further reduce reproduction and survival rates, especially in times of drought, which will be more frequent in the future.

Under both future scenarios, the ranges of the Masai giraffe in Rwanda and Zambia are unlikely to exhibit a decline in area from accumulating influences. However, due to their limited area and abundance, a catastrophic event (e.g., multi-year, unprecedented drought) could result in the loss of these populations. Neither population is likely to expand its range: the population in the Rwandan AU is bounded by fencing (Shabahat 2017, unpaginated), and the Zambia population is near the unit's carrying capacity (Berry and Bercovitch 2016, p. 723; Bercovitch et al. 2018, p. 5). With projected habitat loss, degradation, and fragmentation, and poaching in Kenya and Tanzania, where nearly the entire population (98 percent) of Masai giraffes occur, the trend of decreasing density of populations and greater separations between them observed over the last 30 years will likely continue.

We simulated future population trajectories based on the current population size and growth rate estimates for the Masai giraffe to assess the potential change in future population size if historical trends and conditions continue unchanged. On average, the population is projected to decline to 5–24 percent (across the two growth rate scenarios, 95 percent, CI = 4–30 percent) of the historical size by 2100 (Service 2024c, p. 78), or an estimated mean population size of 3,725–16,074 (95 percent, CI = 2,899–20,175) individuals. The projections of Masai giraffe populations are based on historical rates of decline and do not incorporate the full range of biological complexity, uncertainty, or anticipated increases in the magnitude of threats facing Masai giraffes in the future. Due to a lack of consistent data to estimate the rate of population change for each AU, we did not separately project future population trends for each AU.

In summary, resiliency and redundancy for the Masai giraffe will be further reduced from historical conditions. The overall population is projected to decline to 5–24 percent of its historical size by the end of the century. The species will likely remain in its current range in Rwanda and Zambia, and its occupancy and distribution will likely decline in the future in Kenya and Tanzania (where most Masai giraffes occur). The reason for the projected continued decline of

the Masai giraffe population is primarily related to changing habitat conditions and poaching, which are expected to increase in the future because of human population growth and the effects of climate change, which will intensify. The magnitude of influences is the same across the range of the Masai giraffe. Masai giraffes currently move through ecosystems and cross the Kenya-Tanzania border, although formal protection appears to influence Masai giraffe concentrations. However, populations are geographically separated by the Gregory Rift escarpment (Lohay et al. 2023, p. 14), and they will have limited options to avoid the risks associated with habitat loss, poaching, and threats associated with rapidly increasing human populations and the effects of climate change.

Determination of Status: Background

Section 4 of the Act and its implementing regulations at 50 CFR part 424 set forth the procedures for determining whether a species meets the definition of an endangered species or a threatened species. The Act requires that we determine whether a species meets the definition of an endangered species or a threatened species because of any of the following factors: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. We consider these five factors and the species' responses to these determinations.

Section 3 of the Act defines “endangered species” and “threatened species.” An endangered species is a species that is in danger of extinction throughout all or a significant portion of its range, and a threatened species is a species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. Both definitions include not only the phrase “throughout all,” but also the phrase “or a significant portion of its range.” Thus, there are ultimately four bases for listing a species under the Act (in danger of extinction throughout all of its range, in danger of extinction throughout a significant portion of its range, likely to become an endangered species within the foreseeable future throughout all of its range, or likely to become an endangered species within the

foreseeable future throughout a significant portion of its range). These four bases are made up of two classifications (i.e., endangered or threatened) and two components (i.e., throughout all of its range or throughout a significant portion of its range).

Beginning in 2001, a number of judicial opinions addressed our interpretation of the phrase “or a significant portion of its range” (the SPR phrase) in these statutory definitions. The seminal case was *Defenders of Wildlife v. Norton*, 258 F.3d 1136 (9th Cir. 2001) regarding the flat-tailed horned lizard.

The court in that case held that the SPR phrase in the Act was “inherently ambiguous,” finding that it was something of an oxymoron to speak of a species being at risk of extinction in only a portion of its range (id. at 1141); because the Act does not define a “significant portion,” the Secretary has wide discretion to delineate it (id. at 1145). However, the court found that, even with wide discretion, the interpretation we had applied in analyzing the status of the flat-tailed horned lizard was unacceptable because it would allow for a species to warrant listing throughout a significant portion of a species' range only when the species “is in danger of extinction everywhere” (id. at 1141). The court held that the SPR phrase must be given independent meaning from the “throughout all” phrase making the SPR phrase in the statute superfluous. In an attempt to address the judicial opinions calling into question our approach to evaluating whether a species was endangered or threatened throughout a significant portion of its range, the Services published the 2014 SPR Policy (79 FR 37578; July 1, 2014). The December 9, 2011, notice announcing the draft policy and requesting public comments on it provides more detail about litigation before 2014 regarding the SPR phrase (76 FR 76987). The 2014 SPR Policy includes four elements:

(1) Consequence—that the consequence of determining that a species warrants listing based on its status in a significant portion of its range is to list the species throughout all of its range;

(2) Significance—a definition of the term “significant”;

(3) Range—that the species' “range” is the current range of the species; and

(4) DPS—that, if a species is endangered or threatened in an SPR, and the population in that SPR is a DPS, the Service will list just the DPS.

Subsequently, two district courts vacated the definition of “significant” contained in the 2014 SPR Policy (*CBD*

v. Jewell, 248 F. Supp. 3d 946, 959 (D. Ariz. 2017), and *Desert Survivors*, 321 F. Supp. 3d 1011, 1070–74 (N.D. Cal. 2018)). The courts found that the definition in the 2014 SPR Policy set too high a threshold and rendered the SPR language in the statute superfluous, failing to give it independent meaning from the “throughout all” phrase. In 2020, another court (*Everson*, 435 F. Supp. 3d 69 (D.D.C. 2020)) also vacated the specific aspect of the 2014 SPR Policy under which, “if the Services determine that a species is threatened throughout all of its range, the Services will not analyze whether the species is endangered in a significant portion of its range” (id. at 98). This was an extension of the definition of “significant,” which required that for a portion of the range of a species to be significant, the species must not be currently endangered or threatened throughout its range. In an extension of the earlier rulings from *CBD v. Jewell* and *Desert Survivors*, the court found that this aspect of the definition of the 2014 SPR Policy was not only inconsistent with the statute because it “rendered the ‘endangered in a significant portion of its range’ basis for listing superfluous,” but also “inconsistent with ESA principles” and “not a logical outgrowth from the draft policy.” Under this ruling, if we find a species is not in danger of extinction throughout all of its range, we must evaluate whether the species is in danger of extinction throughout a significant portion of its range, even in cases where we have determined that the species is likely to become in danger of extinction within the foreseeable future (i.e., it meets the Act’s definition of a threatened species) throughout all of its range. The remaining three elements of the 2014 SPR Policy remain intact and have not been invalidated or questioned by the courts.

In short, courts have directed that the definition of “significant” must afford the phrase “or a significant portion of its range” an independent meaning from the “throughout all of its range” phrase. Therefore, to determine whether any species warrants listing, we determine for each classification (endangered and threatened) the appropriate component to evaluate (throughout all of its range or throughout a significant portion of its range).

We make this determination based on whether the best scientific and commercial data indicate that the species has a similar extinction risk in all areas across its range (at a scale that is biologically appropriate for that species). When a species has a similar extinction risk in all areas across its range, we analyze its regulatory status

using the component “throughout all of its range.” For example, in some cases, there is no way to divide a species’ range in a way that is biologically appropriate. This could be because the range is so small that there is only one population or because the species functions as a metapopulation such that effects to one population directly result in effects to another population. On the other hand, when the species’ extinction risk varies across its range, we analyze its regulatory status using the component “throughout a significant portion of its range.”

For either classification (endangered or threatened), we consider the five factors and the species’ responses to those factors regardless of which component (throughout all of its range or throughout a significant portion of its range) we have determined is appropriate for that classification. When assessing whether a species is endangered or threatened throughout a significant portion of its range, we address two questions because we must determine whether there is any portion of the species’ range for which both (1) the portion is “significant” (the significance question) and (2) the species is in danger of extinction or likely to become in danger of extinction within the foreseeable future throughout that portion (the status question). We may address the significance question or the status question first. Regardless of which question we address first, if we reach a negative answer with respect to the first question that we address, we do not need to evaluate the other question for that portion of the species’ range.

Determination of West African Giraffe Status

We propose to list the West African giraffe as an endangered species because it is in danger of extinction throughout all of its range. As stated above, we determine a species’ classification based upon its regulatory status throughout all of its range when the species has similar extinction risk in all areas across its range at a scale that is biologically appropriate for that species. Conversely, if the extinction risk varies across its range, we determine a species’ classification based upon its regulatory status throughout a significant portion of its range. Either way, we begin by determining the scale that is biologically appropriate for that species. For many species, we can divide the range in an infinite number of ways. As described above, for the West African giraffe there are only two populations that do not interact with each other. Those populations are the units that provide the appropriate scale to assess

extinction risk for the West African giraffe.

For the endangered classification, we evaluated whether the West African giraffe has a similar risk of extinction in all areas across its range by assessing its extinction risk within each population. Because our review indicated that the West African giraffe’s extinction risk is similar in all areas across its range, we then evaluated whether it may be endangered based upon the “throughout all of its range” component. In undertaking this analysis of whether the West African giraffe is endangered throughout all of its range, we reviewed the best scientific and commercial data available regarding threats to the subspecies, the subspecies’ responses to those threats, and any associated conservation measures. We then assessed the cumulative effects of those threats and conservation measures under the Act’s section 4(a)(1) factors. We examined the following threats: habitat loss, fragmentation, and degradation, and poaching, all of which are exacerbated by rapid human population growth and the effects from climate change, as well as disease and predation, including cumulative effects.

After evaluating threats to the species and assessing the cumulative effect of the threats under the Act’s section 4(a)(1) factors, we found that habitat loss, degradation, and fragmentation, which are and will continue to be exacerbated by increasing human population and effects from climate change, are the threats affecting the subspecies’ viability in the near term. There are approximately 690 West African giraffes. Fewer than 20 West African giraffes occur in the recently reintroduced population at the Gadabedji Biosphere Reserve, and all of the rest occur in one population in the Giraffe Zone, making both populations highly vulnerable to threats. While neither of these populations is currently subject to poaching, they are both currently and expected to continue to be affected in the near term by habitat loss, including land degradation; habitat fragmentation exacerbated by civil unrest; rapid human population growth; and climate change via drought. Civil unrest is a longstanding and significant ongoing concern for both populations of the West African giraffe, and both populations are at risk of catastrophic drought events in the near term. The best available information indicates that disease and predation are not currently resulting in population-level or species-level effects.

Overall, the resiliency, redundancy, and adaptive capacity of the West African giraffe have declined due to

declines in abundance, a significant range contraction, and moderately high levels of inbreeding. Historically, the West African giraffe was distributed widely from Senegal to Nigeria but has been extirpated across most of its range; the species is now limited to two small areas in Niger. The two remaining populations are small and isolated, and the limited capacity of West African giraffes to cope with and adapt to rapidly changing environmental conditions exacerbates the risks posed by their declining resiliency and redundancy. These reductions in viability, in the face of ongoing and imminent threats, results in the near-term risk of extinction in both populations such that they currently lack sufficient resiliency, redundancy, and representation for their continued existence to be secure. In summary, we find that the West African giraffe is in danger of extinction in all areas (*i.e.*, both populations). Thus, there is no portion of the range where the West African giraffe may have a regulatory status that is different from its status in the rest of its range.

In summary, after evaluating threats to the subspecies, the subspecies' responses to those threats, and any associated conservation measures, and after assessing the cumulative effects of those threats and conservation measures under the Act's section 4(a)(1) factors, we conclude that the West African giraffe is in danger of extinction throughout all of its range due to the limited number of resiliency of the two extant populations; the severity, extent, and immediacy of threats to those populations; and the anticipated responses of the West African giraffe to those threats. A threatened species status is not appropriate because the threats to the West African giraffe are ongoing or imminent and have already resulted in the species being in danger of extinction.

Determination of Status

Based on the best scientific and commercial data available, we determine that the West African giraffe meets the Act's definition of an endangered species because it is in danger of extinction throughout all of its range. Therefore, we propose to list the West African giraffe as an endangered species in accordance with sections 3(6) and 4(a)(1) of the Act.

Determination of Kordofan Giraffe Status

We propose to list the Kordofan giraffe as an endangered species because it is in danger of extinction throughout all of its range. As stated above, we

determine a species' classification based upon its regulatory status throughout all of its range when the species has similar extinction risk in all areas across its range at a scale that is biologically appropriate for that species. Conversely, if the extinction risk varies across its range, we determine a species' classification based upon its regulatory status throughout a significant portion of its range. Either way, we begin by determining the scale that is biologically appropriate for that species. For many species, we can divide a species' range in an infinite number of ways. As described above, for the Kordofan giraffe, the subspecies is spread across five countries in central Africa with little interactions between populations. Those populations are the units that provide the appropriate scale to assess extinction risk for the Kordofan giraffe.

For the endangered classification, we evaluated whether the Kordofan giraffe has a similar risk of extinction in all areas across its range by assessing its extinction risk within each population. Because our review indicated that the Kordofan giraffe's extinction risk is similar in all areas across its range, we then evaluated whether it may be endangered based upon the "throughout all of its range" component. In undertaking this analysis of whether the Kordofan giraffe is endangered throughout all of its range, we reviewed the best scientific and commercial data available regarding threats to the subspecies, the subspecies' responses to those threats, and any associated conservation measures. We then assessed the cumulative effects of those threats and conservation measures under the Act's section 4(a)(1) factors. We examined the following threats: habitat loss, fragmentation, and degradation, and poaching, all of which are exacerbated by rapid human population growth and the effects from climate change, as well as disease and predation, including cumulative effects.

There are approximately 2,300 Kordofan giraffes, which represents a 64 to 69 percent decline from its historical size of 6,360–7,360 in the 1950s. The overall numbers of Kordofan giraffes have been declining and are projected to continue to decline at a rate of 1.5 to 7.0 percent per year. The majority of Kordofan giraffes occur in two populations in disjunct national parks (approximately 500 in Waza National Park in Cameroon, and approximately 1,200 in Zakouma National Park in Chad); together, these two populations comprise approximately 80 percent of all Kordofan giraffes. The remaining populations are small (each with fewer

than 100 individuals) with little interaction between groups.

After evaluating threats to the subspecies and assessing the cumulative effect of the threats under the Act's section 4(a)(1) factors, we found that habitat loss, degradation, and fragmentation (Factor A), and poaching (Factor B), which are and will continue to be exacerbated by increasing human populations and effects from climate change (Factor E), are the threats affecting the subspecies' viability in the near term. In the near term, only one population across the Kordofan giraffe's range appears protected from habitat loss and poaching within a larger, intact, protected area (Zakouma National Park); however, the current management agreement only extends until 2027. The remaining populations (including at Waza National Park) are currently subject to poaching and are currently and expected to continue to be affected in the near term by habitat loss, degradation, and fragmentation exacerbated by ongoing and near-term civil unrest; rapid human population growth; and climate change via drought. Civil unrest is a longstanding and significant ongoing concern for the Kordofan giraffe. In addition, all populations are at risk of catastrophic drought events in the near term. Ongoing conservation efforts are insufficient to alleviate these threats. The best available information indicates that disease and predation are not currently resulting in population-level or subspecies-level effects.

Overall, the resiliency, redundancy, and adaptive capacity of the Kordofan giraffe have declined due to declines in abundance, significant range contraction, and moderately high levels of inbreeding. Historically, the Kordofan giraffe was distributed widely across central Africa countries in the northern savanna woodlands and Sahel zone, but it has been extirpated across most of its range. The subspecies' area of occupancy is greatly reduced, and approximately 80 percent of individuals now occurring within just two populations. All populations are vulnerable to catastrophic drought events. Only one population (Zakouma National Park) is protected from poaching and habitat loss through 2027. The other larger population is facing ongoing and severe threats. The remaining populations are small and isolated, and the limited capacity of the Kordofan giraffe to cope with and adapt to rapidly changing environmental conditions exacerbates the risks posed by the subspecies' declining resiliency and redundancy. These reductions in viability, in the face of ongoing and

imminent threats, results in the near-term risk of extinction in all populations such that they currently lack sufficient resiliency, redundancy, and representation for their continued existence to be secure. In summary, we find that the Kordofan giraffe is in danger of extinction in all areas (*i.e.*, every population). Thus, there is no portion of the range where the Kordofan giraffe may have a regulatory status that is different from its status in the rest of its range.

In summary, after evaluating threats to the subspecies, the subspecies' responses to those threats, and any associated conservation measures, and after assessing the cumulative effects of those threats and conservation measures under the Act's section 4(a)(1) factors, we conclude that the Kordofan giraffe is in danger of extinction throughout all of its range due to the limited resiliency of the extant populations; the severity, extent, and immediacy of threats to those populations; and the anticipated responses of the Kordofan giraffe to those threats. A threatened species status is not appropriate because the threats to the Kordofan giraffe are ongoing or imminent and have already resulted in the species being in danger of extinction.

Determination of Status

Based on the best scientific and commercial data available, we determine that the Kordofan giraffe meets the Act's definition of an endangered species because it is in danger of extinction throughout all of its range. Therefore, we propose to list the Kordofan giraffe as an endangered species in accordance with sections 3(6) and 4(a)(1) of the Act.

Determination of Nubian Giraffe Status

We propose to list the Nubian giraffe as an endangered species because it is in danger of extinction throughout all of its range. As stated above, we determine a species' classification based upon its regulatory status throughout all of its range when the species has similar extinction risk in all areas across its range at a scale that is biologically appropriate for that species. Conversely, if the extinction risk varies across its range, we determine a species' classification based upon its regulatory status throughout a significant portion of its range. Either way, we begin by determining the scale that is biologically appropriate for that species. For many species, we can divide the range in an infinite number of ways. As described above, populations of Nubian giraffe occur in Ethiopia, Kenya, South Sudan, and Uganda. Those populations are the

units that provide the appropriate scale to assess extinction risk for the Nubian giraffe.

For the endangered classification, we evaluated whether the Nubian giraffe has a similar risk of extinction in all areas across its range by assessing its extinction risk within each population. Because our review indicated that the Nubian giraffe's extinction risk is similar in all areas across its range, we then evaluated whether it may be endangered based upon the "throughout all of its range" component. In undertaking this analysis of whether the Nubian giraffe is endangered throughout all of its range, we reviewed the best scientific and commercial data available regarding threats to the subspecies, the subspecies' responses to those threats, and any associated conservation measures. We then assessed the cumulative effects of those threats and conservation measures under the Act's section 4(a)(1) factors. We examined the following threats: habitat loss, fragmentation, and degradation, and poaching, all of which are exacerbated by rapid human population growth and the effects from climate change, as well as disease and predation, including cumulative effects.

There are approximately 3,022 Nubian giraffes, which represents an 86 percent decline from its historical (1960s to 1980s) population size of 21,907, and the overall numbers of Nubian giraffes have been declining and are projected to continue to decline at a rate of 4–4.9 percent per year. The majority of Nubian giraffes (approximately 60 percent) occur in one population at Murchison Falls National Park, Uganda. There are four other small populations (fewer than 100 individuals each) in eastern and southern Uganda, and the rest of Nubian giraffes occur in small populations in Kenya, South Sudan, and Ethiopia. All these populations have little chance for dispersal between sites or capacity for expansion.

After evaluating threats to the subspecies and assessing the cumulative effect of the threats under the Act's section 4(a)(1) factors, we found that habitat loss, degradation, and fragmentation (Factor A), and poaching (Factor B), which are and will continue to be exacerbated by increasing human populations and effects from climate change (Factor E), are the threats affecting the subspecies' viability in the near term. In the near term, all populations are currently subject to poaching and are currently and expected to continue to be affected in the near term by habitat loss, including land degradation; habitat fragmentation

exacerbated by civil unrest; rapid human population growth; and climate change via drought. Civil unrest is a longstanding and significant ongoing concern for the Nubian giraffe. All populations are at risk of catastrophic drought events in the near term.

Ongoing conservation efforts are not sufficient to alleviate these threats. While disease and predation are impacting individual Nubian giraffes, the best available information indicates that disease and predation are not currently resulting in population-level or subspecies-level effects.

Overall, the resiliency, redundancy, and adaptive capacity of the Nubian giraffe have declined due to declines in abundance and significant range contraction. Nubian giraffes were historically distributed across central-west Kenya into Uganda, Ethiopia, and South Sudan, but the subspecies has been extirpated across most of its range. The Nubian giraffe's area of occupancy is greatly reduced, and approximately 60 percent of individuals now occur within just one population. The remaining populations are small and isolated, and the limited capacity of the Nubian giraffe to cope with and adapt to rapidly changing environmental conditions exacerbates the risks posed by the subspecies' declining resiliency and redundancy. All populations are vulnerable to catastrophic drought events; the effects of habitat loss, degradation, and fragmentation, and poaching. These reductions in viability, in the face of ongoing and imminent threats, results in the near-term risk of extinction in all populations such that they currently lack sufficient resiliency, redundancy, and representation for their continued existence to be secure. In summary, we find that the Nubian giraffe is in danger of extinction in all areas (*i.e.*, every population). Thus, there is no portion of the range where the Nubian giraffe may have a regulatory status that is different from its status in the rest of its range.

In summary, after evaluating threats to the subspecies, the subspecies' responses to those threats, and any associated conservation measures, and after assessing the cumulative effects of those threats and conservation measures under the Act's section 4(a)(1) factors, we conclude that the Nubian giraffe is in danger of extinction throughout all of its range due to the limited resiliency of the two extant populations; the severity, extent, and immediacy of threats to those populations; and the anticipated responses of the Nubian giraffe to those threats. A threatened species status is not appropriate because the threats to the Nubian giraffe are ongoing or

imminent and have already resulted in the species being in danger of extinction.

Determination of Status

Based on the best scientific and commercial data available, we determine that the Nubian giraffe meets the Act's definition of an endangered species because it is in danger of extinction throughout all of its range. Therefore, we propose to list the Nubian giraffe as an endangered species in accordance with sections 3(6) and 4(a)(1) of the Act.

Determination of Reticulated Giraffe Status

We propose to list the reticulated giraffe as a threatened species because it is likely to become in danger of extinction within the foreseeable future throughout all of its range. As stated above, we determine a species' classification based upon its regulatory status throughout all of its range when the species has similar extinction risk in all areas across its range at a scale that is biologically appropriate for that species. Here, the reticulated giraffe functions as a single population that occurs primarily within Kenya (extending into Ethiopia with connectivity), and the threats affect the species such that it has similar extinction risk throughout its entire range. In other words, because of the fission-fusion behavior of reticulated giraffe and the roaming nature of male giraffes, effects to one part of the range are likely to affect the species within other parts of its range. Thus, there is no way to divide this species' range at a scale that is biologically appropriate for a classification determination. Reticulated giraffes are considered extirpated in Somalia, and Somalia is not included in the current range of this species. Therefore, we assessed the species' status based upon the "throughout all of its range" component.

In undertaking this analysis of whether the reticulated giraffe is threatened throughout all of its range, we reviewed the best scientific and commercial data available regarding threats to the species, the species' responses to those threats, and any associated conservation measures. We then assessed the cumulative effects of those threats and conservation measures under the Act's section 4(a)(1) factors. We examined the following threats: habitat loss, fragmentation, and degradation, and poaching, all of which are exacerbated by rapid human population growth and the effects from

climate change, as well as disease and predation, including cumulative effects.

The reticulated giraffe needs to maintain its healthy, resilient population (which contains multiple herds) across its range to reduce the risk of extinction. The species has experienced reductions in resiliency and redundancy over time, but we expect it will continue to have multiple herds with high abundance across its range in the near term. The statutory difference between an endangered species and a threatened species is the timeframe in which the species becomes in danger of extinction. An endangered species is in danger of extinction, and a threatened species is not in danger of extinction but is likely to become so within the foreseeable future. The species currently has an estimated 15,985 individuals, with 99 percent of the population occurring in Kenya. While there has been a decline from historical population size, this is still a large and relatively connected population, and, in the near term, the reticulated giraffe is maintaining its healthy, resilient population (which contains multiple herds) across its range. However, within the foreseeable future, declines are projected to continue to occur, as the best available information suggests that none of the threats are anticipated to be adequately mitigated or decline into the future. While threats are ongoing, the effects to the species are not currently at a magnitude that put the species in near-term risk of extinction; however, threats are expected to increase, resulting in an increasing risk of extinction over time. After evaluating the threats to the species and assessing the cumulative effect of the threats under the Act's section 4(a)(1) factors, we found that habitat loss, degradation, and fragmentation (Factor A), and poaching (Factor B), all of which are exacerbated by increasing human populations and effects from climate change (Factor E), are the threats affecting the species' viability within the foreseeable future. As human population growth and the effects of drought increase, human food security is expected to decrease, and, as a result, human-wildlife conflict will continue to increase.

Declines in the species' resiliency are projected to continue, with a projected population size of 104 million people in the range of the reticulated giraffe by 2100. While not considered a separate population, given the small number of individuals and threats within Ethiopia, including within the last region where reticulated giraffes occur in Ethiopia, the likelihood of extirpation there is high. The continued reticulated giraffe

population decline is likely because of the ongoing and future projected land use changes that support the increased human population and the effects of climate change. Although poaching does not currently pose a significant threat to the reticulated giraffe, it is anticipated to become more significant in the future because of the increased food insecurity anticipated from climate change and an increased human population. Drought duration, frequency, and intensity are projected to continue to increase within the range of the reticulated giraffe. The approximately 1 °C temperature increase resulting from climate change observed over the period of the reticulated giraffe's decline is expected to increase to a 2–4°C increase by 2100, resulting in increased drought extent, frequency, duration, and intensity. The range of projected human population size is from similar to current numbers (lower scenario) to quadruple current numbers (upper scenario) in Kenya and Ethiopia by 2100.

The current connection between these threats and giraffe viability is not expected to change into the future. In other words, we anticipate no change in species' response to changing habitat conditions or poaching. While currently abundant, reticulated giraffe populations have declined from historical levels, due to the declines in adult survival and recruitment that result from drought, changes in habitat condition, and poaching. Extrapolating the increases for the threats to the reticulated giraffe that have resulted in the decline to date, we expect ongoing risks to the reticulated giraffe's viability to continue and increase into the future such that the species is likely to have an inability to meet its needs of having a healthy, resilient population with multiple herds distributed across its range, resulting in an increased risk of extinction within the foreseeable future.

In addition, the species' ability to shift its range in response to changing environmental conditions is highly limited. In addition to physical (fencing, topography) and physiological barriers to large-scale migration, there is limited habitat available nearby to shift to escape the effects of climate change. The entire sub-Saharan region of Africa is considered a hot spot for climate change, which has led to increased frequency and severity of drought over the last four decades. Under a warming climate, drought risk and extreme rainfall events are projected to worsen in the near-term and accelerate at mid-century. Thus, even if the reticulated giraffe were able to shift or expand its range to in response to local land use-induced habitat changes, it appears

nearly certain that the species cannot avoid the long-term impacts from climate change.

Thus, based on the best scientific and commercial data available, we conclude that the reticulated giraffe is not in danger of extinction but is likely to become in danger of extinction within the foreseeable future throughout all of its range. As discussed above, there is no way to divide the reticulated giraffe's range that is biologically appropriate. Thus, there is no portion of the range where the species may be in danger of extinction.

Determination of Status

Based on the best scientific and commercial data available, we determine that the reticulated giraffe meets the Act's definition of a threatened species because it is likely to become in danger of extinction within the foreseeable future throughout all of its range. Therefore, we propose to list the reticulated giraffe as a threatened species in accordance with sections 3(20) and 4(a)(1) of the Act.

Determination of Masai Giraffe Status

We propose to list the Masai giraffe as a threatened species because it is likely to become in danger of extinction within the foreseeable future throughout all of its range. As stated above, we determine a species classification based upon its regulatory status throughout all of its range when the species has similar extinction risk in all areas across its range at a scale that is biologically appropriate for that species. Conversely, if the extinction risk varies across its range, we determine a species' classification based upon its regulatory status throughout a significant portion of its range. Either way, we begin by determining the scale that is biologically appropriate for that species. For many species, we can divide the range in an infinite number of ways. As described above, for the Masai giraffe, we divided the range into five AUs: (1) Kenya/Tanzania west—west of the Gregory Rift escarpment, (2) Kenya/Tanzania east—east of the Gregory Rift escarpment, (3) West Tanzania, (4) Zambia, and (5) Rwanda. In summary, those five AUs are the units that provide the appropriate scale to assess extinction risk for the Masai giraffe.

Evaluation for Threatened Classification

For the threatened classification, we evaluated whether the Masai giraffe has a similar risk of extinction within the foreseeable future in all areas across its range by assessing its extinction risk within each of the AUs. Because our review indicated that the Masai giraffe's

extinction risk is similar in all areas across its range and will likely continue to be, we then evaluated whether it may be threatened based upon the "throughout all of its range" component. In undertaking these analyses, we reviewed the best scientific and commercial data available regarding threats to the species, the species' responses to those threats, and any associated conservation measures. We then assessed the cumulative effects of those threats and conservation measures under the Act's section 4(a)(1) factors. We examined the following threats: habitat loss, fragmentation, and degradation, and poaching, all of which are exacerbated by rapid human population growth and the effects from climate change, as well as hunting, disease, and predation, including cumulative effects.

The Masai giraffe needs multiple healthy, resilient populations that are distributed across its range to reduce the risk of extinction. The statutory difference between an endangered species and a threatened species is the timeframe in which the species becomes in danger of extinction. An endangered species is in danger of extinction, and a threatened species is not in danger of extinction but is likely to become so within the foreseeable future.

While three AUs (Kenya/Tanzania west, Kenya/Tanzania east, and West Tanzania) are much larger in geographical size and population abundance and more likely to be able to respond to stochastic events over time than the other two AUs, all AUs will experience increased threats within the foreseeable future that are likely to be similar. After evaluating threats to the species and assessing the cumulative effect of the threats under the Act's section 4(a)(1) factors, we found that habitat loss, degradation, and fragmentation, and poaching, all of which are exacerbated by human population growth and the effects of climate change, are the threats affecting the species' viability within the foreseeable future.

The following information applies to each of the AUs, unless explicitly stated otherwise. While current populations are either large and connected (Kenya/Tanzania west, Kenya/Tanzania east, and West Tanzania) or smaller with minimal threats (Zambia and Rwanda), within the foreseeable future, declines of at least 1 to 3 percent are projected to continue to occur within the three large AUs (Kenya/Tanzania west, Kenya/Tanzania east, and West Tanzania), as the best available information suggests that none of the threats will be mitigated or decline into

the future. While threats are ongoing, the effects to the species are not currently at a high magnitude but are expected to continue to increase, resulting in an increasing risk of extinction over time. Human population growth will increase, food security will decrease, human-wildlife conflict will increase, and the effects of drought will increase.

The ongoing threats of habitat condition changes (all AUs except Rwanda) and poaching (all AUs except Zambia and Rwanda) are expected to intensify into the future, as the human population in the countries where the Masai giraffe occurs continues to grow (e.g., nearly doubling in Kenya and more than tripling in Tanzania by 2100); drought extent, frequency, intensity, and duration increase; and habitat loss, degradation, and fragmentation increase (e.g., forest and woody cover will decline up to 1,860 and 5,305 kha by mid and late century, respectively). Drought duration, frequency, and intensity are projected to continue to increase within the range of the Masai giraffe. The approximately 1 °C temperature increase resulting from climate change observed over the period of the Masai giraffe's decline is expected to increase to a 2–4 °C increase by 2100, resulting in increased drought extent, frequency, duration, and intensity. Human population size is expected to increase by 60 to 800 million people within the four countries that contain the Masai giraffe by 2100.

In turn, Masai giraffes in all AUs will face further reductions in food quality and availability, and further restriction of their movement patterns and ability to access necessary resources. Additionally, poaching will likely continue due to increased food insecurity associated with rapid human population growth and climate change. Disease may also become a greater threat, as high rainfall events can increase disease prevalence.

There is no evidence suggesting a change in the species' past response to these threats in the future. Based on the historical rate of decline, the total population is projected to decline to an estimated 3,725–16,074 giraffes (5–24 percent of the 1970s population size) by 2100. These estimates are the minimum rates of future decline, as they do not incorporate the increasing magnitude of threats into the future. Thus, it is likely that the species will experience a substantial loss of abundance and, consequently, reductions in density and extent of occupancy into the future, especially for the Kenya/Tanzania west, Kenya/Tanzania east, and West Tanzania AUs. In Zambia, a maximum

of 660 giraffes are estimated to live in their core range within the Luangwa River Valley, and the population is currently between 600 and 700 individuals, suggesting it is near the carrying capacity. In Rwanda, available habitat is limited by the fenced area within Akagera National Park. These small populations are unlikely to continue increasing into the future and may begin to decline as risks related to climate change intensify.

These reductions in abundance will, in turn, further reduce the species' ability to withstand environmental stochasticity and disturbances, catastrophic events, and changing environmental conditions in all AUs. Additionally, because the magnitude and frequency of catastrophic events (e.g., extreme drought and extreme rainfall events) are expected to increase into the future, the Masai giraffe will have increasingly low ability to recover from those events in any AU. Large declines in abundance will also increase the proportional impact from individual catastrophic events on the remaining population. Finally, the species' ability to relocate will become more limited into the future, as its habitat will continue to be converted to other land uses and become further fragmented. Human population growth and climate change are also projected to increase into the future, accelerating the pace of environmental changes. The species' ability to shift its range in response to changing environmental conditions is highly limited. In addition to physical (fencing, topography) and physiological barriers to large-scale migration, there is limited habitat available nearby to shift to escape the risks from climate change. The entire sub-Saharan region of Africa is considered a hot spot for climate change, which has led to increased frequency and severity of drought over the last four decades. Under a warming climate, drought risk and extreme rainfall events are projected to worsen in the near-term and accelerate at mid-century. Thus, even if the Masai giraffe were able to shift or expand its range in response to local land use-induced habitat changes, it appears nearly certain that the species cannot escape the long-term impacts from climate change. Together, these projections of future threats and the species' response to those threats suggest the ability of the Masai giraffe to adapt or adjust to its changing environmental conditions will likely become severely limited in the future. Therefore, in the future, the Masai giraffe is likely to be unable to meet its needs of having multiple healthy, resilient populations that are

distributed across its range, resulting in an increased risk of extinction for the species.

In summary, the Masai giraffe is likely to become in danger of extinction within the foreseeable future in every AU; thus, for the threatened classification, there is no portion of the range where the Masai giraffe may have a regulatory status that is different from its status in the rest of its range. Based on the best scientific and commercial data available, we conclude that the Masai giraffe is likely to become in danger of extinction within the foreseeable future throughout all of its range.

When we find a species warrants listing as a threatened species, we must consider whether the species is endangered throughout a significant portion of its range. We determine that the Masai giraffe is not in danger of extinction throughout a significant portion of its range. To reach this determination, we first assessed whether we can divide the species' range at a biologically appropriate scale. As discussed above, AUs are the units that provide the appropriate scale to assess extinction risk for the Masai giraffe.

Evaluation for Endangered Classification

For the endangered classification, we evaluated whether the Masai giraffe has a similar risk of extinction in all areas across its range by assessing the Masai giraffe's extinction risk within each AU. Because our review indicated that the Masai giraffe's extinction risk is similar in all areas across its range, we then evaluated whether it may be endangered based upon the "throughout all of its range" component. In undertaking these analyses, we reviewed the best scientific and commercial data available regarding threats to the species, the species' responses to those threats, and any associated conservation measures. We then assessed the cumulative effects of those threats and conservation measures under the Act's section 4(a)(1) factors. We examined the following threats: habitat loss, fragmentation, and degradation, and poaching, all of which are exacerbated by rapid human population growth and the effects from climate change, as well as hunting, disease, and predation, including cumulative effects.

Masai giraffes need multiple healthy, resilient populations that are distributed across the species' range to reduce the risk of extinction. Three AUs (Kenya/Tanzania west, Kenya/Tanzania east, and West Tanzania) are much larger in geographical size and population

abundance (currently at an estimated 15,760, 19,070, and 9,460 individuals, respectively) and more likely to be able to respond to stochastic events over time than the other two AUs. However, the magnitude of the impact of poaching and land use changes is greater in those three largest AUs, and these populations have been experiencing declines of 1 to 3 percent per year. Ongoing conservation efforts, such as CITES and other provincial protections, have likely reduced, but have been inadequate to halt and reverse, the declining trend of the Masai giraffe in Kenya and Tanzania. The population in Zambia is stable or increasing since the 1950s, and the population in Rwanda is increasing since its establishment in 1986. The population in Zambia occurs in a system of protected areas in the Luangwa Valley; thus, poaching is not influencing this population. However, habitat conversion (e.g., settlement and cropland expansion) is occurring within game management areas adjacent to the national park. The Masai giraffe faces minimal threats in Rwanda given their fenced and protected state; however, threats from climate change remain. We also considered the potential threats of predation, hunting, and disease, and while individuals may be affected by these threats, the best available information does not indicate population-level or species-level effects.

The species has experienced reductions in resiliency and redundancy over time, but we expect all five AUs to be resilient to stochastic events in the near term. The Masai giraffe currently has an estimated 45,402 individuals, which is 66 to 68 percent of the historical population size in the 1970s. The overall range is likely similar to or less than the historical distribution in Kenya, Tanzania, and Zambia; however, the area of occupancy and density in occupied areas has likely declined because of ongoing threats. The species' current range also includes an introduced population in Rwanda. Within each AU, the species has a similar adaptive capacity. Overall, while threats are ongoing, given the large population sizes for three AUs and protections in two AUs in the near term, these threats are currently not of such a magnitude that the species is in danger of extinction. The Masai giraffe is currently meeting its need for multiple healthy, resilient populations that are distributed across the species' range. In summary, we find that the Masai giraffe is not in danger of extinction in any areas across its range (i.e., AUs).

Therefore, no portion of the species' range provides a basis for determining that the species is in danger of

extinction throughout a significant portion of its range. In reaching this conclusion, we did not apply the aspects of the 2014 SPR Policy, including the definition of “significant,” that courts have held to be invalid.

Determination of Status

Based on the best scientific and commercial data available, we determine that the Masai giraffe meets the Act’s definition of a threatened species because it is likely to become in danger of extinction within the foreseeable future throughout all of its range. Therefore, we propose to list the Masai giraffe as a threatened species in accordance with sections 3(20) and 4(a)(1) of the Act.

Available Conservation Measures

The primary purpose of the Act is the conservation of endangered and threatened species and the ecosystems upon which they depend. The ultimate goal of such conservation efforts is the recovery of these listed species, so that they no longer need the protective measures of the Act.

Conservation measures provided to species listed as endangered or threatened species under the Act include recognition as a listed species, planning and implementation of recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing results in public awareness, and conservation by Federal, State, Tribal, and local agencies, foreign governments, private organizations, and individuals. The Act encourages cooperation with the States and other countries and calls for recovery actions to be carried out for listed species. The protection required by Federal agencies, including the Service, and the prohibitions against certain activities are discussed, in part, below.

Section 7 of the Act is titled, “Interagency Cooperation,” and it mandates all Federal action agencies to use their existing authorities to further the conservation purposes of the Act and to ensure that their actions are not likely to jeopardize the continued existence of listed species or adversely modify critical habitat. Regulations implementing section 7 are codified at 50 CFR part 402.

Section 7(a)(2) states that each Federal action agency shall, in consultation with the Secretary, ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. Each Federal agency shall review its action at

the earliest possible time to determine whether it may affect listed species or critical habitat. If a determination is made that the action may affect listed species or critical habitat, formal consultation is required (50 CFR 402.14(a)), unless the Service concurs in writing that the action is not likely to adversely affect listed species or critical habitat. At the end of a formal consultation, the Service issues a biological opinion, containing its determination of whether the Federal action is likely to result in jeopardy or adverse modification.

In contrast, section 7(a)(4) of the Act requires Federal agencies to confer with the Service on any action which is likely to jeopardize the continued existence of any species proposed to be listed under the Act or result in the destruction or adverse modification of critical habitat proposed to be designated for such species. Although the conference procedures are required only when an action is likely to result in jeopardy or adverse modification, action agencies may voluntarily confer with the Service on actions that may affect species proposed for listing or critical habitat proposed to be designated. In the event that the subject species is listed or the relevant critical habitat is designated, a conference opinion may be adopted as a biological opinion and serve as compliance with section 7(a)(2) of the Act.

With respect to all giraffe species and subspecies, no known actions require consultation under section 7(a)(2) of the Act. Given the regulatory definition of “action” at 50 CFR 402.02, which clarifies that it applies to activities or programs carried out “in the United States or upon the high seas,” the giraffe is unlikely to be the subject of section 7 consultations, because the entire life cycles of the species occur in terrestrial areas outside of the United States and the species are unlikely to be affected by U.S. Federal actions. Additionally, no critical habitat will be designated for any giraffe species or subspecies because, under 50 CFR 424.12(g), we will not designate critical habitat within foreign countries or in other areas outside of the jurisdiction of the United States.

Section 8(a) of the Act (16 U.S.C. 1537(a)) authorizes the provision of limited financial assistance for the development and management of programs that the Secretary of the Interior determines to be necessary or useful for the conservation of endangered or threatened species in foreign countries. Sections 8(b) and 8(c) of the Act (16 U.S.C. 1537(b) and (c)) authorize the Secretary to encourage

conservation programs for foreign listed species, and to provide assistance for such programs, in the form of personnel and the training of personnel.

Additional requirements apply to activities with all giraffes, separate from their proposed listing as endangered species or threatened species. As a CITES-listed species, all international trade of any giraffe by persons subject to the jurisdiction of the United States must also comply with CITES requirements pursuant to section 9, paragraphs (c) and (g), of the Act (16 U.S.C. 1538(c) and (g)) and to 50 CFR part 23. As “fish or wildlife” (16 U.S.C. 1532(8)), giraffe imports and exports must also meet applicable wildlife import/export requirements established under section 9, paragraphs (d), (e), and (f), of the Act (16 U.S.C. 1538(d), (e), and (f)); the Lacey Act Amendments of 1981 (16 U.S.C. 3371 *et seq.*); and 50 CFR part 14. Questions regarding whether specific activities with giraffe would constitute a violation of section 9 of the Act should be directed to the Service’s Division of Management Authority (managementauthority@fws.gov; 703–358–2104).

Additional Measures for West African, Kordofan, and Nubian Giraffe

The Act and its implementing regulations set forth a series of general prohibitions and exceptions that apply to endangered wildlife. The prohibitions of section 9(a)(1) and 9(g) of the Act, and the Service’s implementing regulations codified at 50 CFR 17.21, make it illegal for any person subject to the jurisdiction of the United States to commit, to attempt to commit, to solicit another to commit, or to cause to be committed any of the following acts with regard to any endangered wildlife: (1) import into, or export from, the United States; (2) take (which includes harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct) within the United States, within the territorial sea of the United States, or on the high seas; (3) possess, sell, deliver, carry, transport, or ship, by any means whatsoever, any such wildlife that has been taken illegally; (4) deliver, receive, carry, transport, or ship in interstate or foreign commerce, by any means whatsoever and in the course of commercial activity; or (5) sell or offer for sale in interstate or foreign commerce. Certain exceptions to these prohibitions apply to employees or agents of the Service, the National Marine Fisheries Service, other Federal land management agencies, and State conservation agencies.

We may issue permits to carry out otherwise prohibited activities involving endangered wildlife under certain circumstances. Regulations governing permits for endangered wildlife are codified at 50 CFR 17.22, and general Service permitting regulations are codified at 50 CFR part 13. With regard to endangered wildlife, a permit may be issued: for scientific purposes, for enhancing the propagation or survival of the species, or for take incidental to otherwise lawful activities.

The statute also contains certain exemptions from the prohibitions, which are found in sections 9 and 10 of the Act. For example, the provisions in section 9(b)(1) of the Act (16 U.S.C. 1538(b)(1)) provide a limited exemption from certain otherwise prohibited activities regarding wildlife specimens held in captivity or in a controlled environment on the date they were first subject to the Act, provided that such holding and any subsequent holding or use of the wildlife was not in the course of a commercial activity (commonly referred to as “pre-Act” specimens). Therefore, if a giraffe is held in captivity prior to receiving protections under the Act (and the holding is not in the course of commercial activity), there are several activities that are allowed without the need for a permit (or exception in a 4(d) rule) in accordance with section 9(b)(1) of the Act.

Section 9(b)(1) was amended in the 1982 amendments to the Act (96 Stat. 1426–27), to clarify that the scope of the 9(b)(1) exemption is limited to only certain section 9(a)(1) prohibitions, that the exemption does not apply to pre-Act wildlife held or used in the course of a commercial activity on or after the pre-Act date for the species, and that the pre-Act date for species first listed after the enactment of the ESA is the date of publication in the **Federal Register** of the final regulation adding such species to the List of Endangered and Threatened Wildlife for the first time (H.R. Rep. No. 97–835, 97th Cong., 2nd Sess., at 35 (1982) (Conf. Rep.); S. Rep. No. 97–418, 97th Cong., 2nd Sess., at 24–25 (1982)). Specifically, section 9(b)(1) of the Act states that the prohibitions of sections 9(a)(1)(A) and 9(a)(1)(G) shall not apply to any fish or wildlife which was held in captivity or in a controlled environment on (A) December 28, 1973, or (B) the date of the publication in the **Federal Register** of a final regulation adding such fish or wildlife to any list of species published pursuant to section 4(c) of the Act (as relevant to listed wildlife, the list of endangered and threatened wildlife (50 CFR 17.11(h)) that such holding and any subsequent holding or use of the fish or

wildlife was not in the course of a commercial activity.

Therefore, for pre-Act wildlife, there is a limited exemption from the prohibitions associated with: (1) import into, or export from the United States of any endangered wildlife, or (2) violation of regulations pertaining to threatened or endangered wildlife. Other prohibitions of section 9—including those at section 9(a)(1)(B)–(F), regarding take of endangered wildlife, possession and other acts with unlawfully taken wildlife, interstate or foreign commerce in endangered wildlife, and sale or offer for sale of endangered wildlife—continue to apply to activities with qualifying endangered pre-Act wildlife specimens. For threatened species, prohibitions are promulgated by regulation under section 4(d) of the Act, and a specimen may qualify for the exemption in 9(a)(1)(G) with regard to regulatory violations. For those specimens that continue to qualify under the “pre-Act” exemption, 4(d) rule protections do not apply. Specimens born after the listing date and specimens taken from the wild after the listing date do not qualify as “pre-Act” wildlife under the text of section 9(b)(1) of the Act. If a person engages in any commercial activity with a “pre-Act” specimen, the wildlife would immediately cease to qualify as pre-Act wildlife and become subject to the relevant prohibitions, because it has been held or used in the course of a commercial activity.

Additional Measures for Reticulated and Masai Giraffes

Section 9 of the Act provides a specific list of prohibitions for endangered species but does not provide these same prohibitions for threatened species. Instead, pursuant to section 4(d) of the Act, for any species listed as a threatened species, the Secretary must issue protective regulations that are “necessary and advisable to provide for the conservation of such species” (these are referred to as “4(d) rules”). Additional measures for the reticulated and Masai giraffes are described below in relation to the proposed 4(d) rule for the reticulated giraffe, Masai giraffe, Angolan giraffe, and South African giraffe (see IV. Protective Regulations Under Section 4(d) of the Act for Reticulated Giraffe, Masai Giraffe, Angolan Giraffe, and South African Giraffe, below).

III. Similarity of Appearance for the Angolan Giraffe and South African Giraffe

Whenever a species that is not endangered or threatened closely resembles an endangered or threatened species, such unlisted species may be treated as either endangered or threatened if the Secretary makes a determination in accordance with section 4(e) of the Act for similarity of appearance. Section 4(e) authorizes the treatment of any species as an endangered or threatened species “even though it is not listed” pursuant to section 4(a)(1) of the Act, if: (A) the unlisted species so closely resembles in appearance, at the point in question, a species which has been listed pursuant to section 4(a)(1) that enforcement personnel would have substantial difficulty in attempting to differentiate between the listed and unlisted species; (B) the effect of this substantial difficulty is an additional threat to an endangered or threatened species; and (C) such treatment of an unlisted species will substantially facilitate the enforcement and further the policy of the Act.

A designation of an endangered or threatened species due to similarity of appearance under section 4(e) of the Act, however, does not extend other protections of the Act, such as consultation requirements for Federal agencies under section 7 and the recovery planning provisions under section 4(f), that apply to species that are listed as an endangered or threatened species under section 4(a)(1). The Service implements this section 4(e) authority in accordance with the Act and our regulations at 50 CFR 17.50. Our analysis of the criteria for the proposed 4(e) rule for the Angolan giraffe and South African giraffe is described below for the similarity of appearance of the Angolan giraffe and South African giraffe to the proposed endangered West African giraffe, Kordofan giraffe, and Nubian giraffe, and proposed threatened reticulated giraffe and Masai giraffe.

Do the Angolan giraffe and South African giraffe so closely resemble in appearance, at the point in question, the West African giraffe, Kordofan giraffe, Nubian giraffe, reticulated giraffe, or Masai giraffe such that enforcement personnel would have substantial difficulty in attempting to differentiate between the listed and unlisted species?

Yes. At this time, it is not possible for law enforcement, using either morphology, genetics, or other forensic techniques to differentiate giraffe

species or subspecies. Morphologically, while some subspecies have been described to have distinct external morphological characteristics when provided a complete specimen (Kingdon and Hoffmann 2013, entire), there is considerable variation and overlap in giraffe morphology, and particularly in the parts and pieces that are commonly in the trade (e.g., small patch of skin, carved bones), which would not be able to be identified beyond genus. Similarly, Service law enforcement follows both current CITES and IUCN taxonomy, which consider the giraffe one species with nine subspecies. The existing genetic datasets are either currently not available and/or not verified to identify a specimen beyond the genus level when considering multiple species (as described in this rule) for enforcement purposes (Office of Law Enforcement 2024, pers. comm.).

Is the effect of this substantial difficulty an additional threat to West African giraffe, Kordofan giraffe, Nubian giraffe, reticulated giraffe, or Masai giraffe?

Yes. Specifically, we considered the possibility that an additional threat is posed to the proposed endangered West African giraffe, Kordofan giraffe, and Nubian giraffe, and proposed threatened reticulated giraffe and Masai giraffe, by providing an avenue for persons who misrepresent West African giraffe, Kordofan giraffe, Nubian giraffe, reticulated giraffe, or Masai giraffe specimens as Angolan giraffe and South African giraffe specimens to engage in unauthorized taking, trade, or commerce. This misrepresentation contributes to market demand for the West African giraffe, Kordofan giraffe, Nubian giraffe, reticulated giraffe, and Masai giraffe. Due to the lack of distinct physical characteristics and difficulty in distinguishing individual species or subspecies of giraffes, the similarity of giraffe specimens poses a problem for law enforcement officers trying to stem unauthorized killing and trade of giraffes.

As stated above, poaching is a primary threat to giraffes, and allowing an avenue to traffic giraffes (including specimens, and the parts and products, of giraffes) could place additional stress on populations that are already small, and in most cases declining. The proposed listing of the Angolan giraffe and South African giraffe as threatened due to similarity of appearance minimizes the possibility that private and commercial collectors will be able to misrepresent West African giraffe, Kordofan giraffe, Nubian giraffe, reticulated giraffe, or Masai giraffe for private or commercial purposes.

Current protections and regulation of the trade under CITES are insufficient to help address these concerns, because CITES taxonomy and CITES documents do not distinguish between giraffe species or subspecies. Additionally, eight range countries have taken reservations to the CITES listing (Botswana, Democratic Republic of the Congo, Eswatini, Namibia, South Africa, United Republic of Tanzania, Zambia, and Zimbabwe) (CITES 2024, unpaginated). While these reserving Parties would be required to issue CITES documents for trade with the United States and other CITES Parties, these reserving Parties are able to trade in any giraffe with each other without CITES documents. With the large number of reservations, current CITES protections alone are therefore insufficient to ensure legal, biologically sustainable, traceable trade in the species. We find that the difficulty enforcement personnel have in attempting to differentiate between the giraffe species and subspecies would pose an additional threat to the West African giraffe, Kordofan giraffe, Nubian giraffe, reticulated giraffe, and Masai giraffe.

Would treatment of the two unlisted giraffes as threatened or endangered due to similarity of appearance substantially further the enforcement and policy of the Act?

Yes. The listing of the Angolan giraffe and South African giraffe due to similarity of appearance will facilitate Federal, State, local, and foreign law enforcement agents' efforts to curtail unauthorized taking and trade in the West African giraffe, Kordofan giraffe, Nubian giraffe, reticulated giraffe, and Masai giraffe. We find that listing the Angolan giraffe and South African giraffe due to similarity of appearance under section 4(e) of the Act and providing applicable prohibitions and exceptions under section 4(d) of the Act will substantially facilitate the enforcement and further the policy of the Act for the West African giraffe, Kordofan giraffe, Nubian giraffe, reticulated giraffe, and Masai giraffe.

If the Angolan giraffe and South African giraffe were not listed, importers and exporters could inadvertently or purposefully misrepresent West African giraffe, Kordofan giraffe, Nubian giraffe, reticulated giraffe, and/or Masai giraffe (including specimens, and their parts or products) as the unlisted entity, creating a loophole in enforcing the Act's protections for listed species of giraffe. The listing will facilitate law-enforcement efforts to curtail

unauthorized import and trade in West African giraffe, Kordofan giraffe, Nubian giraffe, reticulated giraffe, and Masai giraffe. Extending the prohibitions of the Act to the similar entities (Angolan giraffe and South African giraffe) through the listing of those entities due to similarity of appearance under section 4(e) of the Act and providing applicable prohibitions and exceptions in a rule issued under section 4(d) of the Act will provide greater protection to West African giraffe, Kordofan giraffe, Nubian giraffe, reticulated giraffe, and Masai giraffe.

Additionally, although the section 4(e) provisions of the Act do not contain criteria as to whether a species listed under the similarity of appearance provisions should be treated as endangered or threatened, we find that treating the Angolan giraffe and South African giraffe as threatened is appropriate because the proposed 4(d) rule would provide adequate protection for these entities. Under section 4(e), regulations for commerce or taking may be promulgated to the extent deemed advisable, regardless of whether the species is treated as endangered or threatened. The proposed 4(d) rule would prohibit the same activities as those activities prohibited for endangered giraffe species through adoption of all of the Act's section 9(a)(1) prohibitions for each threatened species of giraffe, and for each subspecies of giraffe treated as threatened by reason of similarity of appearance. The proposed 4(d) rule would also ensure evidence that the specimens are Angolan giraffe or South African giraffe prior to permitting otherwise prohibited activities with either subspecies of giraffe, and would otherwise require applicants to meet the same permitting requirements that apply to threatened species of giraffe, unless another exception applies.

While species listed as endangered are limited to the permitting options provided in section 10 of the Act, there are additional permitting options available for species listed as threatened. We are unaware of an additional benefit that would be provided to the conservation of the West African giraffe, Kordofan giraffe, or Nubian giraffe by limiting permitting for southern giraffes (Angolan giraffe and South African giraffe) to the options for endangered species under section 10 of the Act. The primary advantage of requiring a permit for all otherwise prohibited activities is to ensure the ability to identify the giraffe species or subspecies prior to authorizing the activity (e.g., import from the range countries). This identification helps

ensure authorized trade in less protected species does not provide cover for illegal trade in other species of giraffe or result in negative conservation consequences for those species. We deem the treatment of Angolan giraffe and South African giraffe as threatened species, together with the proposed protections and exceptions of the proposed 4(d) rule, advisable to ensure protection for the West African giraffe, Kordofan giraffe, Nubian giraffe, reticulated giraffe, and Masai giraffe.

For the above reasons, we propose to list the Angolan giraffe and South African giraffe as threatened due to similarity of appearance to the West African giraffe, Kordofan giraffe, Nubian giraffe, reticulated giraffe, and Masai giraffe pursuant to section 4(e) of the Act.

IV. Protective Regulations Under Section 4(d) of the Act for Reticulated Giraffe, Masai Giraffe, Angolan Giraffe, and South African Giraffe Background

As discussed above in Available Conservation Measures, section 9 of the Act provides a specific list of prohibitions for endangered species but does not provide these same prohibitions for threatened species. Instead, pursuant to section 4(d) of the Act, for any species listed as a threatened species, the Secretary must issue protective regulations that are “necessary and advisable to provide for the conservation of such species” (these are referred to as “4(d) rules”). Section 4(d) of the Act contains two sentences. The first sentence states that the Secretary shall issue such regulations as she deems necessary and advisable to provide for the conservation of species listed as threatened species. Conservation is defined in the Act to mean the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary. Additionally, the second sentence of section 4(d) of the Act states that the Secretary may by regulation prohibit with respect to any threatened species any act prohibited under section 9(a)(1), in the case of fish or wildlife, or section 9(a)(2), in the case of plants. With these two sentences in section 4(d), Congress delegated broad authority to the Secretary to determine what protections would be necessary and advisable to provide for the conservation of threatened species, and even broader authority to put in place any of the section 9 prohibitions, for a given species.

Courts have recognized the extent of the Secretary’s discretion under this

standard to develop rules that are appropriate for the conservation of a species. For example, courts have upheld, as a valid exercise of agency authority, rules developed under section 4(d) of the Act that included limited prohibitions against takings (see *Alsea Valley Alliance v. Lautenbacher*, 2007 WL 2344927 (D. Or. 2007); *Washington Environmental Council v. National Marine Fisheries Service*, 2002 WL 511479 (W.D. Wash. 2002)). Courts have also upheld 4(d) rules that do not address all of the threats a species faces (see *State of Louisiana v. Verity*, 853 F.2d 322 (5th Cir. 1988)). As noted in the legislative history when the Act was initially enacted, “once an animal is on the threatened list, the Secretary has an almost infinite number of options available to [her] with regard to the permitted activities for those species. [She] may, for example, permit taking, but not importation of such species, or [she] may choose to forbid both taking and importation but allow the transportation of such species” (H.R. Rep. No. 412, 93rd Cong., 1st Sess. 1973).

Under our section 4(d) authorities, we put in place protections intended to both prevent a threatened species from becoming an endangered species and promote its recovery. We have two ways to put in place these protections for a threatened species: (1) we can issue a species-specific 4(d) rule (codified at 50 CFR 17.40–17.47 for wildlife and at 50 CFR 17.73 and 17.74 for plants), which would contain all of the protective regulations for that species; or (2) we can apply the “blanket rule” at 50 CFR 17.31(a) for wildlife and 50 CFR 17.71(a) for plants (for more information, see 89 FR 23919, April 5, 2024), which extends to threatened species without a species-specific rule all of the prohibitions that apply to endangered species under section 9 (with certain exceptions applicable to threatened species). Both “blanket rules” and species-specific 4(d) rules explain what is prohibited for a threatened species, thus requiring a permit or authorization under the Act unless otherwise excepted in the 4(d) rule (species-specific 4(d) rules may also include affirmative requirements).

The provisions of these proposed protective regulations under section 4(d) of the Act are one of many tools that we would use to promote the conservation of the reticulated giraffe and Masai giraffe. The proposed protective regulations would apply only if and when we make final the listing of the reticulated giraffe and Masai giraffe as threatened species, as well as the determination to treat the Angolan giraffe and South African giraffe as

threatened species based on their similarity of appearance; or otherwise make final under the authority of either section 4(a)(1) or 4(e) of the Act the listing of a giraffe species as a threatened species or treatment of a species of giraffe as a threatened species based on their similarity of appearance. The proposed protective regulations would promote conservation of the reticulated giraffe and Masai giraffe by ensuring that activities undertaken with these species by any person under the jurisdiction of the United States are also supportive of the conservation efforts undertaken for the species in Africa, as well as under the CITES Appendix-II listing, and, as explained above, would also help ensure protection for the West African giraffe, Kordofan giraffe, Nubian giraffe, reticulated giraffe, and Masai giraffe.

Exercising the Secretary’s authority under section 4(d) of the Act, we propose a species-specific 4(d) rule to apply protections for the reticulated giraffe, Masai giraffe, Angolan giraffe, and South African giraffe. Section 4(d) requires the Secretary to issue such regulations as she deems necessary and advisable to provide for the conservation of each threatened species and authorizes the Secretary to include among those protective regulations any of the prohibitions that section 9(a)(1) of the Act prescribes for endangered species. We find that, if finalized, the protections, prohibitions, and exceptions in this proposed rule as a whole satisfy the requirement in section 4(d) of the Act to issue regulations deemed necessary and advisable to provide for the conservation of the reticulated giraffe and Masai giraffe.

Under the proposed 4(d) rule, prohibitions and provisions that apply to endangered wildlife under section 9(a)(1) of the Act would help minimize threats that could cause further declines in the status of reticulated giraffe and Masai giraffe. We are also proposing to treat both Angolan giraffe and South African giraffe as threatened species based on similarity of appearance to the West African giraffe, Kordofan giraffe, Nubian giraffe, reticulated giraffe, and Masai giraffe under the authority of section 4(e) of the Act with a 4(d) rule for these species to minimize misidentification and enforcement-related issues.

The protective regulations we are proposing for the reticulated giraffe, Masai giraffe, Angolan giraffe, and South African giraffe incorporate prohibitions from section 9(a)(1) to address the threats to the reticulated giraffe and Masai giraffe, as well as threats posed by similarity of

appearance of Angolan giraffe and South African giraffe to West African giraffe, Kordofan giraffe, Nubian giraffe, reticulated giraffe, and Masai giraffe. The prohibitions of section 9(a)(1) of the Act, and implementing regulations codified at 50 CFR 17.21, make it illegal for any person subject to the jurisdiction of the United States to commit, to attempt to commit, to solicit another to commit, or to cause to be committed any of the following acts with regard to any endangered wildlife, unless they are otherwise authorized or permitted: (1) import into, or export from, the United States; (2) take within the United States, within the territorial sea of the United States, or on the high seas; (3) possess, sell, deliver, carry, transport, or ship, by any means whatsoever, any such wildlife that has been taken illegally; (4) deliver, receive, carry, transport, or ship in interstate or foreign commerce, by any means whatsoever and in the course of commercial activity; or (5) sell or offer for sale in interstate or foreign commerce. Certain exceptions to these prohibitions apply to employees or agents of the Service, the National Marine Fisheries Service, other Federal land management agencies, and State conservation agencies.

Under the Act, “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Some of these provisions have been further defined in regulations at 50 CFR 17.3. Take can result knowingly or otherwise, by direct and indirect impacts, intentionally or incidentally. This protective regulation would provide for the conservation of the reticulated giraffe and Masai giraffe by including all of these prohibitions because the reticulated giraffe and Masai giraffe are at risk of extinction within the foreseeable future and putting these prohibitions in place would help to decrease synergistic, negative effects from other ongoing or future threats.

As discussed above, poaching is a primary threat to giraffes, and trafficking of giraffe (e.g., specimens, parts, products) could place additional stress on populations that are already small, and in most cases declining. Prohibiting the acts prohibited under section 9(a)(1) of the Act and regulating import and export into, from, and through the United States, take, and interstate and foreign commerce by persons subject to the jurisdiction of the United States would indirectly contribute to conservation of the species in their range countries and help conserve the species by eliminating the United States as a potential market for illegally taken

and traded giraffes. It would ensure any activities with listed giraffes under U.S. jurisdiction contribute to enhancing the conservation of the species, and that any domestic demand for listed giraffes or for giraffes treated as listed due to similarity of appearance does not contribute to the decline of listed giraffe species in the wild.

Further, as noted above, current protections for giraffes and the regulation of giraffe trade under CITES are insufficient to address threats relating to similarity of appearance at this time, because CITES taxonomy and CITES documents do not distinguish between giraffe species or subspecies, and a number of countries have entered reservations that may result in undocumented trade in giraffes between countries in the ranges of multiple giraffe species without CITES documents. Current CITES protections alone are therefore insufficient to ensure legal, biologically sustainable, traceable trade in specimens of the species.

Despite these prohibitions regarding threatened species, we may under certain circumstances issue permits to carry out one or more otherwise prohibited activities, including those described above. The regulations that govern permits for threatened wildlife state that the Director may issue a permit authorizing any activity otherwise prohibited with regard to threatened species. These include permits issued for the following purposes: for scientific purposes, to enhance propagation or survival, for economic hardship, for zoological exhibition, for educational purposes, for incidental taking, or for special purposes consistent with the purposes of the Act (50 CFR 17.32).

Although the general permit provisions for threatened species are found at 50 CFR 17.32, the Service issues permits for otherwise prohibited activities involving endangered or threatened species listed due to similarity of appearance under the regulatory criteria at 50 CFR 17.52. Under 50 CFR 17.52, a permit may be issued for any otherwise prohibited activity if the applicant adequately identifies the wildlife or plant in question so as to distinguish it from any endangered or threatened wildlife or plant. In the case of the Angolan giraffe and South African giraffe, the Service’s criteria to issue such a permit would consist of the permit applicant providing adequate information to document that the specimen involved in the activity is an Angolan giraffe or a South African giraffe. This would ensure that otherwise prohibited activities, such as import and export, of

the specimens are not undertaken with West African giraffe, Kordofan giraffe, or Nubian giraffe without an endangered species permit, and are not undertaken with reticulated giraffe and Masai giraffe without a threatened species permit. Accordingly, this proposed 4(d) rule would promote and enhance the conservation of the West African giraffe, Kordofan giraffe, Nubian giraffe, reticulated giraffe, and Masai giraffe.

There are other standard exceptions to the prohibitions included in the proposed 4(d) rule for the reticulated giraffe, Masai giraffe, Angolan giraffe, and South African giraffe (see Proposed Regulation Promulgation, below), and the statute also contains certain exemptions from the prohibitions, which are found in sections 9 and 10 of the Act. If the species-specific 4(d) rule is finalized as proposed, the import exemption for threatened wildlife listed in Appendix II of CITES (50 CFR 17.8; section 9(c)(2) of the Act) would not apply to the species. A threatened species import permit under 50 CFR 17.32 would be required for the importation of specimens of the species, or a similarity of appearance import permit under 50 CFR 17.52 would be required for the importation of specimens of Angolan giraffe or South African giraffe, regardless of whether the trade is reported as for commercial or personal purposes, in order to address the similarity of appearance issues explained above. Further, as noted above, we may also authorize certain activities associated with conservation breeding under captive-bred wildlife registrations (see 50 CFR 17.21(g)). We recognize that captive breeding of wildlife can support conservation, for example by producing animals that could be used for reintroductions. The proposed 4(d) rule would apply to all live and dead reticulated giraffe, Masai giraffe, Angolan giraffe, and South African giraffe, including any part, product, egg, or offspring thereof, and support conservation management efforts for giraffes in the wild in Africa.

As noted above, we are requesting information regarding threats to one or more species or subspecies of giraffe from hunting, poaching, or any other taking or trade involving one or more other species or subspecies of giraffe, such as threats to the West African, Kordofan, Nubian, reticulated, or Masai giraffe from hunting, poaching, or any other taking or trade involving the Angolan giraffe or South African giraffe. In most of the range countries of southern giraffe, only Angolan giraffes and/or South African giraffes occur in the wild (with the exception of Zambia,

where Masai giraffes also occur). Accordingly, in range countries where sport-hunting of southern giraffe is well-managed and used as an effective conservation management tool, it may be possible to determine that import of personal Angolan giraffe and/or South African giraffe sport-hunted trophies that are documented as legally taken in and exported from a southern giraffe range country, poses little risk of confusion with West African giraffe, Kordofan giraffe, Nubian giraffe, reticulated giraffe, and Masai giraffe based on similarity of appearance. While the risks noted above with respect to incomplete CITES documentation would need to be fully considered, such an exception may be possible because, at the time of importation of a personal sport-hunted trophy, hunters are required to provide wildlife inspectors for the Service's Office of Law Enforcement with substantial documentation on where and when the specimen was taken, including all permits or other documents required by the laws or regulations of any foreign country, as part of the inspection and clearance process for the import. We specifically request comment on whether to adopt an additional exception in the proposed 4(d) rule to allow a hunter to import a personal Angolan giraffe sport-hunted trophy or personal South African giraffe sport-hunted trophy without a threatened species permit or similarity of appearance permit, provided that (A) the Angolan giraffe or South African giraffe was legally taken by the hunter in Angola, Namibia, Botswana, Zimbabwe, Mozambique, South Africa, or Eswatini; (B) the import is only for the noncommercial use of the hunter; and (C) the applicable provisions of 50 CFR parts 13, 14, and 23 have been met.

Required Determinations

Clarity of the Rule

We are required by Executive Orders 12866 and 12988 and by the Presidential Memorandum of June 1, 1998, to write all rules in plain language. This means that each rule we publish must:

- (1) Be logically organized;
- (2) Use the active voice to address readers directly;
- (3) Use clear language rather than jargon;
- (4) Be divided into short sections and sentences; and
- (5) Use lists and tables wherever possible.

If you feel that we have not met these requirements, send us comments by one of the methods listed in **ADDRESSES**. To better help us revise the rule, your comments should be as specific as possible. For example, you should tell us the numbers of the sections or paragraphs that are unclearly written, which sections or sentences are too long, the sections where you feel lists or tables would be useful, etc.

National Environmental Policy Act (42 U.S.C. 4321 *et seq.*)

Regulations adopted pursuant to section 4(a) of the Act are exempt from the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 *et seq.*) and do not require an environmental analysis under NEPA. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244). This includes listing, delisting, and reclassification rules, as well as critical habitat designations and species-specific protective regulations promulgated concurrently with a decision to list or reclassify a species as threatened. Courts have upheld this position (*e.g.*, *Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. 1995) (critical habitat); *Center for Biological Diversity v. U.S. Fish and Wildlife*

Service, 2005 WL 2000928 (N.D. Cal. Aug. 19, 2005) (concurrent 4(d) rule)).

References Cited

A complete list of references cited in this rulemaking is available on the internet at <https://www.regulations.gov> and upon request from the Branch of Delisting and Foreign Species (see **FOR FURTHER INFORMATION CONTACT**).

Authors

The primary authors of this proposed rule are the staff members of the Fish and Wildlife Service's Species Assessment Team and the Branch of Delisting and Foreign Species.

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Plants, Reporting and recordkeeping requirements, Transportation, Wildlife.

Proposed Regulation Promulgation

Accordingly, we propose to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS

- 1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 1531–1544; and 4201–4245, unless otherwise noted.

- 2. In § 17.11, in paragraph (h), amend the List of Endangered and Threatened Wildlife by adding entries for “Giraffe, Angolan”, “Giraffe, Kordofan”, “Giraffe, Masai”, “Giraffe, Nubian”, “Giraffe, reticulated”, “Giraffe, South African”, and “Giraffe, West African” in alphabetical order under MAMMALS to read as follows:

§ 17.11 Endangered and threatened wildlife.

* * * * *

(h) * * *

Common name	Scientific name	Where listed	Status	Listing citations and applicable rules
Mammals				
* Giraffe, Angolan	* <i>Giraffa giraffa angolensis</i>	* Wherever found	* T(S/A)	* [Federal Register citation when published as a final rule]; 50 CFR 17.40(w). ^{4d}
Giraffe, Kordofan	<i>Giraffa camelopardalis antiquorum</i> .	Wherever found	E	[Federal Register citation when published as a final rule].
Giraffe, Masai	<i>Giraffa tippelskirchi</i>	Wherever found	T	[Federal Register citation when published as a final rule]; 50 CFR 17.40(w). ^{4d}
Giraffe, Nubian	<i>Giraffa camelopardalis camelopardalis</i> .	Wherever found	E	[Federal Register citation when published as a final rule].
Giraffe, reticulated	<i>Giraffa reticulata</i>	Wherever found	T	[Federal Register citation when published as a final rule]; 50 CFR 17.40(w). ^{4d}

Common name	Scientific name	Where listed	Status	Listing citations and applicable rules
Giraffe, South African	<i>Giraffa giraffa giraffa</i>	Wherever found	T(S/A)	[Federal Register citation when published as a final rule]; 50 CFR 17.40(w). ^{4d}
Giraffe, West African	<i>Giraffa camelopardalis peralta</i> .	Wherever found	E	[Federal Register citation when published as a final rule].
*	*	*	*	*

■ 3. Further amend § 17.40, as proposed to be amended at 89 FR 20928 (March 26, 2024), by adding paragraph (w) to read as follows:

§ 17.40 Special rules—mammals.

* * * * *

(w) Reticulated giraffe (*Giraffa reticulata*), Masai giraffe (*Giraffa tippelskirchi*), Angolan giraffe (*Giraffa giraffa angolensis*), and South African giraffe (*Giraffa giraffa giraffa*).

(1) *Prohibitions.* The following prohibitions that apply to endangered wildlife also apply to the reticulated giraffe, Masai giraffe, Angolan giraffe, and South African giraffe. Except as provided under paragraph (w)(2) of this section and §§ 17.4 and 17.5, it is unlawful for any person subject to the jurisdiction of the United States to

commit, to attempt to commit, to solicit another to commit, or cause to be committed, any of the following acts in regard to these species:

(i) Import or export, as set forth at § 17.21(b) for endangered wildlife.

(ii) Take, as set forth at § 17.21(c)(1) for endangered wildlife.

(iii) Possession and other acts with unlawfully taken specimens, as set forth at § 17.21(d)(1) for endangered wildlife.

(iv) Interstate or foreign commerce in the course of commercial activity, as set forth at § 17.21(e) for endangered wildlife.

(v) Sale or offer for sale, as set forth at § 17.21(f) for endangered wildlife.

(2) *Exceptions from prohibitions.* In regard to these species, you may:

(i) Conduct activities as authorized by a permit under § 17.32.

(ii) Conduct activities with Angolan giraffe and South African giraffe as authorized by a permit under § 17.52.

(iii) Take, as set forth at § 17.21(c)(2) through (c)(4) for endangered wildlife.

(iv) Possess and engage in other acts with unlawfully taken wildlife, as set forth at § 17.21(d)(2) for endangered wildlife.

(v) Take, as set forth at § 17.31(b).

(vi) Conduct activities as authorized by a captive-bred wildlife registration under § 17.21(g) for endangered wildlife.

Gary Frazer,
Acting Director, U.S. Fish and Wildlife Service.
[FR Doc. 2024–26395 Filed 11–20–24; 8:45 am]
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