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The Code of Federal Regulations is sold by the Superintendent of Documents. Prices of new books are listed in the first FEDERAL REGISTER issue of each week.

DEPARTMENT OF HOMELAND SECURITY

Office of the Secretary

6 CFR Part 5

[Docket No. DHS–2016–0020]

Privacy Act of 1974: Implementation of Exemptions; Department of Homeland Security/U.S. Customs and Border Protection-001 Import Information System, System of Records

AGENCY: Privacy Office, Department of Homeland Security.

ACTION: Final rule.

SUMMARY: The Department of Homeland Security (DHS) is issuing a final rule to amend its regulations to exempt portions of newly established system of records titled, ''Department of Homeland Security/U.S. Customs and Border Protection, DHS/CBP–001, Import Information System [IIS] System of Records'' from certain provisions of the Privacy Act. Specifically, the Department exempts portions of the DHS/CBP–001 IIS system of records from one or more provisions of the Privacy Act because of criminal, civil, and administrative enforcement requirements.

DATES: This final rule is effective March 17, 2016.

FOR FURTHER INFORMATION CONTACT: For general questions, please contact: John Connors, (202) 344–1610, CBP Privacy Officer, Privacy and Diversity Office, 1300 Pennsylvania Ave. NW., Washington, DC 20229. For privacy questions, please contact: Karen L. Neuman, (202) 343–1717, Chief Privacy Officer, Privacy Office, Department of Homeland Security, Washington, DC 20528.

SUPPLEMENTARY INFORMATION:

Background

The Department of Homeland Security (DHS) U.S. Customs and Border Protection (CBP) published a notice of proposed rulemaking in the **Federal Register**, 80 FR 49175, August 17, 2015, proposing to exempt portions of the system of records from one or more provisions of the Privacy Act because of criminal, civil, and administrative enforcement requirements. DHS issued the ''Department of Homeland Security, U.S. Customs and Border Protection, DHS/CBP–001, Import Information System, System of Records'' in the **Federal Register** at 80 FR 49256 on August 17, 2015, to provide notice to the public that DHS/CBP was consolidating, updating, and renaming as one SORN the information previously contained in two DHS SORNs titled, ''Privacy Act of 1974; Systems of Records [Department of Homeland Security/U.S. Customs and Border Protection, DHS/CBP–001 Automated Commercial Environment/International Trade Data System (ACE/ITDS) System of Records]'' (71 FR 3109, January 19, 2006) and ''Privacy Act of 1974; U.S. Customs and Border Protection—015 Automated Commercial System, [ACS] System of Records'' (73 FR 77759, December 19, 2008). DHS/CBP invited comments on both the Notice of Proposed Rulemaking (NPRM) and System of Records Notice (SORN).

Public Comments

DHS received no comments on the NPRM for the DHS/CBP–001 IIS System of Records and will implement the rulemaking as proposed.

List of Subjects in 6 CFR Part 5

Freedom of information, Privacy.

For the reasons stated in the preamble, DHS amends chapter I of title 6, Code of Federal Regulations, as follows:

PART 5—DISCLOSURE OF RECORDS AND INFORMATION

■ 1. The authority citation for part 5 continues to read as follows:

Authority: Pub. L. 107–296, 116 Stat. 2135; (6 U.S.C. 101 *et seq.*); 5 U.S.C. 301. Subpart A also issued under 5 U.S.C. 552. Subpart B also issued under 5 U.S.C. 552a.

■ 2. In appendix C to part 5, revise paragraph 26 to read as follows:

Appendix C to Part 5—DHS Systems of Records Exempt From the Privacy Act

* * * * *

26. DHS/CBP–001, Import Information System (IIS). A portion of the following system of records is exempt from 5 U.S.C. 552a(c)(3), (e)(8), and (g)(1) pursuant to 5 U.S.C. 552a(j)(2), and from 5 U.S.C. 552a(c)(3) pursuant to 5 U.S.C. 552a(k)(2). Further, no exemption shall be asserted with respect to information maintained in the system as it relates to data submitted by or on behalf of a person who travels to visit the United States and crosses the border, nor shall an exemption be asserted with respect to the resulting determination (approval or denial). After conferring with the appropriate component or agency, DHS may waive applicable exemptions in appropriate circumstances and where it would not appear to interfere with or adversely affect the law enforcement purposes of the systems from which the information is recompiled or in which it is contained. Exemptions from the above particular subsections are justified, on a case-by-case basis to be determined at the time a request is made, when information in this system of records is may impede a law enforcement, intelligence activities and national security investigation:

(a) From subsection (c)(3) (Accounting for Disclosure) because making available to a record subject the accounting of disclosures from records concerning him or her would specifically reveal any investigative interest in the individual. Revealing this information could reasonably be expected to compromise ongoing efforts to investigate a violation of U.S. law, including investigations of a known or suspected terrorist, by notifying the record subject that he or she is under investigation. This information could also permit the record subject to take measures to impede the investigation, *e.g.,* destroy evidence, intimidate potential witnesses, or flee the area to avoid or impede the investigation.

(b) From subsection (e)(8) (Notice on Individuals) because to require individual notice of disclosure of information due to compulsory legal process would pose an impossible administrative burden on DHS and other agencies and could alert the subjects of counterterrorism or law enforcement investigations to the fact of those investigations when not previously known.

(c) From subsection (g)(1) (Civil Remedies) to the extent that the system is exempt from other specific subsections of the Privacy Act.

* * * * *

Dated: March 2, 2016.

Karen L. Neuman,

Chief Privacy Officer, Department of Homeland Security.

[FR Doc. 2016–05962 Filed 3–16–16; 8:45 am]

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DEPARTMENT OF THE TREASURY

Community Development Financial Institutions Fund

12 CFR Part 1807

RIN 1559–AA00

Capital Magnet Fund

AGENCY: Community Development Financial Institutions Fund, Department of the Treasury

ACTION: Interim rule; extension of comment period.

SUMMARY: On February 8, 2016, the Department of the Treasury published an interim rule (hereafter, the interim rule) implementing the Capital Magnet Fund (CMF), administered by the Community Development Financial Institutions Fund (CDFI Fund). The interim rule incorporates updates to the definitions, requirements and parameters for CMF implementation and administration. This document extends the comment period on the interim rule to May 8, 2016.

DATES: The comment period for the interim rule published February 8, 2016, at 81 FR 6434, is extended. All comments must be written and must be received in the offices of the CDFI Fund on or before May 8, 2016.

ADDRESSES: You may submit comments concerning the interim rule via the Federal e-Rulemaking Portal at *http://www.regulations.gov* (please follow the instructions for submitting comments). All submissions must include the agency name and Regulatory Information Number (RIN) for this rulemaking. Information regarding the CDFI Fund and its programs may be obtained through the CDFI Fund's Web site at *http://www.cdfifund.gov.*

FOR FURTHER INFORMATION CONTACT: Marcia Sigal, CMF program staff by email at *cmf@cdfi.treas.gov,* or by phone at (202) 653–0421.

SUPPLEMENTARY INFORMATION: On February 8, 2016, the Department of the Treasury published an interim rule implementing the CMF, administered by the CDFI Fund.

The comment period designated in the interim rule notice will close on April 8, 2016. The FY 2016 CMF application round opened on February 8, 2016 with the publication in the **Federal Register** of the Notice of Funds Availability Inviting Applications for the Fiscal Year (FY) 2016 Funding Round of the Capital Magnet Fund (FY 2016 NOFA). Per the FY 2016 NOFA, applications are due by March 30, 2016. The CDFI Fund also held a series of application webinars for the FY 2016 CMF application round in February and March of 2016. Since the opening of the FY 2016 CMF application round and during these application webinars, multiple interested applicants requested additional time to submit comments regarding the interim rule and requested that the comment period be extended. In response to these requests, the Department hereby extends the comment period for an additional 30 days so that comments are due on or before May 8, 2016.

The interim rule incorporates updates to the definitions, requirements and parameters for CMF implementation and administration including, among others, Applicant eligibility, application review, Recipient selection, Assistance Agreements, eligible uses of CMF Awards, and Recipient reporting. In addition, sections of the interim rule regarding certain definitions and project level requirements have been revised in order to facilitate alignment and ease of administration. These revisions are modeled after the requirements of the Low Income Housing Tax Credit Program (LIHTC Program) authorized under Title I of the U.S. Housing Act of 1937, as amended, 42 U.S.C. 1437 *et seq.,* and the HOME Investment Partnership Program (HOME Program) authorized under Title II of the Cranston-Gonzalez National Affordable Housing Act, as amended, 42 U.S.C. 12701 *et seq.* and the HOME Program final rule published on July 24, 2013.

The interim rule also reflects requirements set forth in a final rule, Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards (12 CFR 1000), adopted by the Department of the Treasury on December 19, 2014 (hereafter referred to as the Uniform Administrative Requirements). The Uniform Administrative Requirements constitute a government-wide framework for grants management codified by the Office of Management and Budget (OMB), combining several OMB grants management circulars aimed at reducing the administrative burden for Recipients, and reducing the risk of waste, fraud and abuse of Federal financial assistance. The Uniform Administrative Requirements establish financial, administrative, procurement, and program management standards with which Federal award-making programs, including those administered by the CDFI Fund, and Recipients must comply. Accordingly, the interim rule includes revisions necessary to implement the Uniform Administrative Requirements, as well as to make certain technical corrections and certain programmatic updates, as well as provide clarifying language to existing program requirements.

The CDFI Fund seeks public comment on the entire interim rule. All capitalized terms herein are defined in the definitions section of the interim rule, as set forth in 12 CFR 1807.104.

Mary Ann Donovan,

Director, Community Development Financial Institutions Fund.

[FR Doc. 2016–06030 Filed 3–16–16; 8:45 am]

BILLING CODE 4810–70–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2006–25970; Directorate Identifier 99–NE–12–AD; Amendment 39–18426; AD 2016–05–08]

RIN 2120–AA64

Airworthiness Directives; Turbomeca S.A. Turboshaft Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are superseding airworthiness directive (AD) 2006–23–17 for certain Turbomeca S.A. Turmo IV A and IV C turboshaft engines. AD 2006–23–17 required repetitive inspections of the centrifugal compressor intake wheel (inducer) blades for cracks and corrosion, replacement of parts that fail inspection, and replacement of the TU 197 standard centrifugal compressor. This AD requires the same inspections, but at revised intervals, adds the replacement of the TU 215 standard centrifugal compressor, and requires replacement of parts that fail inspection. This AD was prompted by a centrifugal compressor inducer blade loss. This AD was also prompted by a Turbomeca S.A. review of the engine service experience and their determination that more frequent borescope inspections (BSIs) are required on engines not modified to the TU 191, TU 197, or TU 224 standard. We are issuing this AD to prevent failure of the centrifugal compressor inducer, which could lead to an uncontained blade release, damage to the engine, and damage to the airplane.

DATES: This AD is effective April 21, 2016.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of April 21, 2016.

ADDRESSES: For service information identified in this AD, contact Turbomeca S.A., 40220 Tarnos, France; phone: 33 (0)5 59 74 40 00; fax: 33 (0)5 59 74 45 15. You may view this service information at the FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781–238–7125. It is also available on the Internet at *http://www.regulations.gov* by searching for and locating Docket No. FAA–2006–25970.

Examining the AD Docket

You may examine the AD docket on the Internet at *http://www.regulations.gov* by searching for and locating Docket No. FAA–2006–25970; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the mandatory continuing airworthiness information, regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800–647–5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Kenneth Steeves, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781–238–7765; fax: 781–238–7199; email: *kenneth.steeves@faa.gov.*

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2006–23–17, Amendment 39–14829 (71 FR 66664, November 16, 2006), (''AD 2006–23–17''). AD 2006–23–17 applied to the specified products. The NPRM published in the **Federal Register** on November 25, 2015 (80 FR 73681). The NPRM proposed to require the same inspections, but at revised intervals, add the replacement of the TU 215 standard centrifugal compressor, and require replacement of parts that fail inspection.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (80 FR 73681, November 25, 2015).

Conclusion

We reviewed the available data and determined that air safety and the public interest require adopting this AD as proposed.

Related Service Information Under 1 CFR Part 51

We reviewed Turbomeca S.A. Alert Mandatory Service Bulletin (MSB) No. A249 72 0100, Version H, dated May 21, 2015. The Alert MSB describes procedures for the inspection and replacement of the centrifugal compressor inducer blades. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the **ADDRESSES** section.

Costs of Compliance

We estimate that this AD affects 36 engines installed on airplanes of U.S. registry. We estimate that two of these engines will require compressor replacement. We also estimate that about 40 hours per engine are required to comply with this AD. The average labor rate is $85 per hour. Parts cost about $40,000 per engine. Based on these figures, we estimate the cost of this AD on U.S. operators to be $202,400.

Authority for This Rulemaking

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

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

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

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

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

(2) Is not a ''significant rule'' under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),

(3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, and

(4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

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

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39—AIRWORTHINESS DIRECTIVES

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

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

§ 39.13 [Amended]

■ 2. The FAA amends § 39.13 by removing airworthiness directive (AD) 2006–23–17, Amendment 39–14829 (71 FR 66664, November 16, 2006) (''2006–23–17''), and adding the following new AD:

2016–05–08 Turbomeca S.A.: Amendment 39–18426; Docket No. FAA–2006–25970; Directorate Identifier 99–NE–12–AD.

(a) Effective Date

This AD is effective April 21, 2016.

(b) Affected ADs

This AD replaces AD 2006–23–17.

(c) Applicability

This AD applies to Turbomeca S.A. Turmo IV A and IV C turboshaft engines.

(d) Unsafe Condition

This AD was prompted by a centrifugal compressor inducer blade loss. We are issuing this AD to prevent failure of the centrifugal compressor inducer, which could lead to an uncontained blade release, damage to the engine, and damage to the airplane.

(e) Compliance

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

(1) Remove the TU 197 and TU 215 standard centrifugal compressors and install the TU 224 standard centrifugal compressor, within 30 days after the effective date of this AD.

(2) Perform initial and repetitive ultrasonic inspections (UIs) or eddy current inspections

(ECIs) of the centrifugal compressor (inducer). Use Accomplishment Instructions, paragraph 6.B.(1)(b) of Turbomeca S.A. Alert Mandatory Service Bulletin (MSB) No. A249 72 0100, Version H, dated May 21, 2015 to do the inspections. Use Appendix 1 of Turbomeca S.A. Alert MSB No. A249 72 0100, Version H, dated May 21, 2015 for the schedule of inspections.

(3) Perform initial and repetitive borescope inspections (BSIs) of the centrifugal compressor inducer. Use Accomplishment Instructions, paragraphs 6.B.(1)(a) of Turbomeca S.A. Alert MSB No. A249 72 0100, Version H, dated May 21, 2015 to do the inspections. Use Appendix 1 of Turbomeca S.A. Alert MSB No. A249 72 0100, Version H, dated May 21, 2015 for the schedule of inspections.

(4) If, during any inspection required by paragraphs (e)(2) or (e)(3) of this AD, any crack, corrosion, or other damage is detected on the inducer, then before next flight, replace the centrifugal compressor.

(5) Accomplishment of a UI or ECI of the centrifugal compressor inducer, required by paragraph (e)(2) of this AD, is acceptable in lieu of a BSI required by paragraph (e)(3) of this AD for that engine.

(6) Replacement of a centrifugal compressor required by paragraph (e)(4) of this AD, does not constitute terminating action for the repetitive inspections required by paragraphs (e)(2) and (e)(3) of this AD.

(f) Credit for Previous Actions

You may take credit for the inspections and corrective actions required by paragraphs (e)(2) and (e)(3) of this AD, if you performed the inspections and corrective actions before the effective date of this AD, using Turbomeca S.A. Alert MSB No. A249 72 0100, Version G, or an earlier version.

(g) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, FAA, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request. You may email your request to: *ANE-AD-AMOC@faa.gov.*

(h) Related Information

For more information about this AD, contact Kenneth Steeves, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781–238–7765; fax: 781–238–7199; email: *kenneth.steeves@faa.gov.*

(i) Material Incorporated by Reference

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

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

(i) Turbomeca S.A. Alert Mandatory Service Bulletin (MSB) No. A249 72 0100, Version H, dated May 21, 2015.

(ii) Reserved.

(3) For Turbomeca S.A. service information identified in this AD, contact Turbomeca S.A., 40220 Tarnos, France; phone: 33 (0)5 59 74 40 00; fax: 33 (0)5 59 74 45 15.

(4) You may view this service information at FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781–238–7125.

(5) You may view this service information at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: *http://www.archives.gov/federal-register/cfr/ibr-locations.html.*

Issued in Burlington, Massachusetts, on February 26, 2016.

Colleen M. D'Alessandro,

Manager, Engine & Propeller Directorate, Aircraft Certification Service.

[FR Doc. 2016–06000 Filed 3–16–16; 8:45 am]

BILLING CODE 4910–13–P

SECURITIES AND EXCHANGE COMMISSION

17 CFR Part 300

[Release No. SIPA–175; File No. SIPC–2015–01]

Securities Investor Protection Corporation

AGENCY: Securities and Exchange Commission.

ACTION: Final rule.

SUMMARY: The Securities and Exchange Commission (''Commission'') is approving a proposed rule change filed by the Securities Investor Protection Corporation (''SIPC''). The rule change adds SIPC Rule 600, entitled ''Rules Relating to Supplemental Report of SIPC Membership.'' Because SIPC rules have the force and effect as if promulgated by the Commission, those rules are published in Title 17 of the Code of Federal Regulations, where the rule change will be reflected.

DATES: Effective March 31, 2016.

FOR FURTHER INFORMATION CONTACT: Michael A. Macchiaroli, Associate Director, at (202) 551–5525; Thomas K. McGowan, Associate Director, at (202) 551–5521; Randall W. Roy, Deputy Associate Director, at (202) 551–5522; Timothy C. Fox, Branch Chief, at (202) 551–5687; Rose Russo Wells, Senior Counsel, at (202) 551–5527; Office of Financial Responsibility, Division of Trading and Markets, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549–7010.

SUPPLEMENTARY INFORMATION: The Commission is approving a proposed rule change filed by SIPC, adding SIPC Rule 600, 17 CFR 300.600.

I. Background

On April 17, 2015, SIPC filed a proposed rule change with the Commission under section 3(e)(2)(A) of the Securities Investor Protection Act of 1970 (''SIPA''),[1] and subsequently filed amendments to the proposed rule change on June 23, 2015, July 24, 2015, and September 29, 2015. The proposed rule change would add SIPC Rule 600 (''Rule 600''), entitled ''Rules Relating to Supplemental Report of SIPC Membership.'' Notice requesting comment on the proposed rule change, as amended, was published in the **Federal Register** on November 4, 2015.[2] The Commission received one comment on the proposal.[3] The Commission is approving the proposed rule change under section 3(e)(2) of SIPA.[4]

II. Proposed Rule Change

Pursuant to SIPA and SIPC Bylaws, broker-dealers that are SIPC members pay semi-annual assessments to SIPC at the mid-point and at the end of their fiscal year.[5] The assessment payments are the main source of funding for the SIPC Fund. The amount of the assessment a broker-dealer must pay is based on the firm's revenues from its securities business.[6] Consequently, in relation to the payment of the assessments, a broker-dealer must file with SIPC a Form SIPC–6 (General Assessment Payment Form) with the mid-year assessment and a Form SIPC–7 (General Assessment Reconciliation Form) with the year-end assessment. These forms show the broker-dealer's calculation of the assessment amount based on its revenues from its securities business.[7]

Broker-dealers that limit their business to certain specified activities or conduct their business outside of the United States are exempt from being members of SIPC.[8] Consequently, these broker-dealers do not pay a SIPC assessment. However, they must file a

[1] 15 U.S.C. 78ccc(e)(2)(A).

[2] *See Securities Investor Protection Corporation,* Release No. SIPA–173 (Oct. 28, 2015), 80 FR 68286 (Nov. 4, 2015).

[3] *See* email from Paul W. Lameo to Michael A. Macchiaroli dated December 22, 2015. The comment requested clarification regarding a number of technical questions concerning the process for filing reports with SIPC. SIPC intends to issue Frequently Asked Questions to respond to those and other technical questions.

[4] Under SIPA, to be final, rules proposed by SIPC must be approved by the Commission. *See* 15 U.S.C. 78ccc(e)(2).

[5] *See* 15 U.S.C. 78ddd(c); SIPC Bylaws, Article 6.

[6] *See* 15 U.S.C. 78ddd(c) and (d).

[7] Form SIPC–7 provides that the broker-dealer may deduct from the end of fiscal year assessment the amount paid mid-year with the filing of the Form SIPC–6.

[8] *See* 15 U.S.C. 78ccc(a)(2)(A).

Form SIPC–3, which is a certification by the broker-dealer that it is excluded from SIPC membership under SIPA.

In 1972, as a result of significant discrepancies between the assessment information reported to SIPC on the Forms SIPC–6 and SIPC–7 and information supplied in reports filed with the Commission on which the calculation of the assessment was based, the Commission amended Rule 17a–5 [9] (the broker-dealer reporting rule).[10] As amended, the rule generally requires broker-dealers to file with the Commission a SIPC supplemental report.[11] The SIPC supplemental report includes a schedule of assessment payments or a statement that the broker-dealer qualified for exclusion from membership in SIPC. The SIPC supplemental report also must include a report of an independent public accountant, who must be engaged to perform certain procedures specified in Rule 17a–5 with respect to the information provided in the report.[12]

On July 30, 2013, the Commission amended Rule 17a–5.[13] As part of this rulemaking, the Commission determined that because Forms SIPC–3, SIPC–6, and SIPC–7 are used solely by SIPC for purposes of levying its assessments, the SIPC supplemental report should be filed only with SIPC. The Commission also determined that SIPC should prescribe the form and content of the SIPC supplemental report. Accordingly, the Commission amended paragraph (e)(4) of Rule 17a–5 to provide that a broker-dealer must file a SIPC supplemental report with SIPC that contains such information and is in such format as determined by SIPC by rule and approved by the Commission.[14]

The rule change approved by the Commission adds SIPC Rule 600, entitled ''Rules Relating to Supplemental Report of SIPC Membership.'' [15] The purpose of Rule 600 is to replace the requirements currently in Rule 17a–5 prescribing the information that must be included in, and the format of, the SIPC supplemental report.[16] The requirements of Rule 600 are modeled on the requirements of Rule 17a–5.[17] For example, Rule 600 requires that the SIPC supplemental report include, among other things, a copy of the Form SIPC–7 filed or a schedule of assessment payments showing any overpayments applied and overpayments carried forward, including payment dates and amounts; or, if exclusion from membership was claimed, a statement that the broker-dealer qualified for exclusion from membership under SIPA and the date the Form SIPC–3 was filed with SIPC.[18] Further, Rule 600 requires that the SIPC supplemental report include a report of an independent public accountant who is engaged to perform the following agreed-upon procedures:

- Compare assessment payments made in accordance with Form SIPC–6 and applied to the general assessment calculation on Form SIPC–7 with respective cash disbursements record entries;
- For all or any portion of a fiscal year, compare amounts reflected in the audited financial statements required by Commission rule with amounts reported in Form SIPC–7;
- Compare adjustments reported in Form SIPC–7 with supporting schedules and working papers supporting the adjustments;
- Verify the arithmetical accuracy of the calculations reflected in Form SIPC–7 and in the schedules and working papers supporting any adjustments; and
- Compare the amount of any overpayment applied with the Form SIPC–7 on which it was computed; or
- If exclusion from membership is claimed, compare the income or loss reported in the audited financial statements required by Commission rule with Form SIPC–3.[19]

Rule 600 also incorporates prior relief by providing that a SIPC member broker-dealer is exempt from filing the supplemental report if the broker-dealer reports $500,000 or less in total revenue in its ''annual audited statement of income'' filed with the Commission.[20]

Finally, Rule 600 provides that a broker-dealer must file the supplemental report within 60 days after the end of its fiscal year.

III. Discussion and Commission Action

Section 3(e)(2)(A) of SIPA provides that the SIPC Board of Directors must file with the Commission any proposed amendment to a SIPC Rule.[21] Section 3(e)(2)(B) of SIPA provides that within thirty-five days of the date of publication of the notice of filing of a proposed rule change in the **Federal Register**, or within such longer period (1) as the Commission may designate of not more than ninety days after such date if it finds such longer period to be appropriate and publishes its reasons for so finding or (2) as to which SIPC consents, the Commission shall: (i) By order approve such proposed rule change or (ii) institute proceedings to determine whether such proposed rule change should be disapproved.[22] Further, section 3(e)(2)(D) of SIPA provides that the Commission shall approve a proposed rule change if it finds that the proposed rule change is in the public interest and is consistent with the purposes of SIPA.[23]

The Commission finds, pursuant to section 3(e)(2)(D) of SIPA, that the proposed rule change is in the public interest and consistent with the purposes of SIPA. First, as noted above, paragraph (e)(4) of Rule 17a–5 provides that the broker-dealer must file with SIPC a report on the SIPC annual general assessment reconciliation or exclusion from membership forms that contains such information and is in such format as determined by SIPC by rule and approved by the Commission. SIPC uses broker-dealers' SIPC supplemental reports to evaluate whether broker-dealers calculate their SIPC assessments correctly. These

[9] 17 CFR 240.17a–5.

[10] *See Report of Securities Investor Protection Corporation Assessments,* Exchange Act Release No. 9766 (Sep. 15, 1972), 37 FR 18909 (Sep. 16, 1972).

[11] *See* 17 CFR 240.17a–5(e)(4).

[12] The items that must be included in the report and the procedures to be performed by the accountant are listed in paragraphs (e)(4)(ii)(A), (B), and (C) of Rule 17a–5.

[13] *See Broker-Dealer Reports,* Exchange Act Release No. 70073 (Jul. 30, 2013), 78 FR 51910 (Aug. 21, 2013) (''Broker-Dealer Reports'').

[14] *See Broker-Dealer Reports,* 78 FR 51926–7, 51991, 17 CFR 240.17a–5(e)(4)(i).

[15] 17 CFR 300.600.

[16] *See* 17 CFR 240.17a–5(e)(4)(ii). Rule 17a–5 provides that broker-dealers are required to file the SIPC supplemental reports pursuant to the requirements in paragraph (e)(4)(ii) of the rule until the earlier of the Commission approving a rule adopted by SIPC or two years from the effective date of the amendment (that is, by June 14, 2016). *See* 17 CFR 240.17a–5(e)(4)(ii). Consequently, if, after two years from the effective date no such SIPC rule has been approved, broker-dealers would no longer be required to file the reports.

[17] *Compare* Rule 600, *with* 17 CFR 240.17a–5(e)(4)(ii).

[18] *Compare* Rule 600(b)(i) and (ii), *with* 17 CFR 240.17a–5(e)(4)(ii).

[19] *Compare* Rule 600(b)(iii), *with* 17 CFR 240.17a–5(e)(4)(ii). Consistent with requirements in Rule 17a–5 regarding the independent public accountant that is engaged to prepare reports covering the annual reports of a broker-dealer, Rule 600 provides that the independent public accountant who is engaged to perform the enumerated agreed-upon procedures must be independent in accordance with the provisions of 17 CFR 210.2–01 and that the accountant must be engaged to perform the enumerated agreed-upon procedures in accordance with standards of the Public Company Accounting Oversight Board. *See* Rule 600(b)(iii); 17 CFR 240.17a–5(f)(1) and (g).

[20] *See* Rule 600(a)(ii).

[21] 15 U.S.C. 78ccc(e)(2)(A).

[22] 15 U.S.C. 78ccc(e)(2)(B). SIPC has agreed to two 60-day extensions; consequently, the Commission must act no later than April 7, 2016. *See* emails from Hemant Sharma, Associate General Counsel, SIPC, to Randall W. Roy, Deputy Associate Director, Commission, dated December 3, 2015 and February 1, 2016.

[23] 15 U.S.C. 78ccc(e)(2)(D).

assessments are the main source of funding for the SIPC Fund. The Commission determined that because Forms SIPC–3, SIPC–6, and SIPC–7 are used solely by SIPC for purposes of levying its assessments, SIPC should prescribe by rule the form and content of the SIPC supplemental report. Rule 600 prescribes the form and content of the report, in accordance with paragraph (e)(4) of Rule 17a–5. Second, Rule 600 is modelled on existing requirements in Rule 17a–5 prescribing the information that must be included in, and the format of, the SIPC supplemental report. Accordingly, the Commission finds that Rule 600 is in the public interest and is consistent with the purposes of SIPA.

It is therefore ordered by the commission, pursuant to section 3(e)(2) of SIPA, that the above-mentioned proposed rule change is approved. In accordance with section 3(e)(2) of SIPA, the approved rule change shall be given the force and effect as if promulgated by the Commission.

IV. Statutory Authority

Pursuant to SIPA, 15 U.S.C. 78aaa *et seq.,* and particularly, section 3(e)(15 U.S.C. 78ccc(e), SIPC is adding section 300.600 of Title 17 of the Code of Federal Regulations in the manner set forth below.

List of Subjects in 17 CFR Part 300

Brokers, Securities.

Text of the Amendments

In accordance with the foregoing, Title 17, Chapter II of the Code of Federal Regulations is amended as follows:

PART 300—RULES OF THE SECURITIES INVESTOR PROTECTION CORPORATION

■ 1. The authority citation for part 300 continues to read as follows:

Authority: 15 U.S.C. 78ccc.

■ 2. Add an undesignated center heading and § 300.600 to read as follows:

Rules Relating to Supplemental Report on SIPC Membership

§ 300.600 Rules relating to supplemental report on SIPC membership.

(a)(1) *Who must file the supplemental report.* Except as provided in paragraph (a)(2) of this section, a broker or dealer must file with SIPC, within 60 days after the end of its fiscal year, a supplemental report on the status of its membership in SIPC (commonly referred to as the ''Independent Accountants' Report on Applying Agreed-Upon Procedures'') if a rule of the Securities and Exchange Commission (SEC) requires the broker or dealer to file audited financial statements annually.

(2) If the broker or dealer is a member of SIPC, the broker or dealer is not required to file the supplemental report for any year in which it reports $500,000 or less in total revenues in its annual audited statement of income filed with the SEC.

(b) *Requirements of the supplemental report.* The supplemental report must cover the SIPC Annual General Assessment Reconciliation Form (Form SIPC–7) or the Certification of Exclusion From Membership Form (Form SIPC–3) for each year for which an SEC Rule requires audited financial statements to be filed. The supplemental report must include the following:

(1) A copy of the form filed or a schedule of assessment payments showing any overpayments applied and overpayments carried forward, including payment dates, amounts, and name of SIPC collection agent to whom mailed; or

(2) If exclusion from membership was claimed, a statement that the broker or dealer qualified for exclusion from membership under the Securities Investor Protection Act of 1970, as amended, and the date the Form SIPC–3 was filed with SIPC; and

(3) An independent public accountant's report. The independent public accountant, who must be independent in accordance with the provisions of 17 CFR 210.2–01, must be engaged to perform the following agreed-upon procedures in accordance with standards of the Public Company Accounting Oversight Board (PCAOB):

(i) Compare assessment payments made in accordance with the General Assessment Payment Form (Form SIPC–6) and applied to the General Assessment calculation on the Form SIPC–7 with respective cash disbursements record entries;

(ii) For all or any portion of a fiscal year, compare amounts reflected in the audited financial statements required by an SEC rule with amounts reported in the Form SIPC–7;

(iii) Compare adjustments reported in the Form SIPC–7 with supporting schedules and working papers supporting the adjustments;

(iv) Verify the arithmetical accuracy of the calculations reflected in the Form SIPC–7 and in the schedules and working papers supporting any adjustments; and

(v) Compare the amount of any overpayment applied with the Form SIPC–7 on which it was computed; or

(vi) If exclusion from membership is claimed, compare the income or loss reported in the audited financial statements required by an SEC rule with the Form SIPC–3.

By the Commission.

Dated: March 14, 2016.

Robert W. Errett,

Deputy Secretary.

[FR Doc. 2016–06041 Filed 3–16–16; 8:45 am]

BILLING CODE 8011–01–P

DEPARTMENT OF LABOR

Occupational Safety and Health Administration

29 CFR Part 1985

[Docket Number: OSHA–2011–0540]

RIN 1218–AC58

Procedures for Handling Retaliation Complaints Under the Employee Protection Provision of the Consumer Financial Protection Act of 2010

AGENCY: Occupational Safety and Health Administration, Labor.

ACTION: Final rule.

SUMMARY: This document provides the final text of regulations governing the employee protection (whistleblower) provisions of the Consumer Financial Protection Act of 2010, Section 1057 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (CFPA). An interim final rule establishing procedures for these provisions and requesting public comment was published in the **Federal Register** on April 3, 2014. Two comments were received. This rule responds to those comments and establishes the final procedures and time frames for the handling of retaliation complaints under CFPA, including procedures and timeframes for employee complaints to the Occupational Safety and Health Administration (OSHA), investigations by OSHA, appeals of OSHA determinations to an administrative law judge (ALJ) for a hearing de novo, hearings by ALJs, review of ALJ decisions by the Administrative Review Board (ARB) (acting on behalf of the Secretary of Labor) and judicial review of the Secretary of Labor's final decision.

DATES: This final rule is effective on March 17, 2016.

FOR FURTHER INFORMATION CONTACT: Viet Ly, Program Analyst, Directorate of Whistleblower Protection Programs, Occupational Safety and Health

Administration, U.S. Department of Labor, Room N–4618, 200 Constitution Avenue NW., Washington, DC 20210; telephone (202) 693–2199. This is not a toll-free number. Email: *OSHA.DWPP@dol.gov.* This **Federal Register** publication is available in alternative formats. The alternative formats available are large print, electronic file on computer disk (Word Perfect, ASCII, Mates with Duxbury Braille System) and audiotape.

SUPPLEMENTARY INFORMATION:

I. Background

The Consumer Financial Protection Act of 2010 was enacted as Title X of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank Act), Pub. L. 111–203, 124 Stat. 1376, on July 21, 2010. The Act established the Consumer Financial Protection Bureau (Bureau) as an independent bureau within the Federal Reserve System and gave the Bureau the power to regulate the offering and provision of consumer financial products or services under more than a dozen Federal consumer financial laws. The laws subject to the Bureau's jurisdiction generally include, among others, the Consumer Financial Protection Act of 2010, the Consumer Leasing Act of 1976 (15 U.S.C. 1667 *et seq.*), the Electronic Fund Transfer Act (15 U.S.C. 1693 *et seq.*), the Equal Credit Opportunity Act (15 U.S.C. 1691 *et seq.*), the Fair Credit Billing Act (15 U.S.C. 1666 *et seq.*), the Fair Debt Collection Practices Act (15 U.S.C. 1692 *et seq.*), the Fair Credit Reporting Act (15 U.S.C. 1681 *et seq.*), the Home Mortgage Disclosure Act of 1975 (12 U.S.C. 2801 *et seq.*), the Real Estate Settlement Procedures Act of 1974 (12 U.S.C. 2601 *et seq.*), and the Truth in Lending Act (15 U.S.C. 1601 *et seq.*). The regulations to be enforced by the Bureau include certain regulations issued by seven ''transferor agencies,'' including the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, the Federal Trade Commission, the National Credit Union Administration, the Office of the Comptroller of the Currency, the Office of Thrift Supervision, and the Department of Housing and Urban Development. The Bureau also has concurrent authority to enforce the Telemarketing Sales Rule issued by the Federal Trade Commission. The Bureau published an initial list of such rules and regulations. *See* 76 FR 43569–71 (July 21, 2011). It has also revised and republished many of these regulations and announced its intention to continue doing so. *See, e.g.,* Streamlining Inherited Regulations, 76 FR 75825 (Dec. 5, 2011); Fall 2014 Unified Regulatory Agenda and Regulatory Plan, Consumer Financial Protection Bureau *Statement of Regulatory Priorities,* available at *http://www.reginfo.gov/public/jsp/eAgenda/StaticContent/201410/Statement_3170.html.*

The Bureau also has authority to issue new rules, orders, and guidance, as may be necessary or appropriate to enable the Bureau to administer and carry out the purposes and objectives of the Federal consumer financial laws, and to prevent evasions thereof.

More information about the Bureau, its jurisdiction, and the laws and regulations it enforces is available at its Web site, *http://www.consumerfinance.gov/the-bureau.*

Section 1057 of the Dodd-Frank Act, codified at 12 U.S.C. 5567 and referred to throughout this final rule as CFPA, provides protection to covered employees, and authorized representatives of such employees, against retaliation because they provided information to their employer, to the Bureau, or to any other Federal, State, or local government authority or law enforcement agency relating to any violation of (or any act or omission that the employee reasonably believes to be a violation of) any provision of the Act or any other provision of law that is subject to the jurisdiction of the Bureau, or any rule, order, standard, or prohibition prescribed by the Bureau; testified or will testify in any proceeding resulting from the administration or enforcement of any provision of the Act or any other provision of law that is subject to the jurisdiction of the Bureau, or any rule, order, standard, or prohibition prescribed by the Bureau; filed, instituted, or caused to be filed or instituted any proceeding under any Federal consumer financial law; or objected to, or refused to participate in, any activity, policy, practice, or assigned task that the employee (or other such person) reasonably believed to be in violation of any law, rule, order, standard, or prohibition, subject to the jurisdiction of, or enforceable by, the Bureau. The section applies to covered persons and service providers. Examples of these include, but are not limited to, providers of the following financial products or services: (1) residential mortgage loan origination, brokerage, and servicing, modification and foreclosure relief services; (2) student loans; (3) payday loans; (4) debt collection; (5) credit reporting; (6) finance companies, lending, and loan servicing and brokerage; (7) money transmitting and check cashing services; (8) prepaid card services; (9) debt life services, and (10) certain service providers and certain affiliates related to such an entity.

This final rule establishes procedures for the handling of whistleblower complaints under CFPA.

II. Summary of Statutory Procedures

CFPA's whistleblower provisions include procedures that allow a covered employee to file a complaint with the Secretary of Labor (Secretary) within 180 days of the alleged retaliation. Upon receipt of the complaint, the Secretary must provide written notice to the person or persons named in the complaint alleged to have violated the Act (respondent) of the filing of the complaint, the allegations contained in the complaint, the substance of the evidence supporting the complaint, and the rights afforded the respondent throughout the investigation. The Secretary must then, within 60 days of receipt of the complaint, afford the complainant and respondent an opportunity to submit a response and meet with the investigator to present statements from witnesses, and conduct an investigation.

The statute provides that the Secretary may conduct an investigation only if the complainant has made a prima facie showing that the protected activity was a contributing factor in the adverse action alleged in the complaint and the respondent has not demonstrated, through clear and convincing evidence, that it would have taken the same adverse action in the absence of that activity (see section 1985.104 for a summary of the investigation process). OSHA interprets the prima facie case requirement as allowing the complainant to meet this burden through the complaint as supplemented by interviews of the complainant.

After investigating a complaint, the Secretary will issue written findings. If, as a result of the investigation, the Secretary finds there is reasonable cause to believe that retaliation has occurred, the Secretary must notify the respondent of those findings, along with a preliminary order that requires the respondent to, where appropriate: take affirmative action to abate the violation; reinstate the complainant to his or her former position together with the compensation of that position (including back pay) and restore the terms, conditions, and privileges associated with his or her employment; and provide compensatory damages to the complainant, as well as all costs and expenses (including attorney fees and expert witness fees) reasonably incurred

by the complainant for, or in connection with, the bringing of the complaint upon which the order was issued.

The complainant and the respondent then have 30 days after the date of receipt of the Secretary's notification in which to file objections to the findings and/or preliminary order and request a hearing before an administrative law judge (ALJ) at the Department of Labor. The filing of objections under CFPA will stay any remedy in the preliminary order except for preliminary reinstatement. If a hearing before an ALJ is not requested within 30 days, the preliminary order becomes final and is not subject to judicial review.

If a hearing is held, CFPA requires the hearing to be conducted ''expeditiously.'' The Secretary then has 120 days after the conclusion of any hearing in which to issue a final order, which may provide appropriate relief or deny the complaint. Until the Secretary's final order is issued, the Secretary, the complainant, and the respondent may enter into a settlement agreement that terminates the proceeding. Where the Secretary has determined that a violation has occurred, the Secretary, where appropriate, will assess against the respondent a sum equal to the total amount of all costs and expenses, including attorney and expert witness fees, reasonably incurred by the complainant for, or in connection with, the bringing of the complaint upon which the Secretary issued the order. The Secretary also may award a prevailing employer reasonable attorney fees, not exceeding $1,000, if the Secretary finds that the complaint is frivolous or has been brought in bad faith. Within 60 days of the issuance of the final order, any person adversely affected or aggrieved by the Secretary's final order may file an appeal with the United States Court of Appeals for the circuit in which the violation occurred or the circuit where the complainant resided on the date of the violation.

CFPA permits the employee to seek de novo review of the complaint by a United States district court in the event that the Secretary has not issued a final decision within 210 days after the filing of the complaint, or within 90 days after the date of receipt of a written determination. The provision provides that the court will have jurisdiction over the action without regard to the amount in controversy and that the case will be tried before a jury at the request of either party.

Finally, CFPA provides that except in very limited circumstances, and notwithstanding any other provision of law, the rights and remedies provided for in the CFPA whistleblower provision may not be waived by any agreement, policy, form, or condition of employment, including by any predispute arbitration agreement, and no predispute arbitration agreement shall be valid or enforceable to the extent that it requires arbitration of a dispute arising under CFPA's whistleblower provision.

III. Summary and Discussion of Rulemaking Proceedings and Regulatory Provisions

On April 3, 2014, OSHA published in the **Federal Register** an interim final rule (IFR), promulgating rules governing the employee protection (whistleblower) provisions of CFPA. 79 FR 18630. In addition to promulgating the IFR, OSHA's publication included a request for public comment on the IFR by June 2, 2014. OSHA received two comments: One from an individual, Chris Strickling, and one from an organization, International Bancshares Corporation (IBC). Mr. Strickling expressed general support for protecting whistleblowers, but his comment did not address any particular provision of the IFR. IBC criticized several provisions of the IFR, however its criticisms all related to statutory requirements in CFPA itself, rather than the regulatory choices that OSHA has made in these procedural rules. Accordingly, no changes were made to the rule based on public comments. Several small changes were made, however, to clarify the final rule and to make the final rule consistent with OSHA's other, recently promulgated whistleblower rules. These changes and OSHA's response to each of IBC's comments is discussed below.

The regulatory provisions in this part have been written and organized to be consistent with other whistleblower regulations promulgated by OSHA to the extent possible within the bounds of the statutory language of CFPA. Responsibility for receiving and investigating complaints under CFPA has been delegated to the Assistant Secretary for Occupational Safety and Health (Assistant Secretary) by Secretary's Order 1–2012 (Jan. 18, 2012), 77 FR 3912 (Jan. 25, 2012). Hearings on determinations by the Assistant Secretary are conducted by the Office of Administrative Law Judges, and appeals from decisions by ALJs are decided by the ARB. Secretary of Labor's Order No. 2–2012, 77 FR 69378 (Nov. 16, 2012).

Subpart A—Complaints, Investigations, Findings and Preliminary Orders

Section 1985.100 Purpose and Scope

This section describes the purpose of the regulations implementing CFPA and provides an overview of the procedures covered by these regulations. This section has been reworded slightly for consistency with other whistleblower procedural rules.

Section 1985.101 Definitions

This section includes the general definitions from Section 1002 of the Dodd-Frank Act, 12 U.S.C. 5481, which are applicable to CFPA's whistleblower provisions. The Act defines the term ''affiliate'' as ''any person that controls, is controlled by, or is under common control with another person.'' 12 U.S.C. 5481(1). It defines the term ''consumer'' as ''an individual or an agent, trustee, or representative acting on behalf of an individual.'' 12 U.S.C. 5481(4).

In the IFR, OSHA defined ''Bureau'' as ''the Bureau of Consumer Financial Protection.'' This definition was used in the CFPA. However, when the Bureau came into existence, it was named the Consumer Financial Protection Bureau. The definition of ''Bureau'' has been changed to reflect the current name of the agency.

The Act defines a ''consumer financial product or service'' to include a wide variety of financial products or services offered or provided for use by consumers primarily for personal, family, or household purposes, and certain financial products or services that are delivered, offered, or provided in connection with a consumer financial product or service. *See* 12 U.S.C. 5481(5), (15). Examples of these include, but are not limited to, residential mortgage origination, lending, brokerage and servicing, and related products and services such as mortgage loan modification and foreclosure relief; student loans; payday loans; and other financial services such as debt collection, credit reporting, credit cards and related activities, money transmitting, check cashing and related activities, prepaid cards, and debt relief services.

The Act defines ''covered person'' as ''any person that engages in offering or providing a consumer financial product or service'' and ''any affiliate of [such] a person . . . if [the] affiliate acts as a service provider to such person.'' 12 U.S.C. 5481(6). It defines the term ''person'' as ''an individual, partnership, company, corporation, association (incorporated or unincorporated), trust, estate, cooperative organization, or other entity.'' 12 U.S.C. 5481(19). The law

defines ''service provider'' as ''any person that provides a material service to a covered person in connection with the offering or provision by such covered person of a consumer financial product or service, including a person that—(i) participates in designing, operating, or maintaining the consumer financial product or service; or (ii) processes transactions relating to the consumer financial product or service. . . .'' 12 U.S.C. 5481(26)(A). The term ''service provider'' does not include a person who solely offers or provides certain general business support services or advertising services. 12 U.S.C. 5481(26)(B). Anyone who is a ''service provider'' is also ''deemed to be a covered person to the extent that such person engages in the offering or provision of its own consumer financial product or service.'' 12 U.S.C. 5481(26)(C).

CFPA defines ''covered employee'' as ''any individual performing tasks related to the offering or provision of a consumer financial product or service.'' 12 U.S.C. 5567(b). Consistent with the other whistleblower protection provisions administered by OSHA, OSHA interprets the term ''covered employee'' to also include individuals presently or formerly working for, individuals applying to work for, and individuals whose employment could be affected by a covered person or service provider where such individual was performing tasks related to the offering or provision of a consumer financial product or service at the time that the individual engaged in protected activity under CFPA. *See, e.g.,* 29 CFR 1979.101; 29 CFR 1980.101(g); 29 CFR 1981.101; 29 CFR 1982.101(d); 29 CFR 1983.101(h). OSHA believes this interpretation of the term ''covered employee'' best implements the broad statutory protections of CFPA, which aim to protect individuals who perform tasks related to the offering or provision of a consumer financial product or service from termination or any other form of retaliation resulting from their protected activity under CFPA. OSHA received no comments on this section of the IFR. In addition to the change in the Bureau's official name noted above, OSHA moved the rule of construction that a person that is a service provider shall be deemed to be a covered person to the extent that such person engages in the offering or provision of its own consumer financial product or service from the definition of ''covered person'' in paragraph (j) to the definition of ''service provider'' in paragraph (p) to better mirror the statutory definitions in 12 U.S.C. 5481.

Section 1985.102 Obligations and Prohibited Acts

This section describes the activities that are protected under CFPA and the conduct that is prohibited in response to any protected activities. As described above, CFPA protects individuals who provide information to their employer, to the Bureau, or to any other Federal, State, or local government authority or law enforcement agency relating to any violation of (or any act or omission that the employee reasonably believes to be a violation of) any provision of the Act or any other provision of law that is subject to the jurisdiction of the Bureau, or any rule, order, standard, or prohibition prescribed by the Bureau. CFPA also protects individuals who object to, or refuse to participate in, any activity, policy, practice, or assigned task that the employee (or other such person) reasonably believes to be in violation of any law, rule, order, standard, or prohibition, subject to the jurisdiction of, or enforceable by, the Bureau.

In order to have a ''reasonable belief'' under CFPA, a complainant must have both a subjective, good faith belief and an objectively reasonable belief that the complained-of conduct violates one of the listed categories of law. *See Sylvester* v. *Parexel Int'l LLC,* ARB No. 07–123, 2011 WL 2165854, at *11–12 (ARB May 25, 2011) (discussing the reasonable belief standard under analogous language in the Sarbanes-Oxley Act whistleblower provision, 18 U.S.C. 1514A). The requirement that the complainant have a subjective, good faith belief is satisfied so long as the complainant actually believed that the conduct complained of violated the relevant law, rule, order, standard, or prohibition. *See id.* The objective ''reasonableness'' of a complainant's belief is typically determined ''based on the knowledge available to a reasonable person in the same factual circumstances with the same training and experience as the aggrieved employee.'' *Id.* at *12 (internal quotation marks and citation omitted). However, the complainant need not show that the conduct complained of constituted an actual violation of law. Pursuant to this standard, an employee's whistleblower activity is protected where it is based on a reasonable, but mistaken, belief that a violation of the relevant law has occurred. *Id.* at *13.

IBC raised concerns that the scope of protected activity under this section had the potential to be so broad as to be practically unworkable. In particular, IBC was concerned that under 29 CFR 1985.102(b) covered employees are protected from reporting alleged violations of not only the federal consumer protection laws that were transferred, in whole or in part, to the Bureau, but also for violations of any law subject to the jurisdiction of, or enforceable by the Bureau, which includes the Bureau's ''wide-ranging catchall authority to regulate 'unfair, deceptive, or abusive practices' . . . related to the provision of consumer financial products or services.'' The text of 29 CFR 1985.102(b) parallels the statutory text in 12 U.S.C. 5567(a). OSHA believes the provision accurately reflects the scope of protected activity in the statute and has made no changes in response to this comment.

Section 1985.103 Filing of Retaliation Complaint

This section explains the requirements for filing a retaliation complaint under CFPA. To be timely, a complaint must be filed within 180 days of when the alleged violation occurs. Under *Delaware State College* v. *Ricks,* 449 U.S. 250, 258 (1980), this is considered to be when the retaliatory decision has been both made and communicated to the complainant. In other words, the limitations period commences once the employee is aware or reasonably should be aware of the employer's decision to take an adverse action. *Equal Emp't Opportunity Comm'n* v. *United Parcel Serv., Inc.,* 249 F.3d 557, 561–62 (6th Cir. 2001). The time for filing a complaint under CFPA may be tolled for reasons warranted by applicable case law. For example, OSHA may consider the time for filing a complaint equitably tolled if a complainant mistakenly files a complaint with an agency other than OSHA within 180 days after an alleged adverse action.

Complaints filed under CFPA need not be in any particular form. They may be either oral or in writing. If the complainant is unable to file the complaint in English, OSHA will accept the complaint in any language. With the consent of the employee, complaints may be filed by any person on the employee's behalf.

OSHA notes that a complaint of retaliation filed with OSHA under CFPA is not a formal document and need not conform to the pleading standards for complaints filed in federal district court articulated in *Bell Atlantic Corp.* v. *Twombly,* 550 U.S. 544 (2007) and *Ashcroft* v. *Iqbal,* 556 U.S. 662 (2009). *See Sylvester* v. *Parexel Int'l, Inc.,* ARB No. 07–123, 2011 WL 2165854, at *9–10 (ARB May 25, 2011) (holding that whistleblower complaints filed with OSHA under analogous provisions in

the Sarbanes-Oxley Act need not conform to federal court pleading standards). Rather, the complaint filed with OSHA under this section simply alerts OSHA to the existence of the alleged retaliation and the complainant's desire that OSHA investigate the complaint. Upon receipt of the complaint, OSHA is to determine whether the ''complaint, supplemented as appropriate by interviews of the complainant'' alleges ''the existence of facts and evidence to make a prima facie showing.'' 29 CFR 1985.104(e). As explained in section 1985.104(e), if the complaint, supplemented as appropriate, contains a prima facie allegation, and the respondent does not show clear and convincing evidence that it would have taken the same action in the absence of the alleged protected activity, OSHA conducts an investigation to determine whether there is reasonable cause to believe that retaliation has occurred. *See* 12 U.S.C. 5567(c)(2)(B), 29 CFR 1985.104(e).

IBC commented that whistleblowers generally should be required to use employer-sponsored reporting programs as a condition of being entitled to a whistleblower award. IBC further expressed the concern that ''the interim final rules do not require whistleblowers to first report internally before filing a complaint and thus, . . . many employees will bypass established internal procedures and take their concerns directly and exclusively to the DOL/OSHA.'' IBC further noted that many financial institutions have developed strong internal compliance procedures to encourage employees, agents, and other company insiders to report suspected violations of applicable law, and to protect those who make such reports. These mechanisms assist financial institutions in promptly addressing violations of law and company policy. OSHA agrees with IBC that internal reporting mechanisms, particularly those that include protections of an employee's confidentiality and safeguards against retaliation, can play a constructive role in ensuring that a provider of consumer financial products and services fully complies with consumer financial protection laws and regulations. These policies can foster a culture of compliance by helping to ensure that employees feel free to come forward with concerns regarding potential violations of the law. However, CFPA protects employees regardless of whether they report internally or to a government agency. *See* 12 U.S.C. 5567(a) (listing activities protected under CFPA). The statute, moreover, requires employees who believe they have suffered retaliation for engaging in protected whistleblowing, to file a complaint with the Secretary of Labor within 180 days of the retaliation. *See* 12 U.S.C. 5567(c)(1). OSHA does not have authority to impose an internal reporting requirement as a prerequisite to filing a retaliation complaint with OSHA. Accordingly, OSHA has made no changes to this section.

Section 1985.104 Investigation

This section describes the procedures that apply to the investigation of CFPA complaints. Paragraph (a) of this section outlines the procedures for notifying the parties and the Bureau of the complaint and notifying the respondent of its rights under these regulations. Paragraph (b) describes the procedures for the respondent to submit its response to the complaint. Paragraph (c) describes OSHA's procedures for sharing a party's submissions during a whistleblower investigation with the other parties to the investigation. It has been revised to encourage the parties to provide documents to each other during the investigation and to clarify the opportunities for each party to provide information to OSHA during the investigation. Paragraph (d) of this section discusses confidentiality of information provided during investigations.

Paragraph (e) of this section sets forth the applicable burdens of proof. CFPA requires that a complainant make an initial prima facie showing that a protected activity was ''a contributing factor'' in the adverse action alleged in the complaint, *i.e.,* that the protected activity, alone or in combination with other factors, affected in some way the outcome of the employer's decision. The qualifier ''(*i.e.* a non-frivolous allegation)'' has been removed from paragraph (e)(1) in order to make it consistent with other whistleblower regulations. The complainant will be considered to have met the required burden if the complaint on its face, supplemented as appropriate through interviews of the complainant, alleges the existence of facts and either direct or circumstantial evidence to meet the required showing. The complainant's burden may be satisfied, for example, if he or she shows that the adverse action took place within a temporal proximity of the protected activity, or at the first opportunity available to the respondent, giving rise to the inference that it was a contributing factor in the adverse action. *See, e.g. Porter* v. *Cal. Dep't of Corrs.,* 419 F.3d 885, 895 (9th Cir. 2005) (years between the protected activity and the retaliatory actions did not defeat a finding of a causal connection where the defendant did not have the opportunity to retaliate until he was given responsibility for making personnel decisions).

If the complainant does not make the required prima facie showing, the investigation must be discontinued and the complaint dismissed. *See Trimmer* v. *U.S. Dep't of Labor,* 174 F.3d 1098, 1101 (10th Cir. 1999) (noting that the burden-shifting framework of the Energy Reorganization Act of 1974 (ERA), which is the same as that under CFPA, serves a ''gatekeeping function'' that ''stem[s] frivolous complaints''). Even in cases where the complainant successfully makes a prima facie showing, the investigation must be discontinued if the employer demonstrates, by clear and convincing evidence, that it would have taken the same adverse action in the absence of the protected activity. Thus, OSHA must dismiss a complaint under CFPA and not investigate further if either: (1) The complainant fails to meet the prima facie showing that protected activity was a contributing factor in the adverse action; or (2) the employer rebuts that showing by clear and convincing evidence that it would have taken the same adverse action absent the protected activity.

Assuming that an investigation proceeds beyond the gatekeeping phase, the statute requires OSHA to determine whether there is reasonable cause to believe that protected activity was a contributing factor in the alleged adverse action. A contributing factor is ''any factor which, alone or in connection with other factors, tends to affect in any way the outcome of the decision.'' *Marano* v. *Dep't of Justice,* 2 F.3d 1137, 1140 (Fed. Cir. 1993) (internal quotation marks, emphasis and citation omitted) (discussing the Whistleblower Protection Act, 5 U.S.C. 1221(e)(1)); *see also Addis* v. *Dep't of Labor,* 575 F.3d 688, 689–91 (7th Cir. 2009) (discussing *Marano* as applied to analogous whistleblower provision in the ERA); *Clarke* v. *Navajo Express, Inc.,* ARB No. 09–114, 2011 WL 2614326, at *3 (ARB June 29, 2011) (discussing burdens of proof under an analogous whistleblower provision in the Surface Transportation Assistance Act (STAA)). For protected activity to be a contributing factor in the adverse action, '' 'a complainant need not necessarily prove that the respondent's articulated reason was a pretext in order to prevail,' '' because a complainant, alternatively, can prevail by showing that the respondent's '' 'reason, while true, is only one of the reasons for its conduct,' '' and that another reason was

the complainant's protected activity. *See Klopfenstein* v. *PCC Flow Techs. Holdings, Inc.,* ARB No. 04–149, 2006 WL 3246904, at *13 (ARB May 31, 2006) (quoting *Rachid* v. *Jack in the Box, Inc.,* 376 F.3d 305, 312 (5th Cir. 2004)) (discussing contributing factor test under the Sarbanes-Oxley Act of 2002 whistleblower provision), *aff'd sub nom. Klopfenstein* v. *Admin. Review Bd., U.S. Dep't of Labor,* 402 F. App'x 936, 2010 WL 4746668 (5th Cir. 2010).

If OSHA finds reasonable cause to believe that the alleged protected activity was a contributing factor in the adverse action, OSHA may not order relief if the employer demonstrates by ''clear and convincing evidence'' that it would have taken the same action in the absence of the protected activity. *See* 12 U.S.C. 5567(c)(3)(C). The ''clear and convincing evidence'' standard is a higher burden of proof than a ''preponderance of the evidence'' standard. Clear and convincing evidence is evidence indicating that the thing to be proved is highly probable or reasonably certain. *Clarke,* 2011 WL 2614326, at * 3.

Paragraph (f) describes the procedures OSHA will follow prior to the issuance of findings and a preliminary order when OSHA has reasonable cause to believe that a violation has occurred. Its purpose is to ensure compliance with the Due Process Clause of the Fifth Amendment, as interpreted by the Supreme Court in *Brock* v. *Roadway Express, Inc.,* 481 U.S. 252 (1987) (requiring OSHA to give a STAA respondent the opportunity to review the substance of the evidence and respond, prior to ordering preliminary reinstatement). The phrase, ''Before providing such materials, OSHA will redact them, if necessary, in accordance with the Privacy Act of 1974'' has been changed to ''Before providing such materials, OSHA will redact them, if necessary, consistent with the Privacy Act of 1974'' to be consistent with OSHA's practices under other whistleblower statutes.

IBC commented on this section, noting that OSHA interprets the prima facie case requirement as allowing the complainant to meet its burden through the complaint supplemented by interviews of the complainant whereas the respondent must meet the more difficult ''clear and convincing'' standard. In IBC's view, this burden shifting regime is unfair and presents an unequal playing field placing the employer at a significant disadvantage.

However, as explained herein, the requirement that the complainant make a prima facie showing based on the complaint and interviews of the complainant is a threshold requirement for OSHA to conduct an investigation. The purpose of this threshold requirement is to stem frivolous complaints. Once an investigation commences, the statute requires OSHA to determine, based on all evidence submitted or developed by OSHA, whether there is reasonable cause to believe that the complaint has merit. 12 U.S.C. 5567(2)(A). In addition, even when OSHA has reasonable cause to believe that protected whistleblowing contributed to action taken against an employee, the statute states that the Secretary may not order relief if the employer demonstrates by clear and convincing evidence that it would have taken the same action in the absence of protected whistleblowing. 12 U.S.C. 5567(c)(3)(C). OSHA believes its regulations accurately reflect these statutory requirements. Apart from the changes to paragraphs (c) and (e) described above, OSHA has reworded paragraphs (a) and (f) slightly to clarify the paragraphs without changing their meaning.

Section 1985.105 Issuance of Findings and Preliminary Orders

This section provides that, on the basis of information obtained in the investigation, the Assistant Secretary will issue, within 60 days of the filing of a complaint, written findings regarding whether or not there is reasonable cause to believe that the complaint has merit. If the findings are that there is reasonable cause to believe that the complaint has merit, the Assistant Secretary will order appropriate relief, including preliminary reinstatement, affirmative action to abate the violation, back pay with interest, and compensatory damages. The findings and, where appropriate, preliminary order, advise the parties of their right to file objections to the findings of the Assistant Secretary and to request a hearing. The findings and, where appropriate, the preliminary order, also advise the respondent of the right to request an award of attorney fees not exceeding $1,000 from the ALJ, regardless of whether the respondent has filed objections, if the respondent alleges that the complaint was frivolous or brought in bad faith. If no objections are filed within 30 days of receipt of the findings, the findings and any preliminary order of the Assistant Secretary become the final decision and order of the Secretary. If objections are timely filed, any order of preliminary reinstatement will take effect, but the remaining provisions of the order will not take effect until administrative proceedings are completed.

As explained in the IFR, in ordering interest on back pay under CFPA, the Secretary has determined that interest due will be computed by compounding daily the Internal Revenue Service interest rate for the underpayment of taxes, which under 26 U.S.C. 6621 is generally the Federal short-term rate plus three percentage points. 79 FR 18635. The Secretary has long applied the interest rate in 26 U.S.C. 6621 to calculate interest on backpay in whistleblower cases. *Doyle* v. *Hydro Nuclear Servs.,* ARB Nos. 99–041, 99–042, 00–012, 2000 WL 694384, at * 14–15, 17 (ARB May 17, 2000); *see also Cefalu* v. *Roadway Express, Inc.,* ARB No. 09–070, 2011 WL 1247212, at * 2 (ARB Mar. 17, 2011); *Pollock* v. *Cont'l Express,* ARB Nos. 07–073, 08–051, 2010 WL 1776974, at * 8 (ARB Apr. 10, 2010); *Murray* v. *Air Ride, Inc.,* ARB No. 00–045, slip op. at 9 (ARB Dec. 29, 2000). Section 6621 provides the appropriate measure of compensation under CFPA and other DOL-administered whistleblower statutes because it ensures the complainant will be placed in the same position he or she would have been in if no unlawful retaliation occurred. *See Ass't Sec'y* v. *Double R. Trucking, Inc.,* ARB No. 99–061, slip op. at 5 (ARB July 16, 1999) (interest awards pursuant to § 6621 are mandatory elements of complainant's make-whole remedy). Section 6621 provides a reasonably accurate prediction of market outcomes (which represents the loss of investment opportunity by the complainant and the employer's benefit from use of the withheld money) and thus provides the complainant with appropriate make-whole relief. *See EEOC* v. *Erie Cnty.,* 751 F.2d 79, 82 (2d Cir. 1984) (''[s]ince the goal of a suit under the [Fair Labor Standards Act] and the Equal Pay Act is to make whole the victims of the unlawful underpayment of wages, and since [§ 6621] has been adopted as a good indicator of the value of the use of money, it was well within'' the district court's discretion to calculate prejudgment interest under § 6621); *New Horizons for the Retarded, Inc.,* 283 N.L.R.B. No. 181, 1987 WL 89652, at * 2 (NLRB May 28, 1987) (observing that ''the short-term Federal rate [used by § 6621] is based on average market yields on marketable Federal obligations and is influenced by private economic market forces''). Similarly, as explained in the IFR, daily compounding of the interest award ensures that complainants are made whole for

unlawful retaliation in violation of CFPA. 79 FR 18635.

As explained in the IFR, in ordering back pay, OSHA will require the respondent to submit the appropriate documentation to the Social Security Administration allocating the back pay to the appropriate calendar quarters. Requiring the reporting of back pay allocation to the SSA serves the remedial purposes of CFPA by ensuring that employees subjected to retaliation are truly made whole. *See* 79 FR 18635; *see also Don Chavas, LLC d/b/a Tortillas Don Chavas,* 361 NLRB No. 10, 2014 WL 3897178, at * 4–5 (NLRB Aug. 8, 2014).

Finally, as noted in the IFR, in limited circumstances, in lieu of preliminary reinstatement, OSHA may order that the complainant receive the same pay and benefits that he or she received prior to termination, but not actually return to work. *See* 79 FR 18636. Such ''economic reinstatement'' is akin to an order for front pay and frequently is employed in cases arising under section 105(c) of the Federal Mine Safety and Health Act of 1977, which protects miners from retaliation. 30 U.S.C. 815(c); *see, e.g., Sec'y of Labor ex rel. York* v. *BR&D Enters., Inc.,* 23 FMSHRC 697, 2001 WL 1806020, at * 1 (ALJ June 26, 2001). Front pay has been recognized as a possible remedy in cases under the whistleblower statutes enforced by OSHA in limited circumstances where reinstatement would not be appropriate. *See, e.g., Luder* v. *Cont'l Airlines, Inc.,* ARB No. 10–026, 2012 WL 376755, at * 11 (ARB Jan. 31, 2012), *aff'd, Cont'l Airlines, Inc.* v. *Admin. Rev. Bd.,* No. 15–60012, slip op. at 8, 2016 WL 97461, at * 4 (5th Cir. Jan. 7, 2016) (unpublished) (under Wendell H. Ford Aviation Investment and Reform Act for the 21st Century, ''front-pay is available when reinstatement is not possible''); *Moder* v. *Vill. of Jackson,* ARB Nos. 01–095, 02–039, 2003 WL 21499864, at * 10 (ARB June 30, 2003) (under environmental whistleblower statutes, ''front pay may be an appropriate substitute when the parties prove the impossibility of a productive and amicable working relationship, or the company no longer has a position for which the complainant is qualified'').

IBC made two comments on this section of the rule. First, IBC expressed the view that 60 days is too short a time for OSHA to complete an investigation, and suggested that 120 days would be more appropriate. OSHA notes that the 60-day time frame for an investigation is provided for in the CFPA statute. *See* 12 U.S.C. 5567(2)(A). However, 60 days is often not enough time for the agency to complete a whistleblower investigation that gives the parties adequate opportunity to present their evidence to OSHA. The fact that an investigation extends beyond 60 days will not deprive OSHA of jurisdiction to complete the investigation. *Cf., Roadway Express, Inc.* v. *Dole,* 929 F.2d 1060, 1066 (5th Cir. 1991) (finding Secretary does not lose jurisdiction over whistleblower complaint when a final decision is not issued within 120 days of completion of the hearing).

IBC also stated that the potential $1,000 penalty against complainants who submit frivolous whistleblower complaints is de minimis and will not deter such claims. In IBC's view, the rules did not provide much protection against frivolous complaints. OSHA notes that, as a protection against frivolous complaints, under 12 U.S.C. 5567(c)(3), OSHA must dismiss complaints that do not meet the prima facie allegation requirement without investigation. The $1,000 potential penalty for frivolous complaints is capped by the statute, and OSHA does not have authority to increase this penalty. *See* 12 U.S.C. 5567(c)(4)(C). Accordingly, OSHA has made no changes to this section in response to IBC's comments. OSHA has omitted an unnecessary abbreviation in paragraph (a)(1).

Subpart B—Litigation

Section 1985.106 Objections to the Findings and the Preliminary Order and Requests for a Hearing

To be effective, objections to the findings of the Assistant Secretary must be in writing and must be filed with the Chief Administrative Law Judge, U.S. Department of Labor, within 30 days of receipt of the findings. The date of the postmark, facsimile transmittal, or electronic communication transmittal is considered the date of the filing; if the objection is filed in person, by hand-delivery or other means, the objection is filed upon receipt. The filing of objections also is considered a request for a hearing before an ALJ. Although the parties are directed to serve a copy of their objections on the other parties of record, as well as the OSHA official who issued the findings and order, the Assistant Secretary, and the U.S. Department of Labor's Associate Solicitor for Fair Labor Standards, the failure to serve copies of the objections on the other parties of record does not affect the ALJ's jurisdiction to hear and decide the merits of the case. *See Shirani* v. *Calvert Cliffs Nuclear Power Plant, Inc.,* ARB No. 04–101, 2005 WL 2865915, at * 7 (ARB Oct. 31, 2005).

The timely filing of objections stays all provisions of the preliminary order, except for the portion requiring reinstatement. A respondent may file a motion to stay the Assistant Secretary's preliminary order of reinstatement with the Office of Administrative Law Judges. However, such a motion will be granted only based on exceptional circumstances. The Secretary believes that a stay of the Assistant Secretary's preliminary order of reinstatement under CFPA would be appropriate only where the respondent can establish the necessary criteria for equitable injunctive relief, *i.e.,* irreparable injury, likelihood of success on the merits, a balancing of possible harms to the parties, and the public interest favors a stay. If no timely objection to the Assistant Secretary's findings and/or preliminary order is filed, then the Assistant Secretary's findings and/or preliminary order become the final decision of the Secretary not subject to judicial review. OSHA received no comments on this section, and no changes were made to it.

Section 1985.107 Hearings

This section adopts the rules of practice and procedure for administrative hearings before the Office of Administrative Law Judges, as set forth in 29 CFR part 18 subpart A. This section provides that the hearing is to commence expeditiously, except upon a showing of good cause or unless otherwise agreed to by the parties. Hearings will be conducted de novo, on the record. As noted in this section, formal rules of evidence will not apply, but rules or principles designed to assure production of the most probative evidence will be applied. The ALJ may exclude evidence that is immaterial, irrelevant, or unduly repetitious. OSHA received no comments on this section, and no changes were made to it.

Section 1985.108 Role of Federal Agencies

The Assistant Secretary, at his or her discretion, may participate as a party or amicus curiae at any time in the administrative proceedings under CFPA. For example, the Assistant Secretary may exercise his or her discretion to prosecute the case in the administrative proceeding before an ALJ; petition for review of a decision of an ALJ, including a decision based on a settlement agreement between the complainant and the respondent, regardless of whether the Assistant Secretary participated before the ALJ; or participate as amicus curiae before the ALJ or in the ARB proceeding. Although OSHA anticipates that ordinarily the Assistant Secretary will not participate, the Assistant Secretary may choose to

do so in appropriate cases, such as cases involving important or novel legal issues, multiple employees, alleged violations that appear egregious, or where the interests of justice might require participation by the Assistant Secretary. The Bureau, if interested in a proceeding, also may participate as amicus curiae at any time in the proceedings. OSHA received no comments on this section. However, OSHA has revised section (a)(2) slightly to clarify that documents must be provided to the Assistant Secretary and the Associate Solicitor for Fair Labor Standards during the litigation only upon request of OSHA, or when OSHA is participating in the proceeding, or when service on OSHA and the Associate Solicitor is otherwise required by these rules.

Section 1985.109 Decision and Orders of the Administrative Law Judge

This section sets forth the requirements for the content of the decision and order of the ALJ, and includes the standard for finding a violation under CFPA. Specifically, the complainant must demonstrate (*i.e.* prove by a preponderance of the evidence) that the protected activity was a ''contributing factor'' in the adverse action. *See, e.g., Allen* v. *Admin. Re*v. *Bd.,* 514 F.3d 468, 475 n.1 (5th Cir. 2008) (''The term 'demonstrates' [under identical burden-shifting scheme in the Sarbanes-Oxley whistleblower provision] means to prove by a preponderance of the evidence.''). If the employee demonstrates that the alleged protected activity was a contributing factor in the adverse action, the employer, to escape liability, must demonstrate by ''clear and convincing evidence'' that it would have taken the same action in the absence of the protected activity. *See* 12 U.S.C. 5567(c)(3)(C).

Paragraph (c) of this section further provides that OSHA's determination to dismiss the complaint without an investigation or without a complete investigation under section 1985.104 is not subject to review. Thus, section 1985.109(c) clarifies that OSHA's determinations on whether to proceed with an investigation under CFPA and whether to make particular investigative findings are discretionary decisions not subject to review by the ALJ. The ALJ hears cases de novo and, therefore, as a general matter, may not remand cases to OSHA to conduct an investigation or make further factual findings. Paragraph (d) notes the remedies that the ALJ may order under CFPA and, as discussed under section 1985.105 above, provides that interest on back pay will be calculated using the interest rate applicable to underpayment of taxes under 26 U.S.C. 6621 and will be compounded daily, and that the respondent will be required to submit appropriate documentation to the Social Security Administration allocating any back pay award to the appropriate calendar quarters. Paragraph (e) requires that the ALJ's decision be served on all parties to the proceeding, OSHA, and the U.S. Department of Labor's Associate Solicitor for Fair Labor Standards. Paragraph (e) also provides that any ALJ decision requiring reinstatement or lifting an order of reinstatement by the Assistant Secretary will be effective immediately upon receipt of the decision by the respondent. All other portions of the ALJ's order will be effective 14 days after the date of the decision unless a timely petition for review has been filed with the ARB. If no timely petition for review is filed with the ARB, the decision of the ALJ becomes the final decision of the Secretary and is not subject to judicial review. OSHA received no comments on this section. OSHA omitted an unnecessary abbreviation from this section but has made no other changes to it.

Section 1985.110 Decision and Orders of the Administrative Review Board

Upon the issuance of the ALJ's decision, the parties have 14 days within which to petition the ARB for review of that decision. The date of the postmark, facsimile transmittal, or electronic communication transmittal is considered the date of filing of the petition; if the petition is filed in person, by hand delivery or other means, the petition is considered filed upon receipt.

The appeal provisions in this part provide that an appeal to the ARB is not a matter of right but is accepted at the discretion of the ARB. The parties should identify in their petitions for review the legal conclusions or orders to which they object, or the objections may be deemed waived. The ARB has 30 days to decide whether to grant the petition for review. If the ARB does not grant the petition, the decision of the ALJ becomes the final decision of the Secretary. If a timely petition for review is filed with the ARB, any relief ordered by the ALJ, except for that portion ordering reinstatement, is inoperative while the matter is pending before the ARB. When the ARB accepts a petition for review, the ALJ's factual determinations will be reviewed under the substantial evidence standard.

This section also provides that, based on exceptional circumstances, the ARB may grant a motion to stay an ALJ's preliminary order of reinstatement under CFPA, which otherwise would be effective, while review is conducted by the ARB. The Secretary believes that a stay of an ALJ's preliminary order of reinstatement under CFPA would be appropriate only where the respondent can establish the necessary criteria for equitable injunctive relief, *i.e.,* irreparable injury, likelihood of success on the merits, a balancing of possible harms to the parties, and the public interest favors a stay.

If the ARB concludes that the respondent has violated the law, it will issue a final order providing relief to the complainant. The final order will require, where appropriate: affirmative action to abate the violation; reinstatement of the complainant to his or her former position, together with the compensation (including back pay and interest), terms, conditions, and privileges of employment; and payment of compensatory damages, including, at the request of the complainant, the aggregate amount of all costs and expenses (including attorney and expert witness fees) reasonably incurred. Interest on back pay will be calculated using the interest rate applicable to underpayment of taxes under 26 U.S.C. 6621 and will be compounded daily, and the respondent will be required to submit appropriate documentation to the Social Security Administration allocating any back pay award to the appropriate calendar quarters. If the ARB determines that the respondent has not violated the law, an order will be issued denying the complaint. If, upon the request of the respondent, the ARB determines that a complaint was frivolous or was brought in bad faith, the ARB may award to the respondent reasonable attorney fees, not exceeding $1,000. OSHA received no comments on this section. OSHA has removed an unnecessary abbreviation from this section, but has made no other changes to it.

Subpart C—Miscellaneous Provisions

Section 1985.111 Withdrawal of Complaints, Findings, Objections, and Petitions for Review; Settlement

This section provides the procedures and time periods for withdrawal of complaints, the withdrawal of findings and/or preliminary orders by the Assistant Secretary, and the withdrawal of objections to findings and/or orders. It permits complainants to withdraw their complaints orally, and provides that, in such circumstances, OSHA will confirm a complainant's desire to withdraw in writing. It also provides for

approval of settlements at the investigative and adjudicative stages of the case. OSHA received no comments on this section and has made no changes to it.

Section 1985.112 Judicial Review

This section describes the statutory provisions for judicial review of decisions of the Secretary and requires, in cases where judicial review is sought, the ARB or the ALJ to submit the record of proceedings to the appropriate court pursuant to the rules of such court. OSHA received no comments on this section and has made no changes to it.

Section 1985.113 Judicial Enforcement

This section describes the Secretary's authority under CFPA to obtain judicial enforcement of orders and terms of settlement agreements. CFPA expressly authorizes district courts to enforce orders issued by the Secretary under 12 U.S.C. 5567. Specifically, the statute provides that ''[i]f any person has failed to comply with a final order issued under paragraph (4), the Secretary of Labor may file a civil action in the United States district court for the district in which the violation was found to have occurred, or in the United States district court for the District of Columbia, to enforce such order. In actions brought under this paragraph, the district courts shall have jurisdiction to grant all appropriate relief including injunctive relief and compensatory damages.'' 12 U.S.C. 5567(c)(5)(A).

All orders issued by the Secretary under 12 U.S.C. 5567 may also be enforced by any person on whose behalf an order was issued in district court, under 12 U.S.C. 5567(c)(5)(B). The Secretary interprets these provisions to grant the district court authority to enforce preliminary orders of reinstatement. Subsection (c)(2)(B) provides that the Secretary shall order the person who has committed a violation to reinstate the complainant to his or her former position (12 U.S.C. 5567(c)(2)(B)). Subsection (c)(2)(B) also instructs the Secretary to accompany any reasonable cause finding that a violation has occurred with a preliminary order containing the relief prescribed by paragraph (4)(B), which includes reinstatement, (*see* 12 U.S.C. 5567(c)(2)(B)). Subsection (c)(2)(C) declares that any reinstatement remedy contained in a preliminary order is not stayed upon the filing of objections. 12 U.S.C. 5567(c)(2)(C) (''The filing of such objections shall not operate to stay any reinstatement remedy contained in the preliminary order.''). Thus, under the statute, enforceable orders under paragraph (c)(5) include both preliminary orders issued under subsection (c)(2)(B), and final orders issued under subsection (c)(4)(A), both of which may contain the relief of reinstatement as prescribed by subsection (c)(4)(B).

This statutory interpretation is consistent with the Secretary's interpretation of similar language in the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century, 49 U.S.C. 42121, and Section 806 of the Corporate and Criminal Fraud Accountability Act of 2002, Title VIII of the Sarbanes-Oxley Act of 2002, 18 U.S.C. 1514A. *See* Brief for the Intervenor/Plaintiff-Appellee Secretary of Labor, *Solis* v. *Tenn. Commerce Bancorp, Inc.,* No. 10–5602 (6th Cir. 2010); *Solis* v. *Tenn. Commerce Bancorp, Inc.,* 713 F. Supp. 2d 701 (M.D. Tenn. 2010); *but see Bechtel* v. *Competitive Techs., Inc.,* 448 F.3d 469 (2d Cir. 2006); *Welch* v. *Cardinal Bankshares Corp.,* 454 F. Supp. 2d 552 (W.D. Va. 2006), (*decision vacated, appeal dismissed,* No. 06–2295 (4th Cir. Feb. 20, 2008)). OSHA received no comments on this section. OSHA has revised this section slightly to more closely parallel the provisions of the statute regarding the proper venue for an enforcement action.

Section 1985.114 District Court Jurisdiction of Retaliation Complaints

This section sets forth CFPA's provisions allowing a complainant to bring an original de novo action in district court, alleging the same allegations contained in the complaint filed with OSHA, under certain circumstances. CFPA permits a complainant to file an action for de novo review in the appropriate district court if there has been no final decision of the Secretary within 210 days after the date of the filing of the complaint, or within 90 days after the date of receipt of a written determination. 12 U.S.C. 5567(c)(4)(D)(i). ''Written determination'' refers to the Assistant Secretary's written findings issued at the close of OSHA's investigation under section 1985.105(a). *See* 12 U.S.C. 5567(c)(2)(A)(ii). The Secretary's final decision is generally the decision of the ARB issued under section 1985.110. In other words, a complainant may file an action for de novo review in the appropriate district court in either of the following two circumstances: (1) A complainant may file a de novo action in district court within 90 days of receiving the Assistant Secretary's written findings issued under section 1985.105(a), or (2) a complainant may file a de novo action in district court if more than 210 days have passed since the filing of the complaint and the Secretary has not issued a final decision. The plain language of 12 U.S.C. 5567(c)(4)(D)(i), by distinguishing between actions that can be brought if the Secretary has not issued a ''final decision'' within 210 days and actions that can be brought within 90 days after a ''written determination,'' supports allowing de novo actions in district court under either of the circumstances described above.

However the Secretary believes that CFPA does not permit complainants to initiate an action in federal court after the Secretary issues a final decision, even if the date of the final decision is more than 210 days after the filing of the complaint or within 90 days of the complainant's receipt of the Assistant Secretary's written findings. Thus, for example, after the ARB has issued a final decision denying a whistleblower complaint, the complainant no longer may file an action for de novo review in federal district court. The purpose of the ''kick-out'' provision is to aid the complainant in receiving a prompt decision. That goal is not implicated in a situation where the complainant already has received a final decision from the Secretary. In addition, permitting the complainant to file a new case in district court in such circumstances conflicts with the parties' rights to seek judicial review of the Secretary's final decision in the court of appeals. *See* 12 U.S.C. 5567(c)(4)(E) (providing that an order with respect to which review could have been obtained in the court of appeals shall not be subject to judicial review in any criminal or other civil proceeding).

Under CFPA, the Assistant Secretary's written findings become the final order of the Secretary, not subject to judicial review, if no objection is filed within 30 days. *See* 12 U.S.C. 5567(c)(2)(C). Thus, a complainant may need to file timely objections to the Assistant Secretary's findings in order to preserve the right to file an action in district court.

This section also requires that, within seven days after filing a complaint in district court, a complainant must provide a file-stamped copy of the complaint to OSHA, the ALJ, or the ARB, depending on where the proceeding is pending. In all cases, a copy of the district court complaint also must be provided to the OSHA official who issued the findings and/or preliminary order, the Assistant Secretary, and the U.S. Department of Labor's Associate Solicitor for Fair Labor Standards. This provision is necessary to notify OSHA that the complainant has opted to file a

complaint in district court. This provision is not a substitute for the complainant's compliance with the requirements for service of process of the district court complaint contained in the Federal Rules of Civil Procedure and the local rules of the district court where the complaint is filed. The section also incorporates the statutory provisions which allow for a jury trial at the request of either party in a district court action and specify the remedies and burdens of proof in a district court action. OSHA received no comments on this section and has made no changes to it.

Section 1985.115 Special Circumstances; Waiver of Rules

This section provides that in circumstances not contemplated by these rules or for good cause the ALJ or the ARB may, upon application and notice to the parties, waive any rule as justice or the administration of CFPA requires. OSHA received no comments on this section and has made no changes to it.

IV. Paperwork Reduction Act

This rule contains a reporting provision (filing a retaliation complaint, Section 1985.103) which was previously reviewed and approved for use by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1995 (Pub. L. 104–13). The assigned OMB control number is 1218–0236.

V. Administrative Procedure Act

The notice and comment rulemaking procedures of Section 553 of the Administrative Procedure Act (APA) do not apply ''to interpretative rules, general statements of policy, or rules of agency organization, procedure, or practice.'' 5 U.S.C. 553(b)(A). This is a rule of agency procedure, practice, and interpretation within the meaning of that section. Therefore, publication in the **Federal Register** of a notice of proposed rulemaking and request for comments are not required for these regulations, which provide the procedures for the handling of retaliation complaints. The Assistant Secretary, however, sought and considered comments to enable the agency to improve the rules by taking into account the concerns of interested persons.

Furthermore, because this rule is procedural and interpretative rather than substantive, the normal requirement of 5 U.S.C. 553(d) that a rule is effective 30 days after publication in the **Federal Register** is inapplicable. The Assistant Secretary also finds good cause to provide an immediate effective date for this final rule. It is in the public interest that the rule be effective immediately so both parties may know what procedures are applicable to pending cases.

VI. Executive Orders 12866 and 13563; Unfunded Mandates Reform Act of 1995; Executive Order 13132

The Department has concluded that this rule is not a ''significant regulatory action'' within the meaning of section 3(f)(4) of Executive Order 12866, as reaffirmed by Executive Order 13563, because it is not likely to result in a rule that may: (1) Have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities; (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or (4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in Executive Order 12866. Therefore, no regulatory impact analysis under Section 6(a)(3)(C) of Executive Order 12866 has been prepared.

For this reason, and because no notice of proposed rulemaking has been published, no statement is required under Section 202 of the Unfunded Mandates Reform Act of 1995, 2 U.S.C. 1531 *et seq.* Finally, this rule does not have ''federalism implications.'' The rule does not have ''substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government'' and therefore is not subject to Executive Order 13132 (Federalism).

VII. Regulatory Flexibility Analysis

The notice and comment rulemaking procedures of Section 553 of the Administrative Procedure Act (APA) do not apply ''to interpretative rules, general statements of policy, or rules of agency organization, procedure, or practice.'' 5 U.S.C. 553(b)(A). Rules that are exempt from APA notice and comment requirements are also exempt from the Regulatory Flexibility Act (RFA). See SBA Office of Advocacy, A Guide for Government Agencies: How to Comply with the Regulatory Flexibility Act 9 (May 2012); also found at: *http://www.sba.gov/sites/default/files/rfaguide_0512_0.pdf.* This is a rule of agency procedure, practice, and interpretation within the meaning of that section; therefore, the rule is exempt from both the notice and comment rulemaking procedures of the APA and the requirements under the RFA.

List of Subjects in 29 CFR Part 1985

Administrative practice and procedure, Employment, Consumer financial protection, Investigations, Reporting and recordkeeping requirements, Whistleblower.

Authority and Signature

This document was prepared under the direction and control of David Michaels, Ph.D., MPH, Assistant Secretary of Labor for Occupational Safety and Health.

Signed at Washington, DC, on February 25, 2016.

David Michaels,

Assistant Secretary of Labor for Occupational Safety and Health.

Accordingly, for the reasons set out in the preamble, 29 CFR part 1985 is revised to read as follows:

PART 1985—PROCEDURES FOR HANDLING RETALIATION COMPLAINTS UNDER THE EMPLOYEE PROTECTION PROVISION OF THE CONSUMER FINANCIAL PROTECTION ACT OF 2010

Subpart A—Complaints, Investigations, Findings and Preliminary Orders

Sec.
1985.100 Purpose and scope.
1985.101 Definitions.
1985.102 Obligations and prohibited acts.
1985.103 Filing of retaliation complaint.
1985.104 Investigation.
1985.105 Issuance of findings and preliminary orders.

Subpart B—Litigation

1985.106 Objections to the findings and the preliminary order and requests for a hearing.
1985.107 Hearings.
1985.108 Role of Federal agencies.
1985.109 Decision and orders of the administrative law judge.
1985.110 Decision and orders of the Administrative Review Board.

Subpart C—Miscellaneous Provisions

1985.111 Withdrawal of complaints, findings, objections, and petitions for review; settlement.
1985.112 Judicial review.
1985.113 Judicial enforcement.
1985.114 District court jurisdiction of retaliation complaints.
1985.115 Special circumstances; waiver of rules.

Authority: 12 U.S.C. 5567; Secretary of Labor's Order No. 1–2012 (Jan. 18, 2012), 77

FR 3912 (Jan. 25, 2012); Secretary of Labor's Order No. 2–2012, 77 FR 69378 (Nov. 16, 2012).

Subpart A—Complaints, Investigations, Findings and Preliminary Orders

§ 1985.100 Purpose and scope.

(a) This Part sets forth procedures for, and interpretations of, the employee protection provision of the Consumer Financial Protection Act of 2010, Section 1057 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (CFPA or the Act), Pub. L. 111–203, 124 Stat. 1376, 1955 (July 21, 2010) (codified at 12 U.S.C. 5567). CFPA provides for employee protection from retaliation because the employee has engaged in protected activity pertaining to the offering or provision of consumer financial products or services.

(b) This part establishes procedures under CFPA for the expeditious handling of retaliation complaints filed by employees, or by persons acting on their behalf. These rules, together with those codified at 29 CFR part 18, set forth the procedures under CFPA for submission of complaints, investigations, issuance of findings and preliminary orders, objections to findings and orders, litigation before administrative law judges (ALJs), post-hearing administrative review, and withdrawals and settlements. In addition, these rules provide the Secretary's interpretations on certain statutory issues.

§ 1985.101 Definitions.

As used in this part:

(a) *Affiliate* means any person that controls, is controlled by, or is under common control with another person.

(b) *Assistant Secretary* means the Assistant Secretary of Labor for Occupational Safety and Health or the person or persons to whom he or she delegates authority under CFPA.

(c) *Bureau* means the Consumer Financial Protection Bureau.

(d) *Business days* means days other than Saturdays, Sundays, and Federal holidays.

(e) *CFPA* means Section 1057 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, Pub. L. 111–203, 124 Stat. 1376, 1955 (July 21, 2010) (codified at 12 U.S.C. 5567).

(f) *Complainant* means the person who filed a CFPA complaint or on whose behalf a complaint was filed.

(g) *Consumer* means an individual or an agent, trustee, or representative acting on behalf of an individual.

(h) *Consumer financial product or service* means any financial product or service that is:

(1) Described in one or more categories in 12 U.S.C. 5481(15) and is offered or provided for use by consumers primarily for personal, family, or household purposes; or

(2) Described in clause (i), (iii), (ix), or (x) of 12 U.S.C. 5481(15)(A), and is delivered, offered, or provided in connection with a consumer financial product or service referred to in subparagraph (1).

(i) *Covered employee* means any individual performing tasks related to the offering or provision of a consumer financial product or service. The term ''covered employee'' includes an individual presently or formerly working for, an individual applying to work for, or an individual whose employment could be affected by a covered person or service provider where such individual was performing tasks related to the offering or provision of a consumer financial product or service at the time that the individual engaged in protected activity under CFPA.

(j) *Covered person* means —

(1) Any person that engages in offering or providing a consumer financial product or service, or

(2) Any affiliate of such a person if such affiliate acts as a service provider to such person, or

(k) *Federal consumer financial law* means any law described in 12 U.S.C. 5481(14).

(l) *OSHA* means the Occupational Safety and Health Administration of the United States Department of Labor.

(m) *Person* means an individual, partnership, company, corporation, association (incorporated or unincorporated), trust, estate, cooperative organization, or other entity.

(n) *Respondent* means the person named in the complaint who is alleged to have violated the Act.

(o) *Secretary* means the Secretary of Labor or person to whom authority under CFPA has been delegated.

(p) *Service provider* means any person that provides a material service to a covered person in connection with the offering or provision by such covered person of a consumer financial product or service, including a person that—

(1) Participates in designing, operating, or maintaining the consumer financial product or service; or

(2) Processes transactions relating to the consumer financial product or service (other than unknowingly or incidentally transmitting or processing financial data in a manner that such data is undifferentiated from other types of data of the same form as the person transmits or processes);

(3) The term ''service provider'' does not include a person solely by virtue of such person offering or providing to a covered person:

(i) A support service of a type provided to businesses generally or a similar ministerial service; or

(ii) Time or space for an advertisement for a consumer financial product or service through print, newspaper, or electronic media.

(4) A person that is a service provider shall be deemed to be a covered person to the extent that such person engages in the offering or provision of its own consumer financial product or service.

(q) Any future statutory amendments that affect the definition of a term or terms listed in this section will apply in lieu of the definition stated herein.

§ 1985.102 Obligations and prohibited acts.

(a) No covered person or service provider may terminate or in any other way retaliate against, or cause to be terminated or retaliated against, including, but not limited to, intimidating, threatening, restraining, coercing, blacklisting or disciplining, any covered employee or any authorized representative of covered employees because such employee or representative, whether at the employee's initiative or in the ordinary course of the employee's duties (or any person acting pursuant to a request of the employee), engaged in any of the activities specified in paragraphs (b)(1) through (4) of this section. (b) A covered employee or authorized representative is protected against retaliation (as described in paragraph (a) of this section) by a covered person or service provider because he or she:

(1) Provided, caused to be provided, or is about to provide or cause to be provided to the employer, the Bureau, or any other State, local, or Federal, government authority or law enforcement agency, information relating to any violation of, or any act or omission that the employee reasonably believes to be a violation of, any provision of Title X of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, Pub. L. 111–203, 124 Stat. 1376, 1955 (July 21, 2010), or any other provision of law that is subject to the jurisdiction of the Bureau, or any rule, order, standard, or prohibition prescribed by the Bureau;

(2) Testified or will testify in any proceeding resulting from the administration or enforcement of any provision of Title X of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, Pub. L. 111–203, 124 Stat. 1376, 1955 (July 21, 2010), or

any other provision of law that is subject to the jurisdiction of the Bureau, or any rule, order, standard, or prohibition prescribed by the Bureau;

(3) Filed, instituted, or caused to be filed or instituted any proceeding under any Federal consumer financial law; or

(4) Objected to, or refused to participate in, any activity, policy, practice, or assigned task that the employee (or other such person) reasonably believed to be in violation of any law, rule, order, standard, or prohibition subject to the jurisdiction of, or enforceable by, the Bureau.

§ 1985.103 Filing of retaliation complaint.

(a) *Who may file.* A person who believes that he or she has been discharged or otherwise retaliated against by any person in violation of CFPA may file, or have filed by any person on his or her behalf, a complaint alleging such retaliation.

(b) *Nature of filing.* No particular form of complaint is required. A complaint may be filed orally or in writing. Oral complaints will be reduced to writing by OSHA. If the complainant is unable to file the complaint in English, OSHA will accept the complaint in any language.

(c) *Place of filing.* The complaint should be filed with the OSHA office responsible for enforcement activities in the geographical area where the complainant resides or was employed, but may be filed with any OSHA officer or employee. Addresses and telephone numbers for these officials are set forth in local directories and at the following Internet address: *http://www.osha.gov.*

(d) *Time for filing.* Within 180 days after an alleged violation of CFPA occurs, any person who believes that he or she has been retaliated against in violation of the Act may file, or have filed by any person on his or her behalf, a complaint alleging such retaliation. The date of the postmark, facsimile transmittal, electronic communication transmittal, telephone call, hand-delivery, delivery to a third-party commercial carrier, or in-person filing at an OSHA office will be considered the date of filing. The time for filing a complaint may be tolled for reasons warranted by applicable case law. For example, OSHA may consider the time for filing a complaint equitably tolled if a complainant mistakenly files a complaint with an agency other than OSHA within 180 days after an alleged adverse action.

§ 1985.104 Investigation.

(a) Upon receipt of a complaint in the investigating office, OSHA will notify the respondent of the filing of the complaint, of the allegations contained in the complaint, and of the substance of the evidence supporting the complaint. Such materials will be redacted, if necessary, consistent with the Privacy Act of 1974, 5 U.S.C. 552a, and other applicable confidentiality laws. OSHA will also notify the respondent of its rights under paragraphs (b) and (f) of this section and paragraph (e) of § 1985.110. OSHA will provide an unredacted copy of these same materials to the complainant (or the complainant's legal counsel if complainant is represented by counsel) and to the Bureau.

(b) Within 20 days of receipt of the notice of the filing of the complaint provided under paragraph (a) of this section, the respondent and the complainant each may submit to OSHA a written statement and any affidavits or documents substantiating its position. Within the same 20 days, the respondent and the complainant each may request a meeting with OSHA to present its position.

(c) During the investigation, OSHA will request that each party provide the other parties to the whistleblower complaint with a copy of submissions to OSHA that are pertinent to the whistleblower complaint. Alternatively, if a party does not provide its submissions to OSHA to the other party, OSHA will provide them to the other party (or the party's legal counsel if the party is represented by counsel) at a time permitting the other party an opportunity to respond. Before providing such materials to the other party, OSHA will redact them, if necessary, consistent with the Privacy Act of 1974, 5 U.S.C. 552a, and other applicable confidentiality laws. OSHA will also provide each party with an opportunity to respond to the other party's submissions.

(d) Investigations will be conducted in a manner that protects the confidentiality of any person who provides information on a confidential basis, other than the complainant, in accordance with part 70 of this title.

(e)(1) A complaint will be dismissed unless the complainant has made a prima facie showing that protected activity was a contributing factor in the adverse action alleged in the complaint.

(2) The complaint, supplemented as appropriate by interviews of the complainant, must allege the existence of facts and evidence to make a prima facie showing as follows:

(i) The employee engaged in a protected activity;

(ii) The respondent knew or suspected that the employee engaged in the protected activity;

(iii) The employee suffered an adverse action; and

(iv) The circumstances were sufficient to raise the inference that the protected activity was a contributing factor in the adverse action.

(3) For purposes of determining whether to investigate, the complainant will be considered to have met the required burden if the complaint on its face, supplemented as appropriate through interviews of the complainant, alleges the existence of facts and either direct or circumstantial evidence to meet the required showing, *i.e.,* to give rise to an inference that the respondent knew or suspected that the employee engaged in protected activity and that the protected activity was a contributing factor in the adverse action. The burden may be satisfied, for example, if the complaint shows that the adverse action took place within a temporal proximity of the protected activity, or at the first opportunity available to the respondent, giving rise to the inference that it was a contributing factor in the adverse action. If the required showing has not been made, the complainant (or the complainant's legal counsel if complainant is represented by counsel) will be so notified and the investigation will not commence.

(4) Notwithstanding a finding that a complainant has made a prima facie showing, as required by this section, further investigation of the complaint will not be conducted if the respondent demonstrates by clear and convincing evidence that it would have taken the same adverse action in the absence of the complainant's protected activity.

(5) If the respondent fails to make a timely response or fails to satisfy the burden set forth in the prior paragraph, OSHA will proceed with the investigation. The investigation will proceed whenever it is necessary or appropriate to confirm or verify the information provided by the respondent.

(f) Prior to the issuance of findings and a preliminary order as provided for in § 1985.105, if OSHA has reasonable cause, on the basis of information gathered under the procedures of this part, to believe that the respondent has violated CFPA and that preliminary reinstatement is warranted, OSHA will contact the respondent (or the respondent's legal counsel if respondent is represented by counsel) to give notice of the substance of the relevant evidence supporting the complainant's allegations as developed during the course of the investigation. This evidence includes any witness statements, which will be redacted to protect the identity of confidential

informants where statements were given in confidence; if the statements cannot be redacted without revealing the identity of confidential informants, summaries of their contents will be provided. The complainant will also receive a copy of the materials that must be provided to the respondent under this paragraph. Before providing such materials, OSHA will redact them, if necessary, consistent with the Privacy Act of 1974, 5 U.S.C. 552a, and other applicable confidentiality laws. The respondent will be given the opportunity to submit a written response, to meet with the investigators, to present statements from witnesses in support of its position, and to present legal and factual arguments. The respondent must present this evidence within 10 business days of OSHA's notification pursuant to this paragraph, or as soon thereafter as OSHA and the respondent can agree, if the interests of justice so require.

§ 1985.105 Issuance of findings and preliminary orders.

(a) After considering all the relevant information collected during the investigation, the Assistant Secretary will issue, within 60 days of the filing of the complaint, written findings as to whether or not there is reasonable cause to believe that the respondent has retaliated against the complainant in violation of CFPA.

(1) If the Assistant Secretary concludes that there is reasonable cause to believe that a violation has occurred, the Assistant Secretary will accompany the findings with a preliminary order providing relief to the complainant. The preliminary order will require, where appropriate: affirmative action to abate the violation; reinstatement of the complainant to his or her former position, together with the compensation (including back pay and interest), terms, conditions and privileges of the complainant's employment; and payment of compensatory damages, including, at the request of the complainant, the aggregate amount of all costs and expenses (including attorney and expert witness fees) reasonably incurred. Interest on back pay will be calculated using the interest rate applicable to underpayment of taxes under 26 U.S.C. 6621 and will be compounded daily. The preliminary order will also require the respondent to submit appropriate documentation to the Social Security Administration allocating any back pay award to the appropriate calendar quarters.

(2) If the Assistant Secretary concludes that a violation has not occurred, the Assistant Secretary will notify the parties of that finding.

(b) The findings and, where appropriate, the preliminary order will be sent by certified mail, return receipt requested (or other means that allow OSHA to confirm receipt), to all parties of record (and each party's legal counsel if the party is represented by counsel). The findings and, where appropriate, the preliminary order will inform the parties of the right to object to the findings and/or order and to request a hearing, and of the right of the respondent to request an award of attorney fees not exceeding $1,000 from the ALJ, regardless of whether the respondent has filed objections, if the respondent alleges that the complaint was frivolous or brought in bad faith. The findings and, where appropriate, the preliminary order also will give the address of the Chief Administrative Law Judge, U.S. Department of Labor. At the same time, the Assistant Secretary will file with the Chief Administrative Law Judge a copy of the original complaint and a copy of the findings and/or order.

(c) The findings and any preliminary order will be effective 30 days after receipt by the respondent (or the respondent's legal counsel if the respondent is represented by counsel), or on the compliance date set forth in the preliminary order, whichever is later, unless an objection and/or a request for hearing has been timely filed as provided at § 1985.106. However, the portion of any preliminary order requiring reinstatement will be effective immediately upon the respondent's receipt of the findings and the preliminary order, regardless of any objections to the findings and/or the order.

Subpart B—Litigation

§ 1985.106 Objections to the findings and the preliminary order and requests for a hearing.

(a) Any party who desires review, including judicial review, of the findings and/or preliminary order, or a respondent alleging that the complaint was frivolous or brought in bad faith who seeks an award of attorney fees under CFPA, must file any objections and/or a request for a hearing on the record within 30 days of receipt of the findings and preliminary order pursuant to § 1985.105. The objections, request for a hearing, and/or request for attorney fees must be in writing and state whether the objections are to the findings, the preliminary order, and/or whether there should be an award of attorney fees. The date of the postmark, facsimile transmittal, or electronic communication transmittal is considered the date of filing; if the objection is filed in person, by hand delivery or other means, the objection is filed upon receipt. Objections must be filed with the Chief Administrative Law Judge, U.S. Department of Labor, and copies of the objections must be mailed at the same time to the other parties of record, the OSHA official who issued the findings and order, the Assistant Secretary, and the Associate Solicitor, Division of Fair Labor Standards, U.S. Department of Labor.

(b) If a timely objection is filed, all provisions of the preliminary order will be stayed, except for the portion requiring preliminary reinstatement, which will not be automatically stayed. The portion of the preliminary order requiring reinstatement will be effective immediately upon the respondent's receipt of the findings and preliminary order, regardless of any objections to the order. The respondent may file a motion with the Office of Administrative Law Judges for a stay of the Assistant Secretary's preliminary order of reinstatement, which shall be granted only based on exceptional circumstances. If no timely objection is filed with respect to either the findings or the preliminary order, the findings and/or the preliminary order will become the final decision of the Secretary, not subject to judicial review.

§ 1985.107 Hearings.

(a) Except as provided in this part, proceedings will be conducted in accordance with the rules of practice and procedure for administrative hearings before the Office of Administrative Law Judges, codified at subpart A of part 18 of this title.

(b) Upon receipt of an objection and request for hearing, the Chief Administrative Law Judge will promptly assign the case to an ALJ who will notify the parties, by certified mail, of the day, time, and place of hearing. The hearing is to commence expeditiously, except upon a showing of good cause or unless otherwise agreed to by the parties. Hearings will be conducted de novo on the record. ALJs have broad discretion to limit discovery in order to expedite the hearing.

(c) If both the complainant and the respondent object to the findings and/or order, the objections will be consolidated and a single hearing will be conducted.

(d) Formal rules of evidence will not apply, but rules or principles designed to assure production of the most probative evidence will be applied. The ALJ may exclude evidence that is

immaterial, irrelevant, or unduly repetitious.

§ 1985.108 Role of Federal agencies.

(a)(1) The complainant and the respondent will be parties in every proceeding and must be served with copies of all documents in the case. At the Assistant Secretary's discretion, the Assistant Secretary may participate as a party or as amicus curiae at any time at any stage of the proceeding. This right to participate includes, but is not limited to, the right to petition for review of a decision of an ALJ, including a decision approving or rejecting a settlement agreement between the complainant and the respondent.

(2) Parties must send copies of documents to OSHA and to the Associate Solicitor, Division of Fair Labor Standards, U.S. Department of Labor, only upon request of OSHA, or when OSHA is participating in the proceeding, or when service on OSHA and the Associate Solicitor is otherwise required by these rules.

(b) The Bureau, if interested in a proceeding, may participate as amicus curiae at any time in the proceeding, at the Bureau's discretion. At the request of the Bureau, copies of all documents in a case must be sent to the Bureau, whether or not it is participating in the proceeding.

§ 1985.109 Decision and orders of the administrative law judge.

(a) The decision of the ALJ will contain appropriate findings, conclusions, and an order pertaining to the remedies provided in paragraph (d) of this section, as appropriate. A determination that a violation has occurred may be made only if the complainant has demonstrated by a preponderance of the evidence that protected activity was a contributing factor in the adverse action alleged in the complaint.

(b) If the complainant has satisfied the burden set forth in the prior paragraph, relief may not be ordered if the respondent demonstrates by clear and convincing evidence that it would have taken the same adverse action in the absence of any protected activity.

(c) Neither OSHA's determination to dismiss a complaint without completing an investigation pursuant to § 1985.104(e) nor OSHA's determination to proceed with an investigation is subject to review by the ALJ, and a complaint may not be remanded for the completion of an investigation or for additional findings on the basis that a determination to dismiss was made in error. Rather, if there otherwise is jurisdiction, the ALJ will hear the case on the merits or dispose of the matter without a hearing if the facts and circumstances warrant.

(d)(1) If the ALJ concludes that the respondent has violated the law, the ALJ will issue an order that will require, where appropriate: Affirmative action to abate the violation; reinstatement of the complainant to his or her former position, together with the compensation (including back pay and interest), terms, conditions, and privileges of the complainant's employment; and payment of compensatory damages, including, at the request of the complainant, the aggregate amount of all costs and expenses (including attorney and expert witness fees) reasonably incurred. Interest on back pay will be calculated using the interest rate applicable to underpayment of taxes under 26 U.S.C. 6621 and will be compounded daily. The order will also require the respondent to submit appropriate documentation to the Social Security Administration allocating any back pay award to the appropriate calendar quarters.

(2) If the ALJ determines that the respondent has not violated the law, an order will be issued denying the complaint. If, upon the request of the respondent, the ALJ determines that a complaint was frivolous or was brought in bad faith, the ALJ may award to the respondent reasonable attorney fees, not exceeding $1,000.

(e) The decision will be served upon all parties to the proceeding, the Assistant Secretary, and the Associate Solicitor, Division of Fair Labor Standards, U.S. Department of Labor. Any ALJ's decision requiring reinstatement or lifting an order of reinstatement by the Assistant Secretary will be effective immediately upon receipt of the decision by the respondent. All other portions of the ALJ's order will be effective 14 days after the date of the decision unless a timely petition for review has been filed with the Administrative Review Board (ARB), U.S. Department of Labor. The decision of the ALJ will become the final order of the Secretary unless a petition for review is timely filed with the ARB and the ARB accepts the petition for review.

§ 1985.110 Decision and orders of the Administrative Review Board.

(a) Any party desiring to seek review, including judicial review, of a decision of the ALJ, or a respondent alleging that the complaint was frivolous or brought in bad faith who seeks an award of attorney fees, must file a written petition for review with the ARB, which has been delegated the authority to act for the Secretary and issue final decisions under this part. The parties should identify in their petitions for review the legal conclusions or orders to which they object, or the objections may be deemed waived. A petition must be filed within 14 days of the date of the decision of the ALJ. The date of the postmark, facsimile transmittal, or electronic communication transmittal will be considered to be the date of filing; if the petition is filed in person, by hand delivery or other means, the petition is considered filed upon receipt. The petition must be served on all parties and on the Chief Administrative Law Judge at the time it is filed with the ARB. Copies of the petition for review must be served on the Assistant Secretary and on the Associate Solicitor, Division of Fair Labor Standards, U.S. Department of Labor.

(b) If a timely petition for review is filed pursuant to paragraph (a) of this section, the decision of the ALJ will become the final order of the Secretary unless the ARB, within 30 days of the filing of the petition, issues an order notifying the parties that the case has been accepted for review. If a case is accepted for review, the decision of the ALJ will be inoperative unless and until the ARB issues an order adopting the decision, except that any order of reinstatement will be effective while review is conducted by the ARB, unless the ARB grants a motion by the respondent to stay that order based on exceptional circumstances. The ARB will specify the terms under which any briefs are to be filed. The ARB will review the factual determinations of the ALJ under the substantial evidence standard. If no timely petition for review is filed, or the ARB denies review, the decision of the ALJ will become the final order of the Secretary. If no timely petition for review is filed, the resulting final order is not subject to judicial review.

(c) The final decision of the ARB will be issued within 120 days of the conclusion of the hearing, which will be deemed to be 14 days after the decision of the ALJ, unless a motion for reconsideration has been filed with the ALJ in the interim. In such case, the conclusion of the hearing is the date the motion for reconsideration is ruled upon or 14 days after a new decision is issued. The ARB's final decision will be served upon all parties and the Chief Administrative Law Judge by mail. The final decision will also be served on the Assistant Secretary and on the Associate Solicitor, Division of Fair Labor

Standards, U.S. Department of Labor, even if the Assistant Secretary is not a party.

(d) If the ARB concludes that the respondent has violated the law, the ARB will issue a final order providing relief to the complainant. The final order will require, where appropriate: Affirmative action to abate the violation; reinstatement of the complainant to his or her former position, together with the compensation (including back pay and interest), terms, conditions, and privileges of the complainant's employment; and payment of compensatory damages, including, at the request of the complainant, the aggregate amount of all costs and expenses (including attorney and expert witness fees) reasonably incurred. Interest on back pay will be calculated using the interest rate applicable to underpayment of taxes under 26 U.S.C. 6621 and will be compounded daily. The order will also require the respondent to submit appropriate documentation to the Social Security Administration allocating any back pay award to the appropriate calendar quarters.

(e) If the ARB determines that the respondent has not violated the law, an order will be issued denying the complaint. If, upon the request of the respondent, the ARB determines that a complaint was frivolous or was brought in bad faith, the ARB may award to the respondent a reasonable attorney fee, not exceeding $1,000.

Subpart C—Miscellaneous Provisions

§ 1985.111 Withdrawal of complaints, findings, objections, and petitions for review; settlement.

(a) At any time prior to the filing of objections to the Assistant Secretary's findings and/or preliminary order, a complainant may withdraw his or her complaint by notifying OSHA, orally or in writing, of his or her withdrawal. OSHA then will confirm in writing the complainant's desire to withdraw and determine whether to approve the withdrawal. OSHA will notify the parties (and each party's legal counsel if the party is represented by counsel) of the approval of any withdrawal. If the complaint is withdrawn because of settlement, the settlement must be submitted for approval in accordance with paragraph (d) of this section. A complainant may not withdraw his or her complaint after the filing of objections to the Assistant Secretary's findings and/or preliminary order.

(b) The Assistant Secretary may withdraw the findings and/or preliminary order at any time before the expiration of the 30-day objection period described in § 1985.106, provided that no objection has been filed yet, and substitute new findings and/or a new preliminary order. The date of the receipt of the substituted findings or order will begin a new 30-day objection period.

(c) At any time before the Assistant Secretary's findings and/or order become final, a party may withdraw objections to the Assistant Secretary's findings and/or order by filing a written withdrawal with the ALJ. If the case is on review with the ARB, a party may withdraw a petition for review of an ALJ's decision at any time before that decision becomes final by filing a written withdrawal with the ARB. The ALJ or the ARB, as the case may be, will determine whether to approve the withdrawal of the objections or the petition for review. If the ALJ approves a request to withdraw objections to the Assistant Secretary's findings and/or order, and there are no other pending objections, the Assistant Secretary's findings and/or order will become the final order of the Secretary. If the ARB approves a request to withdraw a petition for review of an ALJ decision, and there are no other pending petitions for review of that decision, the ALJ's decision will become the final order of the Secretary. If objections or a petition for review are withdrawn because of settlement, the settlement must be submitted for approval in accordance with paragraph (d) of this section.

(d)(1) *Investigative settlements.* At any time after the filing of a complaint, but before the findings and/or order are objected to or become a final order by operation of law, the case may be settled if OSHA, the complainant, and the respondent agree to a settlement. OSHA's approval of a settlement reached by the respondent and the complainant demonstrates OSHA's consent and achieves the consent of all three parties.

(2) *Adjudicatory settlements.* At any time after the filing of objections to the Assistant Secretary's findings and/or order, the case may be settled if the participating parties agree to a settlement and the settlement is approved by the ALJ if the case is before the ALJ, or by the ARB if the ARB has accepted the case for review. A copy of the settlement will be filed with the ALJ or the ARB, as appropriate.

(e) Any settlement approved by OSHA, the ALJ, or the ARB will constitute the final order of the Secretary and may be enforced in United States district court pursuant to § 1985.113.

§ 1985.112 Judicial review.

(a) Within 60 days after the issuance of a final order under §§ 1985.109 and 1985.110, any person adversely affected or aggrieved by the order may file a petition for review of the order in the United States Court of Appeals for the circuit in which the violation allegedly occurred or the circuit in which the complainant resided on the date of the violation.

(b) A final order is not subject to judicial review in any criminal or other civil proceeding.

(c) If a timely petition for review is filed, the record of a case, including the record of proceedings before the ALJ, will be transmitted by the ARB or the ALJ, as the case may be, to the appropriate court pursuant to the Federal Rules of Appellate Procedure and the local rules of such court.

§ 1985.113 Judicial enforcement.

Whenever any person has failed to comply with a final order, including one approving a settlement agreement, issued under CFPA, the Secretary may file a civil action seeking enforcement of the order in the United States district court for the district in which the violation was found to have occurred or in the United States district court for the District of Columbia. Whenever any person has failed to comply with a preliminary order of reinstatement, or a final order, including one approving a settlement agreement, issued under CFPA, the person on whose behalf the order was issued may file a civil action seeking enforcement of the order in the appropriate United States district court.

§ 1985.114 District court jurisdiction of retaliation complaints.

(a) The complainant may bring an action at law or equity for de novo review in the appropriate district court of the United States, which will have jurisdiction over such an action without regard to the amount in controversy, either:

(1) Within 90 days after receiving a written determination under § 1985.105(a) provided that there has been no final decision of the Secretary; or

(2) If there has been no final decision of the Secretary within 210 days of the filing of the complaint.

(b) At the request of either party, the action shall be tried by the court with a jury.

(c) A proceeding under paragraph (a) of this section shall be governed by the same legal burdens of proof specified in § 1985.109. The court shall have jurisdiction to grant all relief necessary to make the employee whole, including

injunctive relief and compensatory damages, including:

(1) Reinstatement with the same seniority status that the employee would have had, but for the discharge or discrimination;

(2) The amount of back pay, with interest;

(3) Compensation for any special damages sustained as a result of the discharge or discrimination; and

(4) Litigation costs, expert witness fees, and reasonable attorney fees.

(d) Within seven days after filing a complaint in federal court, a complainant must file with OSHA, the ALJ, or the ARB, depending on where the proceeding is pending, a copy of the file-stamped complaint. In all cases, a copy of the complaint also must be served on the OSHA official who issued the findings and/or preliminary order, the Assistant Secretary, and the Associate Solicitor, Division of Fair Labor Standards, U.S. Department of Labor.

§ 1985.115 Special circumstances; waiver of rules.

In special circumstances not contemplated by the provisions of these rules, or for good cause shown, the ALJ or the ARB on review may, upon application, after three days' notice to all parties, waive any rule or issue such orders that justice or the administration of CFPA requires.

[FR Doc. 2016–05415 Filed 3–16–16; 8:45 am]

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DEPARTMENT OF THE TREASURY

Financial Crimes Enforcement Network

31 CFR Part 1010

RIN 1506–AB19

Financial Crimes Enforcement Network; Withdrawal of Finding Regarding JSC CredexBank

AGENCY: Financial Crimes Enforcement Network (''FinCEN''), Treasury.

ACTION: Withdrawal of finding.

SUMMARY: This document withdraws FinCEN's finding that JSC CredexBank (''Credex''), renamed JSC InterPayBank (''InterPay''), is a financial institution of primary money laundering concern, pursuant to Section 311 of the USA PATRIOT Act (''Section 311''). Because of material subsequent developments that have mitigated the money laundering risks associated with Credex, FinCEN has determined that Credex is no longer a primary money laundering concern that warrants the implementation of a special measure under Section 311. Elsewhere in this issue of the **Federal Register**, FinCEN is publishing a withdrawal of the related notice of proposed rulemaking that would have imposed two special measures against Credex.

DATES: The finding is withdrawn as of March 17, 2016.

FOR FURTHER INFORMATION CONTACT: The FinCEN Resource Center at (800) 767–2825.

SUPPLEMENTARY INFORMATION:

I. Background

On October 26, 2001, the President signed into law the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001, Public Law 107–56 (the ''USA PATRIOT Act,'' codified at 31 U.S.C. 5318A). Title III of the USA PATRIOT Act amends the anti-money laundering provisions of the Bank Secrecy Act (''BSA''), codified at 12 U.S.C. 1829b, 12 U.S.C. 1951–1959, and 31 U.S.C. 5311–5314, 5316–5332, to promote the prevention, detection, and prosecution of international money laundering and the financing of terrorism. Regulations implementing the BSA appear at 31 CFR chapter X. The authority of the Secretary of the Treasury to administer the BSA and its implementing regulations has been delegated to the Director of FinCEN.

Section 311 of the USA PATRIOT Act (''Section 311'') grants the Director of FinCEN the authority, upon finding that reasonable grounds exist for concluding that a foreign jurisdiction, foreign financial institution, class of transactions, or type of account is of ''primary money laundering concern,'' to require domestic financial institutions and financial agencies to take certain ''special measures'' to address the primary money laundering concern. The special measures enumerated under Section 311 are prophylactic safeguards that defend the U.S. financial system from money laundering and terrorist financing. FinCEN may impose one or more of these special measures in order to protect the U.S. financial system from these threats. To that end, special measures one through four, codified at 31 U.S.C. 5318A(b)(1–4), impose additional recordkeeping, information collection, and information reporting requirements on covered U.S. financial institutions. The fifth special measure, codified at 31 U.S.C. 5318A(b)(5), allows the Director to prohibit or impose conditions on the opening or maintaining of correspondent or payable-through accounts for the identified institution by U.S. financial institutions.

II. The Finding and Notice of Proposed Rulemaking

A. The Finding and Notice of Proposed Rulemaking

Based upon review and analysis of relevant information, consultations with relevant Federal agencies and departments, and after consideration of the factors enumerated in Section 311, the Director of FinCEN found that reasonable grounds existed for concluding that JSC CredexBank (''Credex'') was a financial institution of primary money laundering concern, as published in the **Federal Register** on May 25, 2012.[1] FinCEN published a notice of proposed rulemaking proposing (''NPRM'') to impose the first and fifth special measures on May 30, 2012, pursuant to the authority under 31 U.S.C. 5318A.[2]

B. Subsequent Developments

Since FinCEN's finding and related NPRM regarding Credex, material facts regarding the circumstances of the proposed rulemaking have changed. On May 8, 2015, the National Bank of the Republic of Belarus (''NBRB''), the Belarusian central bank and monetary authority with control over bank supervision and regulation, revoked the banking license of InterPay, the successor of Credex, and delisted InterPay from the list of banks published by the NBRB.[3] In late January 2016, InterPay was also listed by the NBRB as being in the process of bankruptcy and liquidation.[4] Because of the actions taken by the Belarusian banking authorities and the ongoing liquidation of InterPay's assets, InterPay no longer operates as a foreign financial institution.

III. Withdrawal of the Finding

For the reasons set forth above, FinCEN hereby withdraws its finding that Credex/InterPay is of primary

[1] *See* 77 FR 31434 (May 25, 2012).

[2] *See* 77 FR 31795 (May 30, 2012) (RIN 1506–AB19).

[3] *See* Press Release, National Bank of the Republic of Belarus. *About Revocation of the Banking License from 'InterPayBank' Joint Stock Company.* (May 8, 2015). *http://www.nbrb.by/Press/?nId=101&l=en* (accessed January 27, 2016); *see also* Press Release, National Bank of the Republic of Belarus. *Register of Banking Licenses as at 27 January 2016.* (January 27, 2016). *http://www.nbrb.by/engl/system/register.asp* (accessed January 27, 2016).

[4] *See* Press Release, National Bank of the Republic of Belarus. *Information on Banks Under Bankruptcy or Liquidation in the Republic of Belarus as of 27.01.2016.* (January 27, 2016). *http://www.nbrb.by/engl/system/ex-banks.asp* (accessed January 27, 2016).

money laundering concern, published on May 25, 2012. FinCEN's withdrawal of the finding does not acknowledge any remedial measure taken by Credex/InterPay, but results from the fact that Credex/InterPay no longer operates as a foreign financial institution.

Jamal El-Hindi,

Deputy Director, Financial Crimes Enforcement Network.

[FR Doc. 2016–04412 Filed 3–16–16; 8:45 am]

BILLING CODE 4810–02–P

DEPARTMENT OF TRANSPORTATION

Saint Lawrence Seaway Development Corporation

33 CFR Part 402

[Docket No. SLSDC 2016–0003]

RIN 2135–AA38

Tariff of Tolls

AGENCY: Saint Lawrence Seaway Development Corporation, DOT.

ACTION: Final rule.

SUMMARY: The Saint Lawrence Seaway Development Corporation (SLSDC) and the St. Lawrence Seaway Management Corporation (SLSMC) of Canada, under international agreement, jointly publish and presently administer the St. Lawrence Seaway Tariff of Tolls in their respective jurisdictions. The Tariff sets forth the level of tolls assessed on all commodities and vessels transiting the facilities operated by the SLSDC and the SLSMC. The SLSDC is revising its regulations to reflect the fees and charges levied by the SLSMC in Canada starting in the 2016 navigation season, which are effective only in Canada. An amendment to increase the minimum charge per lock for those vessels that are not pleasure craft or subject in Canada to tolls under items 1 and 2 of the Tariff for full or partial transit of the Seaway will apply in the U.S. (See **SUPPLEMENTARY INFORMATION**.)

DATES: This rule will become effective on March 21, 2016.

ADDRESSES: *Docket:* For access to the docket to read background documents or comments received, go to *http://www.Regulations.gov;* or in person at the Docket Management Facility; U.S. Department of Transportation, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12–140, Washington, DC 20590–001, between 9 a.m. and 5 p.m., Monday through Friday, except Federal Holidays.

FOR FURTHER INFORMATION CONTACT: Carrie Mann Lavigne, Chief Counsel, Saint Lawrence Seaway Development Corporation, 180 Andrews Street, Massena, New York 13662; 315/764–3200.

SUPPLEMENTARY INFORMATION: The Saint Lawrence Seaway Development Corporation (SLSDC) and the St. Lawrence Seaway Management Corporation (SLSMC) of Canada, under international agreement, jointly publish and presently administer the St. Lawrence Seaway Tariff of Tolls (Schedule of Fees and Charges in Canada) in their respective jurisdictions. A Notice of Proposed Rulemaking was published in the **Federal Register** on February 9, 2016. No comments were received. The joint regulations will become effective in Canada on March 21, 2016. For consistency, because these are joint regulations under international agreement, and to avoid confusion among users of the Seaway, the SLSDC finds that there is good cause to make the U.S. version of the amendments effective on the same date.

The Tariff sets forth the level of tolls assessed on all commodities and vessels transiting the facilities operated by the SLSDC and the SLSMC. The SLSDC is revising 33 CFR 402.12, ''Schedule of tolls'', to reflect the fees and charges levied by the SLSMC in Canada beginning in the 2016 navigation season. With one exception, the changes affect the tolls for commercial vessels and are applicable only in Canada. The collection of tolls by the SLSDC on commercial vessels transiting the U.S. locks is waived by law (33 U.S.C. 988a(a)). Accordingly, no notice or comment is necessary on these amendments.

The SLSDC is amending 33 CFR 402.12, ''Schedule of tolls'', to increase the minimum charge per vessel per lock for full or partial transit of the Seaway from $26.92 to $27.46. This charge is for vessels that are not pleasure craft or subject in Canada to the tolls under items 1 and 2 of the Tariff. This increase is due to higher operating costs at the locks.

Regulatory Notices: Privacy Act: Anyone is able to search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (Volume 65, Number 70; Pages 19477–78) or you may visit *http://dms.dot.gov.*

Regulatory Evaluation

This regulation involves a foreign affairs function of the United States and therefore Executive Order 12866 does not apply and evaluation under the Department of Transportation's Regulatory Policies and Procedures is not required.

Regulatory Flexibility Act Determination

I certify this regulation will not have a significant economic impact on a substantial number of small entities. The St. Lawrence Seaway Tariff of Tolls primarily relate to commercial users of the Seaway, the vast majority of whom are foreign vessel operators. Therefore, any resulting costs will be borne mostly by foreign vessels.

Environmental Impact

This regulation does not require an environmental impact statement under the National Environmental Policy Act (49 U.S.C. 4321, *et seq.*) because it is not a major federal action significantly affecting the quality of the human environment.

Federalism

The Corporation has analyzed this rule under the principles and criteria in Executive Order 13132, dated August 4, 1999, and has determined that this rule does not have sufficient federalism implications to warrant a Federalism Assessment.

Unfunded Mandates

The Corporation has analyzed this rule under Title II of the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4, 109 Stat. 48) and determined that it does not impose unfunded mandates on State, local, and tribal governments and the private sector requiring a written statement of economic and regulatory alternatives.

Paperwork Reduction Act

This regulation has been analyzed under the Paperwork Reduction Act of 1995 and does not contain new or modified information collection requirements subject to the Office of Management and Budget review.

List of Subjects in 33 CFR Part 402

Vessels, Waterways.

Accordingly, the Saint Lawrence Seaway Development Corporation is amending 33 CFR part 402, Tariff of Tolls, as follows:

PART 402—TARIFF OF TOLLS

■ 1. The authority citation for part 402 continues to read as follows:

Authority: 33 U.S.C. 983(a), 984(a)(4), and 988, as amended; 49 CFR 1.52.

■ 2. In § 402.3, add definitions of ''Gateway Incentive'', ''Toll reduction'', and ''Volume commitment'' in alphabetical order to read as follows:

§ 402.3 Interpretation.

* * * * *

Gateway Incentive means a percentage reduction, as part of an incentive program, negotiated and offered on applicable cargo tolls for shipments of a specific commodity diverted to the Seaway from a competing gateway.

* * * * *

Toll reduction means the negotiated percentage of refund on applicable cargo tolls under the Gateway Incentive program.

* * * * *

Volume commitment means the negotiated annual cargo tonnage, with a minimum of 250,000 metric tons per year, a shipper must reach for the negotiated toll reduction under the Gateway Incentive to become applicable.

* * * * *

■ 3. In § 402.4, revise paragraph (a) to read as follows:

§ 402.4 Tolls.

(a) Every vessel entering, passing through or leaving the Seaway shall pay a toll that is the sum of each applicable charge in § 402.12. Each charge is calculated on the description set out in column 1 of § 402.12 and the rate set out in column 2 or 3.

* * * * *

§§ 402.8, 402.9. 402.10, 402.11, 402.12, and 402.13 [Redesignated as §§ 402.9, 402.10, 402.11, 402.12, 402.13, and 402.14]

■ 4. Redesignate §§ 402.8, 402.9. 402.10, 402.11, 402.12 and 402.13 as §§ 402.9, 402.10, 402.11, 402.12, 402.13 and 402.14, respectively.

■ 5. Add § 402.8 to read as follows:

§ 402.8 Gateway Incentive.

(a) To be eligible for the Gateway Incentive, cargoes, must presently be moving between a specific origin and destination via other competing gateways.

(b) To be eligible for the refund applicable under the Gateway Incentive program, a shipper, or its representative, must:

(1) Submit an application to the Manager for the proposed movement (cargo/origin/destination) to be approved under the rules of the Gateway Incentive program;

(2) Supply to the Manager the information proving that the proposed movement is currently done via a competing gateway;

(3) Negotiate with the Manager the terms of the proposal, that is an applicable toll reduction, a volume commitment, and the duration of the proposal.

(c) The shipper, or its representative, will qualify annually for the negotiated toll reduction upon completion of the annual volume commitment during the agreed upon duration period.

(d) The Gateway Incentive applies only to movements of qualified cargoes done after the commencement date of the qualified Gateway Incentive. Movements done prior to the date of commencement of the Gateway Incentive will be ineligible for the rebate.

(e) The shipper, or its representative, will provide the Manager with a request for the Gateway Incentive refund, together with copies of any documents required to support the request, within sixty (60 days) of the close of the navigation season. Requests for refunds should be submitted to the Manager, Revenue and Forecast, who will be responsible for reviewing all documents and data and recommending the refund under the Gateway Incentive.

(f) The negotiated Gateway Incentive percentage of tolls reduction paid in respect of qualifying cargo shipped will be refunded by the Manager after the close of the navigation season, once the Manager has confirmed through the review of submitted support documents that the shipper has met the volume commitment. The SLSMC reserves the right to require the ultimate origin and destination of cargoes to validate the commitment.

■ 6. In newly redesignated § 402.10, revise paragraph (a) to read as follows:

§ 402.10 Post-clearance date operational surcharges.

(a) Subject to paragraph (b) of this section, a vessel that reports for its final transit of the Seaway from a place set out in column 1 of § 402.12 within a period after the clearance date established by the Manager and the Corporation set out in column 2 of § 402.12 shall pay operational surcharges in the amount set out in column 3 of § 402.12, prorated on a per-lock basis.

* * * * *

■ 7. Revise newly redesignated § 402.12 to read as follows:

§ 402.12 Schedule of tolls.

Column 1		Column 2	Column 3
Item	Description of charges	Rate ($) Montreal to or from Lake Ontario (5 locks)	Rate ($) Welland Canal—Lake Ontario to or from Lake Erie (8 locks)
1	Subject to item 3, for complete transit of the Seaway, a composite toll, comprising.		
	(1) a charge per gross registered ton of the ship, applicable whether the ship is wholly or partially laden, or is in ballast, and the gross registered tonnage being calculated according to prescribed rules for measurement or under the International Convention on Tonnage Measurement of Ships, 1969, as amended from time to time.[1]	0.1061	0.1698.
	(2) a charge per metric ton of cargo as certified on the ship's manifest or other document, as follows:		
	(*a*) bulk cargo	1.0997	0.7506.
	(*b*) general cargo	2.6498	1.2013.
	(*c*) steel slab	2.3981	0.8600.
	(*d*) containerized cargo	1.0997	0.7506.
	(*e*) government aid cargo	n/a	n/a.
	(*f*) grain	0.6756	0.7506.
	(*g*) coal	0.6756	0.7506.
	(3) a charge per passenger per lock	1.6476	1.6476.

Column 1		Column 2	Column 3
Item	Description of charges	Rate ($) Montreal to or from Lake Ontario (5 locks)	Rate ($) Welland Canal—Lake Ontario to or from Lake Erie (8 locks)
	(4) a lockage charge per Gross Registered Ton of the vessel, as defined in tem 1(1), applicable whether the ship is wholly or partially laden, or is in ballast, for transit of the Welland Canal in either direction by cargo ships,.	n/a	0.2827.
	Up to a maximum charge per vessel	n/a	3,955.
2	Subject to item 3, for partial transit of the Seaway	20 per cent per lock of the applicable charge under items 1(1), 1(2) and 1(4) plus the applicable charge under items 1(3).	13 per cent per lock of the applicable charge under items 1(1), 1(2) and 1(4) plus the applicable charge under items 1(3).
3	Minimum charge per vessel per lock transited for full or partial transit of the Seaway.	[2] 27.46	27.46.
4	A charge per pleasure craft per lock transited for full or partial transit of the Seaway, including applicable federal taxes [3].	[4] 30.00	30.00.
5	Under the New Business Initiative Program, for cargo accepted as New Business, a percentage rebate on the applicable cargo charges for the approved period.	20%	20%.
6	Under the Volume Rebate Incentive program, a retroactive percentage rebate on cargo tolls on the incremental volume calculated based on the pre-approved maximum volume.	10%	10%.
7	Under the New Service Incentive Program, for New Business cargo moving under an approved new service, an additional percentage refund on applicable cargo tolls above the New Business rebate.	20%	20%.

[1] Or under the US GRT for vessels prescribed prior to 2002.
[2] The applicable charged under item 3 at the Saint Lawrence Seaway Development Corporation's locks (Eisenhower, Snell) will be collected in U.S. dollars. The collection of the U.S. portion of tolls for commercial vessels is waived by law (33U.S.C. 988a(a)). The other charges are in Canadian dollars and are for the Canadian share of tolls.
[3] $5.00 discount per lock applicable on ticket purchased for Canadian locks via paypal.
[4] The applicable charge at the Saint Lawrence Seaway Development Corporation's locks (Eisenhower, Snell) for pleasure craft is $30 U.S. or $30 Canadian per lock.

Issued at Washington, DC, on March 11, 2016.

Saint Lawrence Seaway Development Corporation.

Carrie Lavigne,

Chief Counsel.

[FR Doc. 2016–05950 Filed 3–16–16; 8:45 am]

BILLING CODE 4910–61–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA–R07–OAR–2016–0045; FRL–9943–89-Region 7]

Approval of Iowa Air Quality Implementation Plans; Withdrawal of Direct Final Rule; Polk County Board of Health Rules and Regulations, Chapter V, Revisions

AGENCY: Environmental Protection Agency (EPA).

ACTION: Withdrawal of direct final rule.

SUMMARY: Due to an adverse comment, the Environmental Protection Agency (EPA) is withdrawing the direct final rule to approve a state implementation plan revision submitted by the State of Iowa pertaining to the ''Polk County Board of Health Rules and Regulations, Chapter V.'' In the direct final rule published on February 17, 2016, we stated that if we received adverse comment by March 18, 2016, the rule would be withdrawn and not take effect. EPA subsequently received an adverse comment. EPA will address the comment received in a subsequent final action based upon the proposed action also published on February 17, 2016. EPA will not institute a second comment period on this action.

DATES: Effective March 17, 2016, the direct final rule published at 81 FR 7979, February 17, 2016, is withdrawn.

FOR FURTHER INFORMATION CONTACT: Heather Hamilton Environmental Protection Agency, Air Planning and Development Branch, 11201 Renner Boulevard, Lenexa, Kansas 66219 at 913–551–7039, or by email at *Hamilton.heather@epa.gov.*

SUPPLEMENTARY INFORMATION: Due to an adverse comment, the Environmental Protection Agency (EPA) is withdrawing the direct final rule to approve a state implementation plan revision submitted by the State of Iowa pertaining to the ''Polk County Board of Health Rules and Regulations, Chapter V.'' In the direct final rule published on February 17, 2016, (81 FR 7979), we stated that if we received adverse comment by March 18, 2016, the rule would be withdrawn and not take effect. EPA subsequently received an adverse comment. EPA will address the comment received in a subsequent final action based upon the proposed action also published on February 17, 2016, (81 FR 8030). EPA will not institute a second comment period on this action.

List of Subjects in 40 CFR Part 52

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

Dated: March 9, 2016.

Mark Hague,

Regional Administrator, Region 7.

■ Accordingly, the direct final rule published at 81 FR 7979, February 17, 2016, is withdrawn as of March 17, 2016.

[FR Doc. 2016–06061 Filed 3–16–16; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 82

[EPA–HQ–OAR–2013–0369; FRL–9943–91–OAR]

RIN 2060–AS44

Protection of Stratospheric Ozone: The 2016 Critical Use Exemption From the Phaseout of Methyl Bromide; Correction

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule; technical correction.

SUMMARY: The Environmental Protection Agency (EPA) published a final rule in the **Federal Register** of October 15, 2015, issuing critical use allowances for 2016 and making non-substantive corrections to the quarantine and preshipment recordkeeping and reporting requirements. This document restores provisions that were inadvertently removed by that final rule.

DATES: This rule is effective March 17, 2016.

ADDRESSES: EPA has established a docket for this action under Docket ID No. EPA–HQ–OAR–2013–0369. All documents in the docket are listed on the *www.regulations.gov* Web site. 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, is not placed on the Internet and is 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 and Radiation Docket, EPA/DC, EPA West, Room 3334, 1301 Constitution Ave. NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the Air and Radiation Docket is (202) 566–1742.

FOR FURTHER INFORMATION CONTACT: Jeremy Arling, Stratospheric Protection Division, Office of Atmospheric Programs, Mail Code 6205T, 1200 Pennsylvania Avenue NW., Washington, DC 20460; telephone number (202) 343–9055; email address *arling.jeremy@epa.gov.* You may also visit the methyl bromide section of the Ozone Depletion Web site of EPA's Stratospheric Protection Division at *www.epa.gov/ozone/mbr* for further information about the methyl bromide critical use exemption, other Stratospheric Ozone Protection regulations, the science of ozone layer depletion, and related topics.

SUPPLEMENTARY INFORMATION:

I. General Information

A. Does this action apply to me?

Entities and categories of entities potentially regulated by this action include producers, importers, and exporters of methyl bromide; applicators and distributors of methyl bromide; and users of methyl bromide. This list is not intended to be exhaustive, but rather to provide a guide for readers regarding entities likely to be regulated by this action. To determine whether your facility, company, business, or organization could be regulated by this action, you should carefully examine the regulations promulgated at 40 CFR part 82, subpart A. If you have questions regarding the applicability of this action to a particular entity, consult the person listed in the preceding section.

II. What does this correction do?

In a final rule EPA published in the **Federal Register** of October 15, 2015, (80 FR 61985) EPA made two technical corrections to the quarantine and preshipment recordkeeping and reporting provisions in section 82.13(y) and (z). As discussed in that final rule, section 82.13(y) contained a reference to paragraph (aa) where it should reference paragraph (y). Similarly, section 82.13(z) contained a reference to paragraph (bb) where it should reference paragraph (z). That rule corrected the typographical error and was not intended to substantively change the recordkeeping and reporting requirements or the quarantine and preshipment exemption program. In making that edit, that rule inadvertently removed subparagraphs (y)(1)–(4) and (z)(1)–(2). This correction restores those subparagraphs under (y) and (z). The corrections will become effective immediately (without further rulemaking action) on March 17, 2016.

III. Why is this correction issued as a final rule?

Section 553(b)(B) of the Administrative Procedure Act (APA), 5 U.S.C. 553(b)(B), provides that, when an agency for good cause finds that notice and public procedure are impracticable, unnecessary, or contrary to the public interest, the agency may issue a rule without providing notice and an opportunity for public comment. We have determined that there is good cause for making today's action final without prior proposal and opportunity for comment because the changes to the rule are minor technical corrections and do not impose new requirements. Thus, notice and public procedure are unnecessary. We find that this constitutes good cause under 5 U.S.C. 553(b)(B).

This rule is subject to the rulemaking procedures in section 553 of the APA. Section 553(d) of the APA generally provides that rules may not take effect earlier than 30 days after they are published in the **Federal Register**. Section 553(d)(3) allows an agency, upon a finding of good cause, to make a rule effective less than 30 days after publication. The purpose of the 30-day waiting period prescribed in section 553(d) is to give affected parties a reasonable time to adjust their behavior and prepare before the final rule takes effect. Because today's changes restore pre-existing provisions that are already familiar to affected parties, we find good cause to make these technical corrections effective immediately.

IV. Statutory and Executive Order and Statutory Reviews

This final rule implements a technical correction to the Code of Federal Regulations, and it does not otherwise impose or amend any requirements.

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was therefore not submitted to the Office of Management and Budget (OMB) for review.

B. Paperwork Reduction Act (PRA)

This action does not impose any new information collection burden under the PRA. OMB has previously approved the information collection activities contained in the existing regulations and has assigned OMB control number 2060–0482. The application, recordkeeping, and reporting requirements have already been established under previous methyl bromide rulemakings.

C. Regulatory Flexibility Act (RFA)

This action is not subject to the RFA. The RFA applies only to rules subject to notice and comment rulemaking requirements under the Administrative Procedure Act (APA), 5 U.S.C. 553, or any other statute. This rule is not subject to notice and comment requirements because the Agency has invoked the APA ''good cause'' exemption under 5 U.S.C. 553(b).

D. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531–1538. The action imposes no enforceable duty on any state, local or tribal governments or the private sector.

E. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. This is a technical correction to restore text that was inadvertently removed from the Code of Federal Regulations. This rule does not impose any duties or responsibilities on state governments.

F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175. This rule does not significantly or uniquely affect the communities of Indian tribal governments nor does it impose any enforceable duties on communities of Indian tribal governments. Thus, Executive Order 13175 does not apply to this action.

G. Executive Order 13045: Protection of Children From Environmental Health and Safety Risks

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the Agency does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children.

H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use

This action is not a ''significant energy action'' because it is not likely to have a significant adverse effect on the supply, distribution or use of energy. This action does not pertain to any segment of the energy production economy nor does it regulate any manner of energy use.

I. National Technology Transfer and Advancement Act

This rulemaking does not involve technical standards.

J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

EPA believes this action will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations because it affects the level of environmental protection equally for all affected populations. This is a technical correction to restore text that was inadvertently removed from the Code of Federal Regulations.

K. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801 *et seq.,* as added by the Small Business Regulatory Enforcement Fairness Act of 1996, 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.

Section 808 allows the issuing agency to make a rule effective sooner than otherwise provided by the CRA if the agency makes a good cause finding that notice and public procedure is impracticable, unnecessary or contrary to the public interest. This determination must be supported by a brief statement (5 U.S.C. 808(2)). As stated previously, EPA has made such a good cause finding, including the reasons therefore, and established an effective date of March 17, 2016.

EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**.

List of Subjects in 40 CFR Part 82

Environmental protection, Chemicals, Exports, Imports, Ozone depletion.

Dated: March 10, 2014.

Janet McCabe,

Acting Administrator for the Office of Air and Radiation.

For the reasons stated in the preamble, 40 CFR part 82 is amended as follows:

PART 82—PROTECTION OF STRATOSPHERIC OZONE

■ 1. The authority citation for part 82 continues to read as follows:

Authority: 42 U.S.C. 7414, 7601, 7671–7671q.

■ 2. In § 82.13, revise paragraphs (y) and (z) to read as follows:

§ 82.13 Recordkeeping and reporting requirements for class I controlled substances.

* * * * *

(y) Every distributor of methyl bromide (class I, Group VI controlled substances) who purchases or receives a quantity produced or imported solely for quarantine or preshipment applications under the exemptions in this subpart must comply with recordkeeping and reporting requirements specified in this paragraph (y).

(1) Every distributor of methyl bromide must certify to the producer or importer that quantities received that were produced or imported solely for quarantine and preshipment applications under the exemptions in this subpart will be used only for quarantine applications or preshipment applications in accordance with the definitions in this subpart.

(2) Every distributor of a quantity of methyl bromide that was produced or imported solely for quarantine or preshipment applications under the exemptions in this subpart must receive from an applicator a certification of the quantity of class I, Group VI controlled substances ordered, prior to delivery of the quantity, stating that the quantity will be used solely for quarantine or preshipment applications in accordance with definitions in this subpart.

(3) Every distributor of methyl bromide who receives a certification from an applicator that the quantity ordered and delivered will be used solely for quarantine and preshipment applications in accordance with definitions in this subpart must maintain the certifications as records for 3 years.

(4) Every distributor of methyl bromide who receives a certification from an applicator that the quantity ordered and delivered will be used solely for quarantine and preshipment applications in accordance with definitions in this subpart must report to the Administrator within 45 days after the end of each quarter, the total quantity delivered for which certifications were received that stated the class I, Group VI controlled substance would be used solely for quarantine and preshipment applications in accordance with definitions in this Subpart.

(z) Every applicator of class I, Group VI controlled substances who purchases or receives a quantity produced or imported solely for quarantine and preshipment applications under the exemptions in this subpart must comply with recordkeeping and reporting

requirements specified in this paragraph (z).

(1) Recordkeeping—Applicators. Every applicator of class I, Group VI controlled substances produced or imported solely for quarantine and preshipment applications under the exemptions of this subpart must maintain, for every application, a document from the commodity owner, shipper or their agent requesting the use of class I, Group VI controlled substances citing the regulatory requirement that justifies its use in accordance with definitions in this subpart. These documents shall be retained for 3 years.

(2) Reporting—Applicators. Every applicator of class I, Group VI controlled substances who purchases or receives a quantity of class I, Group VI controlled substance that was produced or imported solely for quarantine and preshipment applications under the exemptions in this subpart shall provide the distributor of the methyl bromide, prior to shipment of the class I, Group VI controlled substance, with a certification that the quantity of controlled substances will be used only for quarantine and preshipment applications as defined in this subpart.

* * * * *

[FR Doc. 2016–06065 Filed 3–16–16; 8:45 am]

BILLING CODE 6560–50–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

44 CFR Part 64

[Docket ID FEMA–2016–0002; Internal Agency Docket No. FEMA–8423]

Suspension of Community Eligibility

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Final rule.

SUMMARY: This rule identifies communities where the sale of flood insurance has been authorized under the National Flood Insurance Program (NFIP) that are scheduled for suspension on the effective dates listed within this rule because of noncompliance with the floodplain management requirements of the program. If the Federal Emergency Management Agency (FEMA) receives documentation that the community has adopted the required floodplain management measures prior to the effective suspension date given in this rule, the suspension will not occur and a notice of this will be provided by publication in the **Federal Register** on a subsequent date. Also, information identifying the current participation status of a community can be obtained from FEMA's Community Status Book (CSB). The CSB is available at *http://www.fema.gov/fema/csb.shtm.*

DATES: The effective date of each community's scheduled suspension is the third date (''Susp.'') listed in the third column of the following tables.

FOR FURTHER INFORMATION CONTACT: If you want to determine whether a particular community was suspended on the suspension date or for further information, contact Patricia Suber, Federal Insurance and Mitigation Administration, Federal Emergency Management Agency, 500 C Street SW., Washington, DC 20472, (202) 646–4149.

SUPPLEMENTARY INFORMATION: The NFIP enables property owners to purchase Federal flood insurance that is not otherwise generally available from private insurers. In return, communities agree to adopt and administer local floodplain management measures aimed at protecting lives and new construction from future flooding. Section 1315 of the National Flood Insurance Act of 1968, as amended, 42 U.S.C. 4022, prohibits the sale of NFIP flood insurance unless an appropriate public body adopts adequate floodplain management measures with effective enforcement measures. The communities listed in this document no longer meet that statutory requirement for compliance with program regulations, 44 CFR part 59. Accordingly, the communities will be suspended on the effective date in the third column. As of that date, flood insurance will no longer be available in the community. We recognize that some of these communities may adopt and submit the required documentation of legally enforceable floodplain management measures after this rule is published but prior to the actual suspension date. These communities will not be suspended and will continue to be eligible for the sale of NFIP flood insurance. A notice withdrawing the suspension of such communities will be published in the **Federal Register**.

In addition, FEMA publishes a Flood Insurance Rate Map (FIRM) that identifies the Special Flood Hazard Areas (SFHAs) in these communities. The date of the FIRM, if one has been published, is indicated in the fourth column of the table. No direct Federal financial assistance (except assistance pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act not in connection with a flood) may be provided for construction or acquisition of buildings in identified SFHAs for communities not participating in the NFIP and identified for more than a year on FEMA's initial FIRM for the community as having flood-prone areas (section 202(a) of the Flood Disaster Protection Act of 1973, 42 U.S.C. 4106(a), as amended). This prohibition against certain types of Federal assistance becomes effective for the communities listed on the date shown in the last column. The Administrator finds that notice and public comment procedures under 5 U.S.C. 553(b), are impracticable and unnecessary because communities listed in this final rule have been adequately notified.

Each community receives 6-month, 90-day, and 30-day notification letters addressed to the Chief Executive Officer stating that the community will be suspended unless the required floodplain management measures are met prior to the effective suspension date. Since these notifications were made, this final rule may take effect within less than 30 days.

National Environmental Policy Act. This rule is categorically excluded from the requirements of 44 CFR part 10, Environmental Considerations. No environmental impact assessment has been prepared.

Regulatory Flexibility Act. The Administrator has determined that this rule is exempt from the requirements of the Regulatory Flexibility Act because the National Flood Insurance Act of 1968, as amended, Section 1315, 42 U.S.C. 4022, prohibits flood insurance coverage unless an appropriate public body adopts adequate floodplain management measures with effective enforcement measures. The communities listed no longer comply with the statutory requirements, and after the effective date, flood insurance will no longer be available in the communities unless remedial action takes place.

Regulatory Classification. This final rule is not a significant regulatory action under the criteria of section 3(f) of Executive Order 12866 of September 30, 1993, Regulatory Planning and Review, 58 FR 51735.

Executive Order 13132, Federalism. This rule involves no policies that have federalism implications under Executive Order 13132.

Executive Order 12988, Civil Justice Reform. This rule meets the applicable standards of Executive Order 12988.

Paperwork Reduction Act. This rule does not involve any collection of information for purposes of the

Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.*

List of Subjects in 44 CFR Part 64

Flood insurance, Floodplains.

Accordingly, 44 CFR part 64 is amended as follows:

PART 64—[AMENDED]

■ 1. The authority citation for part 64 continues to read as follows:

Authority: 42 U.S.C. 4001 *et seq.;* Reorganization Plan No. 3 of 1978, 3 CFR, 1978 Comp.; p. 329; E.O. 12127, 44 FR 19367, 3 CFR, 1979 Comp.; p. 376.

§ 64.6 [Amended]

■ 2. The tables published under the authority of § 64.6 are amended as follows:

State and location	Community No.	Effective date authorization/cancellation of sale of flood insurance in community	Current effective map date	Date certain federal assistance no longer available in SFHAs
Region III				
Pennsylvania:				
Adamstown, Borough of, Lancaster County.	420541	December 4, 1973, Emerg; January 16, 1981, Reg; April 5, 2016, Susp.	April 5, 2016	April 5, 2016.
Akron, Borough of, Lancaster County ...	422461	December 31, 1975, Emerg; December 16, 1980, Reg; April 5, 2016, Susp.	.....do	Do.
Bart, Township of, Lancaster County	421761	June 10, 1975, Emerg; January 16, 1981, Reg; April 5, 2016, Susp.	.....do	Do.
Brecknock, Township of, Lancaster County.	421762	July 9, 1975, Emerg; April 1, 1981, Reg; April 5, 2016, Susp.	.....do	Do.
Caernarvon, Township of, Lancaster County.	421763	April 29, 1975, Emerg; May 19, 1981, Reg; April 5, 2016, Susp.	.....do	Do.
Christiana, Borough of, Lancaster County.	420542	July 30, 1975, Emerg; April 15, 1981, Reg; April 5, 2016, Susp.	.....do	Do.
Clay, Township of, Lancaster County ...	421764	April 29, 1975, Emerg; December 16, 1980, Reg; April 5, 2016, Susp.	.....do	Do.
Colerain, Township of, Lancaster County.	421765	September 17, 1975, Emerg; January 16, 1981, Reg; April 5, 2016, Susp.	.....do	Do.
Columbia, Borough of, Lancaster County.	420543	March 9, 1973, Emerg; January 6, 1982, Reg; April 5, 2016, Susp.	.....do	Do.
Conestoga, Township of, Lancaster County.	420544	April 24, 1973, Emerg; March 18, 1980, Reg; April 5, 2016, Susp.	.....do	Do.
Conoy, Township of, Lancaster County	420545	July 6, 1973, Emerg; June 4, 1980, Reg; April 5, 2016, Susp.	.....do	Do.
Denver, Borough of, Lancaster County	420546	August 22, 1973, Emerg; April 15, 1981, Reg; April 5, 2016, Susp.	.....do	Do.
Drumore, Township of, Lancaster County.	421766	July 7, 1975, Emerg; April 15, 1981, Reg; April 5, 2016, Susp.	.....do	Do.
Earl, Township of, Lancaster County	421767	January 13, 1975, Emerg; December 16, 1980, Reg; April 5, 2016, Susp.	.....do	Do.
East Cocalico, Township of, Lancaster County.	420547	April 24, 1974, Emerg; March 16, 1981, Reg; April 5, 2016, Susp.	.....do	Do.
East Donegal, Township of, Lancaster County.	421768	August 30, 1974, Emerg; January 16, 1980, Reg; April 5, 2016, Susp.	.....do	Do.
East Drumore, Township of, Lancaster County.	421769	August 27, 1975, Emerg; April 15, 1981, Reg; April 5, 2016, Susp.	.....do	Do.
East Earl, Township of, Lancaster County.	421770	October 18, 1974, Emerg; September 4, 1987, Reg; April 5, 2016, Susp.	.....do	Do.
East Hempfield, Township of, Lancaster County.	420548	June 6, 1973, Emerg; September 28, 1979, Reg; April 5, 2016, Susp.	.....do	Do.
East Lampeter, Township of, Lancaster County.	421771	September 6, 1974, Emerg; December 16, 1980, Reg; April 5, 2016, Susp.	.....do	Do.
East Petersburg, Borough of, Lancaster County.	420549	September 27, 1974, Emerg; September 5, 1979, Reg; April 5, 2016, Susp.	.....do	Do.
Eden, Township of, Lancaster County ..	421772	July 7, 1980, Emerg; December 16, 1980, Reg; April 5, 2016, Susp.	.....do	Do.
Elizabeth, Township of, Lancaster County.	421773	July 31, 1975, Emerg; September 28, 1979, Reg; April 5, 2016, Susp.	.....do	Do.
Elizabethtown, Borough of, Lancaster County.	420550	May 15, 1973, Emerg; April 17, 1978, Reg; April 5, 2016, Susp.	.....do	Do.
Ephrata, Borough of, Lancaster County	420551	April 17, 1973, Emerg; April 1, 1981, Reg; April 5, 2016, Susp.	.....do	Do.
Ephrata, Township of, Lancaster County.	421208	May 20, 1974, Emerg; May 19, 1981, Reg; April 5, 2016, Susp.	.....do	Do.
Fulton, Township of, Lancaster County	421774	July 11, 1975, Emerg; April 15, 1981, Reg; April 5, 2016, Susp.	.....do	Do.
Lancaster, City of, Lancaster County	420552	May 12, 1972, Emerg; September 28, 1979, Reg; April 5, 2016, Susp.	.....do	Do.
Lancaster, Township of, Lancaster County.	420553	March 9, 1973, Emerg; December 18, 1979, Reg; April 5, 2016, Susp.	.....do	Do.

State and location	Community No.	Effective date authorization/cancellation of sale of flood insurance in community	Current effective map date	Date certain federal assistance no longer available in SFHAs
Leacock, Township of, Lancaster County.	420958	December 17, 1973, Emerg; March 1, 1978, Reg; April 5, 2016, Susp.	.....do	Do.
Lititz, Borough of, Lancaster County	420554	October 6, 1972, Emerg; October 15, 1980, Reg; April 5, 2016, Susp.	.....do	Do.
Little Britain, Township of, Lancaster County.	421775	June 16, 1975, Emerg; April 15, 1981, Reg; April 5, 2016, Susp.	.....do	Do.
Manheim, Borough of, Lancaster County.	420555	April 19, 1973, Emerg; March 2, 1983, Reg; April 5, 2016, Susp.	.....do	Do.
Manheim, Township of, Lancaster County.	420556	July 5, 1973, Emerg; August 15, 1979, Reg; April 5, 2016, Susp.	.....do	Do.
Manor, Township of, Lancaster County	420557	April 19, 1973, Emerg; March 18, 1980, Reg; April 5, 2016, Susp.	.....do	Do.
Marietta, Borough of, Lancaster County	420558	July 5, 1973, Emerg; February 1, 1980, Reg; April 5, 2016, Susp.	.....do	Do.
Martic, Township of, Lancaster County	421146	April 11, 1974, Emerg; January 16, 1980, Reg; April 5, 2016, Susp.	.....do	Do.
Millersville, Borough of, Lancaster County.	420559	November 11, 1974, Emerg; December 15, 1978, Reg; April 5, 2016, Susp.	.....do	Do.
Mount Joy, Borough of, Lancaster County.	420561	May 22, 1974, Emerg; October 15, 1981, Reg; April 5, 2016, Susp.	.....do	Do.
Mount Joy, Township of, Lancaster County.	421776	September 20, 1974, Emerg; September 16, 1981, Reg; April 5, 2016, Susp.	.....do	Do.
Mountville, Borough of, Lancaster County.	420560	August 5, 1975, Emerg; July 16, 1981, Reg; April 5, 2016, Susp.	.....do	Do.
Paradise, Township of, Lancaster County.	421777	January 13, 1975, Emerg; May 19, 1981, Reg; April 5, 2016, Susp.	.....do	Do.
Penn, Township of, Lancaster County ..	421778	February 5, 1975, Emerg; September 2, 1981, Reg; April 5, 2016, Susp.	.....do	Do.
Pequea, Township of, Lancaster County.	421779	January 24, 1975, Emerg; September 30, 1980, Reg; April 5, 2016, Susp.	.....do	Do.
Providence, Township of, Lancaster County.	421780	December 13, 1974, Emerg; September 30, 1981, Reg; April 5, 2016, Susp.	.....do	Do.
Quarryville, Borough of, Lancaster County.	420563	September 25, 1974, Emerg; January 16, 1981, Reg; April 5, 2016, Susp.	.....do	Do.
Rapho, Township of, Lancaster County	421781	June 25, 1975, Emerg; February 16, 1983, Reg; April 5, 2016, Susp.	.....do	Do.
Sadsbury, Township of, Lancaster County.	421782	July 30, 1975, Emerg; January 16, 1981, Reg; April 5, 2016, Susp.	.....do	Do.
Salisbury, Township of, Lancaster County.	421783	May 20, 1975, Emerg; April 15, 1981, Reg; April 5, 2016, Susp.	.....do	Do.
Strasburg, Borough of, Lancaster County.	427790	N/A, Emerg; December 18, 2006, Reg; April 5, 2016, Susp.	.....do	Do.
Strasburg, Township of, Lancaster County.	421784	May 27, 1975, Emerg; February 4, 1981, Reg; April 5, 2016, Susp.	.....do	Do.
Upper Leacock, Township of, Lancaster County.	421785	June 19, 1975, Emerg; November 3, 1978, Reg; April 5, 2016, Susp.	.....do	Do.
Warwick, Township of, Lancaster County.	421786	July 2, 1975, Emerg; November 19, 1980, Reg; April 5, 2016, Susp.	.....do	Do.
West Cocalico, Township of, Lancaster County.	421787	August 5, 1974, Emerg; April 15, 1981, Reg; April 5, 2016, Susp.	.....do	Do.
West Donegal, Township of, Lancaster County.	421788	June 5, 1975, Emerg; July 16, 1981, Reg; April 5, 2016, Susp.	.....do	Do.
West Earl, Township of, Lancaster County.	420959	November 2, 1973, Emerg; May 19, 1981, Reg; April 5, 2016, Susp.	.....do	Do.
West Hempfield, Township of, Lancaster County.	421789	August 30, 1974, Emerg; September 5, 1979, Reg; April 5, 2016, Susp.	.....do	Do.
West Lampeter, Township of, Lancaster County.	420566	July 9, 1973, Emerg; January 2, 1981, Reg; April 5, 2016, Susp.	.....do	Do.
Region IV				
Kentucky:				
Bullitt County, Unincorporated Areas	210273	April 11, 1989, Emerg; July 1, 1991, Reg; April 5, 2016, Susp.	.....do	Do.
Hillview, City of, Bullitt County	210384	N/A, Emerg; November 24, 2009, Reg; April 5, 2016, Susp.	.....do	Do.
Lebanon Junction, City of, Bullitt County.	210304	February 23, 1978, Emerg; July 16, 1987, Reg; April 5, 2016, Susp.	.....do	Do.
Shepherdsville, City of, Bullitt County ...	210028	June 7, 1976, Emerg; January 2, 1987, Reg; April 5, 2016, Susp.	.....do	Do.

State and location	Community No.	Effective date authorization/cancellation of sale of flood insurance in community	Current effective map date	Date certain federal assistance no longer available in SFHAs
Region VII				
Kansas:				
Geary County, Unincorporated Areas	200579	January 8, 1979, Emerg; February 4, 1988, Reg; April 5, 2016, Susp.	.....do	Do.
Junction City, City of, Geary County	200112	April 15, 1975, Emerg; September 29, 1978, Reg; April 5, 2016, Susp.	.....do	Do.
Nebraska: Clarkson, City of, Colfax County.	310359	December 5, 1977, Emerg; December 18, 1986, Reg; April 5, 2016, Susp.	.....do	Do.
Colfax County, Unincorporated Areas	310426	March 31, 1978, Emerg; February 1, 1987, Reg; April 5, 2016, Susp.	.....do	Do.
Howells, Village of, Colfax County	310380	May 22, 1978, Emerg; June 2, 1981, Reg; April 5, 2016, Susp.	.....do	Do.
Leigh, Village of, Colfax County	310386	August 25, 1975, Emerg; July 1, 1987, Reg; April 5, 2016, Susp.	.....do	Do.
Richland, Village of, Colfax County	310502	N/A, Emerg; March 4, 2014, Reg; April 5, 2016, Susp.	.....do	Do.
Rogers, Village of, Colfax County	315497	November 30, 1990, Emerg; September 17, 1992, Reg; April 5, 2016, Susp.	.....do	Do.
Schuyler, City of, Colfax County	310046	August 30, 1974, Emerg; March 5, 1990, Reg; April 5, 2016, Susp.	.....do	Do.
Region VIII				
North Dakota:				
Bowman, City of, Bowman County	380012	September 16, 1975, Emerg; July 4, 1988, Reg; April 5, 2016, Susp.	.....do	Do.
Bowman County, Unincorporated Areas	380355	April 3, 1978, Emerg; September 30, 1987, Reg; April 5, 2016, Susp.	.....do	Do.
Gascoyne, City of, Bowman County	380677	April 8, 1987, Emerg; September 30, 1987, Reg; April 5, 2016, Susp.	.....do	Do.
Scranton, City of, Bowman County	380014	August 27, 1975, Emerg; September 30, 1987, Reg; April 5, 2016, Susp.	.....do	Do.
Region IX				
California:				
San Diego, City of, San Diego County	060295	January 29, 1971, Emerg; August 15, 1983, Reg; April 5, 2016, Susp.	.....do	Do.

*-do- = Ditto.
Code for reading third column: Emerg.—Emergency; Reg.—Regular; Susp.—Suspension.

Dated: February 11, 2016.

Roy E. Wright,

Deputy Associate Administrator, Federal Insurance and Mitigation Administration, Department of Homeland Security, Federal Emergency Management Agency.

[FR Doc. 2016–05988 Filed 3–16–16; 8:45 am]

BILLING CODE 9110–12–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

44 CFR Part 64

[Docket ID FEMA–2016–0002; Internal Agency Docket No. FEMA–8425]

Suspension of Community Eligibility

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Final rule.

SUMMARY: This rule identifies communities where the sale of flood insurance has been authorized under the National Flood Insurance Program (NFIP) that are scheduled for suspension on the effective dates listed within this rule because of noncompliance with the floodplain management requirements of the program. If the Federal Emergency Management Agency (FEMA) receives documentation that the community has adopted the required floodplain management measures prior to the effective suspension date given in this rule, the suspension will not occur and a notice of this will be provided by publication in the **Federal Register** on a subsequent date. Also, information identifying the current participation status of a community can be obtained from FEMA's Community Status Book (CSB). The CSB is available at *http://www.fema.gov/fema/csb.shtm.*

DATES: The effective date of each community's scheduled suspension is the third date (''Susp.'') listed in the third column of the following tables.

FOR FURTHER INFORMATION CONTACT: If you want to determine whether a particular community was suspended on the suspension date or for further information, contact Patricia Suber, Federal Insurance and Mitigation Administration, Federal Emergency Management Agency, 500 C Street SW., Washington, DC 20472, (202) 646–4149.

SUPPLEMENTARY INFORMATION: The NFIP enables property owners to purchase Federal flood insurance that is not otherwise generally available from private insurers. In return, communities agree to adopt and administer local floodplain management measures aimed at protecting lives and new construction from future flooding. Section 1315 of the National Flood Insurance Act of 1968, as amended, 42 U.S.C. 4022, prohibits the sale of NFIP flood insurance unless an appropriate public body adopts adequate floodplain management measures with effective enforcement measures. The communities listed in this document no longer meet that statutory requirement

for compliance with program regulations, 44 CFR part 59. Accordingly, the communities will be suspended on the effective date in the third column. As of that date, flood insurance will no longer be available in the community. We recognize that some of these communities may adopt and submit the required documentation of legally enforceable floodplain management measures after this rule is published but prior to the actual suspension date. These communities will not be suspended and will continue to be eligible for the sale of NFIP flood insurance. A notice withdrawing the suspension of such communities will be published in the **Federal Register**.

In addition, FEMA publishes a Flood Insurance Rate Map (FIRM) that identifies the Special Flood Hazard Areas (SFHAs) in these communities. The date of the FIRM, if one has been published, is indicated in the fourth column of the table. No direct Federal financial assistance (except assistance pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act not in connection with a flood) may be provided for construction or acquisition of buildings in identified SFHAs for communities not participating in the NFIP and identified for more than a year on FEMA's initial FIRM for the community as having flood-prone areas (section 202(a) of the Flood Disaster Protection Act of 1973, 42 U.S.C. 4106(a), as amended). This prohibition against certain types of Federal assistance becomes effective for the communities listed on the date shown in the last column. The Administrator finds that notice and public comment procedures under 5 U.S.C. 553(b), are impracticable and unnecessary because communities listed in this final rule have been adequately notified.

Each community receives 6-month, 90-day, and 30-day notification letters addressed to the Chief Executive Officer stating that the community will be suspended unless the required floodplain management measures are met prior to the effective suspension date. Since these notifications were made, this final rule may take effect within less than 30 days.

National Environmental Policy Act. This rule is categorically excluded from the requirements of 44 CFR part 10, Environmental Considerations. No environmental impact assessment has been prepared.

Regulatory Flexibility Act. The Administrator has determined that this rule is exempt from the requirements of the Regulatory Flexibility Act because the National Flood Insurance Act of 1968, as amended, Section 1315, 42 U.S.C. 4022, prohibits flood insurance coverage unless an appropriate public body adopts adequate floodplain management measures with effective enforcement measures. The communities listed no longer comply with the statutory requirements, and after the effective date, flood insurance will no longer be available in the communities unless remedial action takes place.

Regulatory Classification. This final rule is not a significant regulatory action under the criteria of section 3(f) of Executive Order 12866 of September 30, 1993, Regulatory Planning and Review, 58 FR 51735.

Executive Order 13132, Federalism. This rule involves no policies that have federalism implications under Executive Order 13132.

Executive Order 12988, Civil Justice Reform. This rule meets the applicable standards of Executive Order 12988.

Paperwork Reduction Act. This rule does not involve any collection of information for purposes of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.*

List of Subjects in 44 CFR Part 64

Flood insurance, Floodplains.

Accordingly, 44 CFR part 64 is amended as follows:

PART 64—[AMENDED]

■ 1. The authority citation for part 64 continues to read as follows:

Authority: 42 U.S.C. 4001 *et seq.;* Reorganization Plan No. 3 of 1978, 3 CFR, 1978 Comp.; p. 329; E.O. 12127, 44 FR 19367, 3 CFR, 1979 Comp.; p. 376.

§ 64.6 [Amended]

■ 2. The tables published under the authority of § 64.6 are amended as follows:

State and location	Community No.	Effective date authorization/cancellation of sale of flood insurance in community	Current effective map date	Date certain federal assistance no longer available in SFHAs
Region III				
Maryland:				
Aberdeen, City of, Harford County	240041	May 22, 1974, Emerg; July 16, 1981, Reg; April 19, 2016, Susp.	April 19, 2016	April 19, 2016.
Bel Air, Town of, Harford County	240042	January 17, 1974, Emerg; September 16, 1981, Reg; April 19, 2016, Susp.	do *	Do.
Harford County, Unincorporated Areas	240040	May 5, 1972, Emerg; March 2, 1983, Reg; April 19, 2016, Susp.	do	Do.
Havre de Grace, City of, Harford County.	240043	February 26, 1975, Emerg; March 15, 1977, Reg; April 19, 2016, Susp.	do	Do.
Region V				
Indiana:				
Beech Grove, City of, Marion County	180158	October 29, 1971, Emerg; May 15, 1984, Reg; April 19, 2016, Susp.	do	Do.
Indianapolis, City of, Marion County	180159	October 29, 1971, Emerg; May 15, 1984, Reg; April 19, 2016, Susp.	do	Do.
Lawrence, City of, Marion County	180160	October 29, 1971, Emerg; May 15, 1984, Reg; April 19, 2016, Susp.	do	Do.
Southport, City of, Marion County	180161	October 29, 1971, Emerg; May 15, 1984, Reg; April 19, 2016, Susp.	do	Do.
Speedway, Town of, Marion County	180162	October 29, 1971, Emerg; May 15, 1984, Reg; April 19, 2016, Susp.	do	Do.
Michigan:				
Chocolay, Charter Township of, Marquette County.	260448	October 29, 1976, Emerg; May 4, 1987, Reg; April 19, 2016, Susp.	do	Do.

State and location	Community No.	Effective date authorization/cancellation of sale of flood insurance in community	Current effective map date	Date certain federal assistance no longer available in SFHAs
Ely, Township of, Marquette County	260449	November 9, 1981, Emerg; September 1, 1988, Reg; April 19, 2016, Susp.	....do	Do.
Marquette, Charter Township of, Marquette County.	260758	April 7, 1986, Emerg; December 18, 1986, Reg; April 19, 2016, Susp.	....do	Do.
Marquette, City of, Marquette County	260716	April 13, 1987, Emerg; September 30, 1988, Reg; April 19, 2016, Susp.	....do	Do.
Powell, Township of, Marquette County	260452	N/A, Emerg; May 4, 2006, Reg; April 19, 2016, Susp.	....do	Do.
Skandia, Township of, Marquette County.	260987	March 26, 1997, Emerg; N/A, Reg; April 19, 2016, Susp.	....do	Do.
West Branch, Township of, Marquette County.	260993	June 11, 1997, Emerg; N/A, Reg; April 19, 2016, Susp.	....do	Do.
Ohio: Akron, City of, Summit County	390523	February 18, 1975, Emerg; February 18, 1981, Reg; April 19, 2016, Susp.	....do	Do.
Barberton, City of, Summit County	390524	September 13, 1974, Emerg; January 16, 1981, Reg; April 19, 2016, Susp.	....do	Do.
Boston Heights, Village of, Summit County.	390749	November 16, 1976, Emerg; February 18, 1981, Reg; April 19, 2016, Susp.	....do	Do.
Clinton, Village of, Summit County	390525	June 9, 1975, Emerg; July 2, 1980, Reg; April 19, 2016, Susp.	....do	Do.
Cuyahoga Falls, City of, Summit County.	390526	February 27, 1975, Emerg; February 18, 1981, Reg; April 19, 2016, Susp.	....do	Do.
Fairlawn, City of, Summit County	390657	December 29, 1975, Emerg; January 16, 1981, Reg; April 19, 2016, Susp.	....do	Do.
Green, City of, Summit County	390927	N/A, Emerg; May 29, 2002, Reg; April 19, 2016, Susp.	....do	Do.
Hudson, City of, Summit County	390660	May 19, 1975, Emerg; September 30, 1980, Reg; April 19, 2016, Susp.	....do	Do.
Lakemore, Village of, Summit County	390527	August 8, 1975, Emerg; May 25, 1978, Reg; April 19, 2016, Susp.	....do	Do.
Macedonia, City of, Summit County	390750	November 11, 1976, Emerg; February 4, 1981, Reg; April 19, 2016, Susp.	....do	Do.
Mogadore, Village of, Portage and Summit Counties.	390528	June 11, 1975, Emerg; September 3, 1979, Reg; April 19, 2016, Susp.	....do	Do.
Munroe Falls, City of, Summit County	390843	October 26, 1988, Emerg; May 16, 1994, Reg; April 19, 2016, Susp.	....do	Do.
New Franklin, City of, Summit County	390993	N/A, Emerg; November 14, 2008, Reg; April 19, 2016, Susp.	....do	Do.
Norton, City of, Summit County	390529	July 2, 1975, Emerg; January 16, 1981, Reg; April 19, 2016, Susp.	....do	Do.
Peninsula, Village of, Summit County	390530	June 25, 1975, Emerg; March 2, 1979, Reg; April 19, 2016, Susp.	....do	Do.
Reminderville, Village of, Summit County.	390855	July 9, 1980, Emerg; May 17, 1990, Reg; April 19, 2016, Susp.	....do	Do.
Richfield, Village of, Summit County	390083	N/A, Emerg; December 7, 2009, Reg; April 19, 2016, Susp.	....do	Do.
Silver Lake, Village of, Summit County	390531	June 4, 1975, Emerg; March 16, 1981, Reg; April 19, 2016, Susp.	....do	Do.
Stow, City of, Summit County	390532	November 12, 1973, Emerg; July 17, 1978, Reg; April 19, 2016, Susp.	....do	Do.
Summit County, Unincorporated Areas	390781	November 21, 1975, Emerg; April 15, 1981, Reg; April 19, 2016, Susp.	....do	Do.
Tallmadge, City of, Summit County	390533	June 9, 1975, Emerg; April 15, 1981, Reg; April 19, 2016, Susp.	....do	Do.
Twinsburg, City of, Summit County	390534	September 18, 1973, Emerg; February 4, 1981, Reg; April 19, 2016, Susp.	....do	Do.
Region VII				
Iowa:				
Churdan, City of, Greene County	190395	December 27, 1993, Emerg; November 7, 2001, Reg; April 19, 2016, Susp.	....do	Do.
Farnhamville, City of, Calhoun County	190730	September 18, 1990, Emerg; July 1, 1991, Reg; April 19, 2016, Susp.	....do	Do.
Greene County, Unincorporated Areas.	190869	January 27, 1994, Emerg; September 1, 1996, Reg; April 19, 2016, Susp.	....do	Do.
Jefferson, City of, Greene County	190396	December 23, 1976, Emerg; September 1, 1986, Reg; April 19, 2016, Susp.	....do	Do.
Knierim, City of, Calhoun County	190339	September 21, 1976, Emerg; May 1, 1987, Reg; April 19, 2016, Susp.	....do	Do.
Lohrville, City of, Calhoun County	190609	November 12, 1976, Emerg; April 15, 1985, Reg; April 19, 2016, Susp.	....do	Do.

State and location	Community No.	Effective date authorization/cancellation of sale of flood insurance in community	Current effective map date	Date certain federal assistance no longer available in SFHAs
Paton, City of, Greene County	190397	May 23, 1990, Emerg; September 1, 1996, Reg; April 19, 2016, Susp.	.....do	Do.
Rippey, City of, Greene County	190399	November 6, 1975, Emerg; April 15, 1985, Reg; April 19, 2016, Susp.	.....do	Do.
Rockwell City, City of, Calhoun County	190343	December 5, 1980, Emerg; February 1, 1987, Reg; April 19, 2016, Susp.	.....do	Do.
Somers, City of, Calhoun County	190344	March 11, 1994, Emerg; September 1, 1996, Reg; April 19, 2016, Susp.	.....do	Do.
Region VIII				
Colorado:				
Lamar, City of, Prowers County	080146	April 8, 1975, Emerg; November 17, 1982, Reg; April 19, 2016, Susp.	.....do	Do.
Prowers County, Unincorporated Areas.	080272	June 30, 1975, Emerg; July 1, 1986, Reg; April 19, 2016, Susp.	.....do	Do.
Wiley, Town of, Prowers County	080228	August 3, 1995, Emerg; October 6, 2000, Reg; April 19, 2016, Susp.	.....do	Do.
Montana: Drummond, Town of, Granite County.	300033	August 4, 1977, Emerg; July 5, 1982, Reg; April 19, 2016, Susp.	.....do	Do.
Granite County, Unincorporated Areas.	300141	October 8, 1976, Emerg; July 5, 1982, Reg; April 19, 2016, Susp.	.....do	Do.
Philipsburg, Town of, Granite County	300117	April 29, 1976, Emerg; July 5, 1982, Reg; April 19, 2016, Susp.	.....do	Do.
North Dakota:				
Cavalier, City of, Pembina County	380081	June 18, 1975, Emerg; July 2, 1981, Reg; April 19, 2016, Susp.	.....do	Do.
Cavalier, Township of, Pembina County	380274	July 20, 1981, Emerg; July 20, 1981, Reg; April 19, 2016, Susp.	.....do	Do.
Drayton, City of, Pembina County	380150	April 23, 1974, Emerg; August 1, 1980, Reg; April 19, 2016, Susp.	.....do	Do.
Drayton, Township of, Pembina County	380276	October 6, 1982, Emerg; May 1, 1986, Reg; April 19, 2016, Susp.	.....do	Do.
Joliette, Township of, Pembina County	380281	January 6, 1983, Emerg; May 1, 1986, Reg; April 19, 2016, Susp.	.....do	Do.
Pembina, City of, Pembina County	385368	June 12, 1970, Emerg; November 2, 1977, Reg; April 19, 2016, Susp.	.....do	Do.
Pembina County, Unincorporated Areas.	380079	May 1, 1974, Emerg; November 19, 1987, Reg; April 19, 2016, Susp.	.....do	Do.

* -do- =Ditto.
Code for reading third column: Emerg.—Emergency; Reg.—Regular; Susp.—Suspension.

Dated: March 2, 2016.

Roy E. Wright,

Deputy Associate Administrator, Federal Insurance and Mitigation Administration, Department of Homeland Security, Federal Emergency Management Agency.

[FR Doc. 2016–05986 Filed 3–16–16; 8:45 am]

BILLING CODE 9110–12–P

Proposed Rules

Federal Register
Vol. 81, No. 52
Thursday, March 17, 2016

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

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2016–4225; Directorate Identifier 2015–NM–139–AD]

RIN 2120–AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for The Boeing Company Model 777–200 and –300 series airplanes equipped with Rolls-Royce Model Trent 800 engines. This proposed AD was prompted by reports of damage to the upper bifurcation forward fire seal and seal deflector, and localized damage to the insulation blanket installed just aft of the fire seal. This proposed AD would require installing serviceable thrust reverser (T/R) halves on the left and right engines. We are proposing this AD to prevent a breach in the engine firewall due to a failed upper bifurcation forward fire seal. A breach could delay or prevent the fire detection and suppression system from functioning properly, and could result in an increased risk of a fire, prolonged burning, and breach of the fire zone; and could allow fire to reach unprotected areas of the engine, the strut, and wing after engine shutdown. Also, fan air bypassing the fire seal could cause localized damage to the T/R insulation blanket installed just aft of the fire seal, which could allow limited thermal degradation of the thrust reverser inner wall. This could aggravate existing damage and cause the thrust reverser's inner wall to fail.

DATES: We must receive comments on this proposed AD by May 2, 2016.

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

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

For service information identified in this NPRM, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H–65, Seattle, WA 98124–2207; telephone 206–544–5000, extension 1; fax 206–766–5680; Internet *https://www.myboeingfleet.com.* You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425–227–1221. It is also available on the Internet at *http://www.regulations.gov* by searching for and locating Docket No. FAA–2016–4225.

Examining the AD Docket

You may examine the AD docket on the Internet at *http://www.regulations.gov* by searching for and locating Docket No. FAA–2016–4225; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800–647–5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Kevin Nguyen, Aerospace Engineer, Propulsion Branch, ANM–140S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, WA 98057–3356; phone: 425–917–6501; fax: 425–917–6590; email: *kevin.nguyen@faa.gov.*

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the **ADDRESSES** section. Include ''Docket No. FAA–2016–4225; Directorate Identifier 2015–NM–139–AD'' at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to *http://www.regulations.gov,* including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

We received reports of damage to the upper bifurcation forward fire seal and seal deflector. The damage included cracking, wear, and missing material on the fire seal; and cracking and wear on the seal deflector. There was also a report of localized damage to the insulation blanket installed just aft of the damaged fire seal. Boeing has determined that a design deficiency is the most probable root cause for the damage to the upper bifurcation forward fire seal and seal deflector. A combination of factors including operational pressure differential and seal deflections that the system is subjected to during high thrust operation were not accounted for in the design. This design deficiency allows the upper bifurcation forward fire seal to allow air to bypass the sealing interface at the unsupported section, which, over time, damages the upper bifurcation forward fire seal and seal deflector.

The T/R firewall seal is an integral part of the fire suppression system for the engine core compartment. A damaged upper bifurcation forward fire seal and seal deflector can result in a breach of the engine firewall and allow airflow into the engine fire zone, which can decrease the effectiveness of the engine fire detection and suppression systems due to excess fan air entering the core compartment fire zone. A breach in the engine firewall could

delay or prevent the fire detection and suppression system from functioning properly, and could result in an increased risk of a fire, prolonged burning, and potential breach of the fire zone. A breach of the fire wall could allow fire to reach unprotected areas of the engine, strut, and wing after engine shutdown. Also, engine fan air bypassing the seal could cause localized damage to the T/R insulation blanket installed just aft of the fire seal, which could allow limited thermal degradation of the thrust reverser inner wall. This could aggravate existing damage and cause the thrust reverser's inner wall to fail.

Related Service Information Under 1 CFR Part 51

We reviewed Boeing Special Attention Service Bulletin 777–78–0101, Revision 1, dated October 30, 2015. The service information describes procedures for installing serviceable left and right T/R halves on the left and right engines. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the **ADDRESSES** section.

FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

Proposed AD Requirements

This proposed AD would require accomplishing the actions specified in the service information described previously.

Differences Between This Proposed AD and the Service Information

The service information specifies the compliance time as 1,875 days. For this proposed AD, we specified a compliance time of 60 months.

Other Relevant Rulemaking

We have issued additional proposed rulemaking related to the T/Rs for Model 777–200 and –300 series airplanes equipped with Rolls-Royce Model RB211–Trent 800 engines. We issued a supplemental NPRM (SNPRM), Docket No. FAA–2011–0027, Directorate Identifier 2010–NM–127–AD, that published in the **Federal Register** on September 25, 2015 (80 FR 57744). The SNPRM proposes to require repetitive inspections requirements for T/R halves having a thermal protective system installed. The SNPRM also proposes to require installation of serviceable T/R halves. The SNPRM also proposes to revise the maintenance or inspection program by incorporating new airworthiness limitations.

Costs of Compliance

We estimate that this proposed AD affects 55 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

ESTIMATED COSTS

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Install serviceable T/R halves	Up to 91 work-hours × $85 per hour = $7,735.	Up to $7,338	Up to $15,073 per airplane	Up to $829,015.

According to the manufacturer, some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

Authority for This Rulemaking

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

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

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

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

(2) Is not a ''significant rule'' under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),

(3) Will not affect intrastate aviation in Alaska, and

(4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

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

The Proposed Amendment

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

PART 39—AIRWORTHINESS DIRECTIVES

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

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

§ 39.13 [Amended]

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

The Boeing Company: Docket No. FAA–2016–4225; Directorate Identifier 2015–NM–139–AD.

(a) Comments Due Date

We must receive comments by May 2, 2016.

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 777–200 and -300 series airplanes equipped with Rolls-Royce Model Trent 800 engines.

(d) Subject

Air Transport Association (ATA) of America Code 78, Engine Exhaust.

(e) Unsafe Condition

This AD was prompted by reports of damage to the upper bifurcation forward fire seal and seal deflector, and localized damage to the insulation blanket installed just aft of the fire seal. We are issuing this AD to prevent a breach in the engine firewall due to a failed upper bifurcation forward fire seal. A breach could delay or prevent the fire detection and suppression system from functioning properly, and could result in an increased risk of a fire, prolonged burning, and breach of the fire zone; and could allow fire to reach unprotected areas of the engine, the strut, and wing after engine shutdown. Also, fan air bypassing the seal could cause localized damage to the thrust reverser (T/R) insulation blanket installed just aft of the fire seal, which could allow limited thermal degradation of the thrust reverser inner wall. This could aggravate existing damage and cause the thrust reverser's inner wall to fail.

(f) Compliance

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

(g) Installation of Serviceable T/R Halves on Each Engine

Within 60 months after the effective date of this AD: Install serviceable left and right T/R halves on the left and right engines, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 777–78–0101, Revision 1, dated October 30, 2015. A serviceable T/R half is defined in the Accomplishment Instructions of Boeing Special Attention Service Bulletin 777–78–0101, Revision 1, dated October 30, 2015.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (i) of this AD. Information may be emailed to: *9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.*

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

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO, to make those findings. To be approved, the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane and the approval must specifically refer to this AD.

(4) For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (h)(4)(i) and (h)(4)(ii) apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

(i) Related Information

(1) For more information about this AD, contact Kevin Nguyen, Aerospace Engineer, Propulsion Branch, ANM–140S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, WA 98057–3356; phone: 425–917–6501; fax: 425–917–6590; email: *kevin.nguyen@faa.gov.*

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H–65, Seattle, WA 98124–2207; telephone 206–544–5000, extension 1; fax 206–766–5680; Internet *https://www.myboeingfleet.com.* You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425–227–1221.

Issued in Renton, Washington, on March 9, 2016.

Michael Kaszycki,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2016–05831 Filed 3–16–16; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2016–4226; Directorate Identifier 2015–NM–095–AD]

RIN 2120–AA64

Airworthiness Directives; Airbus Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to supersede Airworthiness Directive (AD) 2003–25–07 for certain Airbus Model A319 and A320 series airplanes; and AD 2005–13–39 for certain Airbus Model A321 series airplanes. AD 2003–25–07 currently requires a revision to the airplane flight manual (AFM) and replacement of both elevator aileron computers (ELACs) having L80 standards with new ELACs having L81 standards. AD 2005–13–39 currently requires a revision to the AFM, replacement of existing ELACs with ELACs having either L83 or L91 standards, as applicable; and a concurrent action. Since we issued AD 2003–25–07 and AD 2005–13–39, we have determined that new ELAC standards must be incorporated. The ELAC standards have been upgraded to version L97+, which implements enhanced angle-of-attack (AOA) monitoring to better detect AOA blockage, including multiple AOA blockages. This proposed AD would require replacing existing ELACs with new ELACs having L97+ standards or revising the software in an existing ELAC to the L97+ standards, as applicable, which would terminate the requirements of AD 2003–25–07 and AD 2005–13–39. This proposed AD would also add Airbus Model A318 series airplanes to the applicability. We are proposing this AD to prevent inadvertent activation of the AOA protections. Inadvertent activation of the AOA protections could result in a continuous nose down pitch rate that could result in reduced controllability of the airplane.

DATES: We must receive comments on this proposed AD by May 2, 2016.

ADDRESSES: You may send comments by any of the following methods:

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

For service information identified in this NPRM, contact Airbus, Airworthiness Office—EIAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email *account.airworth-eas@airbus.com;*

Internet *http://www.airbus.com.* You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425–227–1221.

Examining the AD Docket

You may examine the AD docket on the Internet at *http://www.regulations.gov* by searching for and locating Docket No. FAA–2016–4226; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone 800–647–5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM–116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057–3356; telephone 425–227–1405; fax 425–227–1149.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the **ADDRESSES** section. Include ''Docket No. FAA–2016–4226; Directorate Identifier 2015–NM–095–AD'' at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to *http://www.regulations.gov,* including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

On December 5, 2003, we issued AD 2003–25–07, Amendment 39–13390 (68 FR 70431, December 18, 2003). AD 2003–25–07 requires a revision of the AFM and replacement of both ELACs having L80 standards with new ELACs having L81 standards on Airbus Model A319 and A320 series airplanes equipped with L80 standards. The replacement of both ELACs terminates the requirement for the AFM revision.

On June 17, 2005, we issued AD 2005–13–39, Amendment 39–14176 (70 FR 38580, July 5, 2005). AD 2005–13–39 requires a revision of the AFM, a concurrent action, and replacement of existing ELACs with ELACs having L83 or L91 standards on certain Airbus Model A321 series airplanes.

Since we issued AD 2003–25–07, Amendment 39–13390 (68 FR 70431, December 18, 2003); and AD 2005–13–39, Amendment 39–14176 (70 FR 38580, July 5, 2005); we have determined that new ELAC standards must be incorporated. The ELAC standard software has been updated to version L97+ and the hardware is available in a data loadable version and a non-data-loadable version.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Airworthiness Directive 2015–0088R1, dated June 2, 2015 (referred to after this as the Mandatory Continuing Airworthiness Information, or ''the MCAI''), to correct an unsafe condition for all Airbus Model A318, A319, A320, and A321 series airplanes. The MCAI states:

> The latest elevator aileron computer (ELAC) standard, L97+, implements enhanced Angle of Attack (AOA) monitoring in order to better detect cases of AOA blockage, including multiple AOA blockage.
>
> Two ELAC L97+ versions are currently available, Part Number (P/N) 3945129109 with data loading capability, and P/N 3945128215 without the data loading capability. Three existing [EASA] ADs requiring installation of earlier ELAC (software) have been identified and taken into account for cancellation by this new [EASA] AD.
>
> For the reasons described above, EASA issued AD 2015–0088, cancelling DGAC [Direction Générale de l'Aviation Civile] France AD 95–203–072 (no requirements retained) [which corresponds to FAA AD 98–09–18, Amendment 39–10499 (63 FR 23374, April 29, 1998)], and partially retaining the requirements of DGAC France AD 2001–508 [which corresponds to FAA AD 2003–25–07, Amendment 39–13390 (68 FR 70431, December 18, 2003), and [DGAC] AD F–2004–147 (EASA approval ref. 2004–8601) [which corresponds to FAA AD 2005–13–39, Amendment 39–14176 (70 FR 38580, July 5, 2005)], which were superseded, and to require replacement of all ELAC with ELAC L97+ standard.
>
> Since that [EASA] AD was issued, some errors were detected in Appendix 1 of the [EASA] AD, and one P/N ELAC was inadvertently omitted. This [EASA] AD revises EASA AD 2015–0088 to correct these errors and to add clarification to paragraph (7) [of the EASA AD].

The required actions include either replacing existing ELACs with new ELACs having L97+ standards uploaded, or revising the software in the existing ELACs to L97+ standards. This proposed AD also adds Airbus Model A318 series airplanes to the applicability. You may examine the MCAI in the AD docket on the Internet at *http://www.regulations.gov* by searching for and locating Docket No. FAA–2016–4226.

Related Service Information Under 1 CFR Part 51

Airbus has issued Service Bulletin A320–27–1243, dated March 17, 2015. The service information describes procedures for replacing the existing ELACs with new ELACs having L97+ standards, and modifying existing ELACs into units with L97+ standards.

Airbus has also issued Service Bulletin A320–27–1244, dated March 5, 2015. The service information describes procedures for modification of an airplane by replacing any existing ELAC unit with an ELAC 97+ unit having P/N 3945128215.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the **ADDRESSES** section.

FAA's Determination and Requirements of This Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of these same type designs.

Costs of Compliance

We estimate that this proposed AD affects 940 airplanes of U.S. registry.

The actions required by AD 2003–25–07, Amendment 39–13390 (68 FR 70431, December 18, 2003), and retained in this proposed AD take about 1 work-hour per product, at an average labor rate of $85 per work-hour. Based on these figures, the estimated cost of the actions that are required by AD 2003–25–07 is $85 per product.

The actions required by AD 2005–13–39, Amendment 39–14176 (70 FR 38580, July 5, 2005), and retained in this proposed AD take about 1 work-hour per product, at an average labor rate of $85 per work-hour. Based on these figures, the estimated cost of the actions that are required by AD 2005–13–39 is $85 per product.

We also estimate that it would take about 3 work-hours per product to comply with the basic requirements of this proposed AD. The average labor rate is $85 per work-hour. Required parts would cost about $7,230 per product. Based on these figures, we estimate the cost of this proposed AD on U.S. operators to be $7,035,900, or $7,485 per product.

According to the parts manufacturer, some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

Authority for This Rulemaking

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

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

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

1. Is not a ''significant regulatory action'' under Executive Order 12866;
2. Is not a ''significant rule'' under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

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

The Proposed Amendment

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

PART 39—AIRWORTHINESS DIRECTIVES

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

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

§ 39.13 [Amended]

■ 2. The FAA amends § 39.13 by:

■ a. Removing Airworthiness Directive (AD) 2003–25–07, Amendment 39–13390 (68 FR 70431, December 18, 2003); and AD 2005–13–39, Amendment 39–14176 (70 FR 38580, July 5, 2005); and

■ b. Adding the following new AD:

Airbus: Docket No. FAA–2016–4226; Directorate Identifier 2015–NM–095–AD.

(a) Comments Due Date

We must receive comments by May 2, 2016.

(b) Affected ADs

This AD replaces AD 2003–25–07, Amendment 39–13390 (68 FR 70431, December 18, 2003); and AD 2005–13–39, Amendment 39–14176 (70 FR 38580, July 5, 2005).

(c) Applicability

This AD applies to the airplanes identified in paragraphs (c)(1) through (c)(4) of this AD, certificated in any category, all manufacturer serial numbers.

(1) Airbus Model A318–111, –112, –121, and –122 airplanes.

(2) Airbus Model A319–111, –112, –113, –114, –115, –131, –132, and –133 airplanes.

(3) Airbus Model A320–211, –212, –214, –231, –232, and –233 airplanes.

(4) Airbus Model A321–111, –112, –131, –211, –212, –213, –231, and –232 airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 27, Flight Controls.

(e) Reason

This AD was prompted by a determination that new elevator aileron computers (ELAC) standards must be incorporated. The ELAC standards have been upgraded to version L97+, which implements enhanced angle-of-attack (AOA) monitoring to better detect AOA blockage, including multiple AOA blockages. We are issuing this AD to prevent inadvertent activation of the AOA protections. Inadvertent activation of the AOA protections could result in a continuous nose down pitch rate that could result in reduced controllability of the airplane.

(f) Compliance

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

(g) Retained Replacement of ELAC L80 Units With L81 Units, With No Changes

For Model A319 and A320 series airplanes, equipped with ELAC L80 standards having part numbers listed in Airbus Service Bulletin A320–27–1135, dated June 29, 2001: This paragraph restates the requirements of paragraph (b) of AD 2003–25–07, Amendment 39–13390 (68 FR 70431, December 18, 2003), with no changes. Within 1 year after January 22, 2004 (the effective date of AD 2003–25–07): Replace both ELACs having L80 standards with new ELACs having L81 standards, by doing all the actions per paragraphs A., B., C., and D. of the Accomplishment Instructions of Airbus Service Bulletin A320–27–1135, dated June 29, 2001.

(h) Retained Installation of ELAC L83 or L91 Software, With No Changes

For Model A321–111, –112, –131, –211, and –231 airplanes, except those with Airbus Modification 34043 installed in production: This paragraph restates the requirements of paragraph (g) of AD 2005–13–39, Amendment 39–14176 (70 FR 38580, July 5, 2005), with no changes. Within 16 months after August 9, 2005 (the effective date of AD 2005–13–39): Replace existing ELACs with ELACs having L83 standards, by accomplishing all of the actions specified in the Accomplishment Instructions of Airbus Service Bulletin A320–27–1151, dated March 9, 2004, including Appendix 01, dated March 9, 2004; or with ELACs having L91 standards, by accomplishing all of the actions specified in the Accomplishment Instructions of Airbus Service Bulletin A320–27–1152, dated June 4, 2004, including Appendix 01, dated June 4, 2004; as applicable.

(i) New Requirement of This AD: ELAC Replacement or Modification

At the applicable times specified in table 1 to paragraph (i) of this AD: Replace each ELAC unit with an ELAC L97+ unit having part number (P/N) 3945129100 and software having P/N 3945129109, or modify existing ELAC units into ELAC L97+ units having P/N 3945129100 with L97+ operational software P/N 3945129109 loaded, as applicable, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320–27–1243, dated March 17, 2015. Accomplishing this replacement terminates the actions required by paragraphs (g) and (h) of this AD.

TABLE 1 TO PARAGRAPH (I) OF THIS AD—COMPLIANCE TIMES

Airbus airplane models	Compliance time (after the effective date of this AD)
Model A318 series airplanes with UTAS (formerly Goodrich) AOA P/N 0861ED or P/N 0861ED2 installed in all 3 positions (captain, first officer, and standby).	Within 5 months.
Model A319 series airplanes with UTAS (formerly Goodrich) AOA P/N 0861ED or P/N 0861ED2 installed in all 3 positions (captain, first officer, and standby).	Within 10 months.
Model A320 series airplanes with UTAS (formerly Goodrich) AOA P/N 0861ED or P/N 0861ED2 installed in all 3 positions (captain, first officer, and standby).	Within 10 months.
Model A321 series airplanes with UTAS (formerly Goodrich) AOA P/N 0861ED or P/N 0861ED2 installed in all 3 positions (captain, first officer, and standby).	Within 5 months.
Model A318, A319, A320, and A321 series airplanes that do not have UTAS (formerly Goodrich) AOA P/N 0861ED or P/N 0861ED2 installed in all 3 positions (captain, first officer, and standby).	Within 25 months.

(j) Optional Method of Compliance

Modification of an airplane by replacing any existing ELAC unit with an ELAC 97+ unit having P/N 3945128215, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320–27–1244, dated March 5, 2015, is an acceptable method of compliance for the requirements of paragraph (i) of this AD, for only that modified airplane. Accomplishing this modification terminates the actions required by paragraphs (g) and (h) of this AD for that modified airplane.

Note 1 to paragraph (j) of this AD: ELAC unit P/N 3945128215 is not data-loadable, but it is fully interchangeable and mixable with data-loadable ELAC 97+ unit P/N 3945129100 with software P/N 3945129109 loaded.

(k) Exclusion From Requirements of Paragraphs (g), (h), and (i), and the Actions in Paragraph (j), of This AD

Airplanes on which Airbus Modification 156546 (installation of ELAC L97+ with software P/N 3945129109) was installed in production are excluded from the requirements of paragraphs (g), (h), and (i) of this AD and the actions specified in paragraph (j) of this AD, provided it can be determined that no ELAC having a part number identified in table 2 to paragraph (k) of this AD has been installed on that airplane since the date of issuance of the original airworthiness certificate or the date of issuance of the original export certificate of airworthiness.

TABLE 2 TO PARAGRAPH (k) OF THIS AD—PROHIBITED ELAC PART NUMBERS

Part number	Designation	FIN
3945122202	ELAC A320–111 Type Def	2 CE 1/2.
3945122203	ELAC L50C	2 CE 1/2.
3945122303	ELAC L50C	2 CE 1/2.
3945122304	ELAC L60	2 CE 1/2.
3945122305	ELAC L61B	2 CE 1/2.
3945122306	ELAC L61F	2 CE 1/2.
3945122307	ELAC L62C	2 CE 1/2.
C12370AA01	ELAC L68C	2 CE 1/2.
3945122501	ELAC L69	2 CE 1/2.
3945122502	ELAC L69J	2 CE 1/2.
3945122503	ELAC L77	2 CE 1/2.
3945122504	ELAC L78	2 CE 1/2.
3945122505	ELAC A L80	2 CE 1/2.
3945123505	ELAC A' L80	2 CE 1/2.
3945128101	ELAC B L80	2 CE 1/2.
3945122506	ELAC A L81	2 CE 1/2.
3945123506	ELAC A' L81	2 CE 1/2.
3945128102	ELAC B L81	2 CE 1/2.
3945122507	ELAC A L82	2 CE 1/2.
3945123507	ELAC A' L82	2 CE 1/2.
3945128103	ELAC B L82	2 CE 1/2.
3945122608	ELAC A L83	2 CE 1/2.
3945123608	ELAC A' L83	2 CE 1/2.
3945122609	ELAC A L84	2 CE 1/2.
3945123609	ELAC A' L84	2 CE 1/2.
3945128204	ELAC B L90L	2 CE 1/2.
3945128205	ELAC B L90N	2 CE 1/2.
3945128206	ELAC B L91	2 CE 1/2.
3945129101	ELAC B L91 data loadable	2 CE 1/2 SW1.
3945128207	ELAC B L92	2 CE 1/2.
3945128208	ELAC B L92L	2 CE 1/2.
3945128209	ELAC B L93	2 CE 1/2.
3945129103	ELAC B L93 data loadable	2 CE 1/2 SW1.
3945128210	ELAC B L94	2 CE 1/2.
3945129104	ELAC B L94 data loadable	2 CE 1/2 SW1.
3945128212	ELAC B L96	2 CE 1/2.
3945129106	ELAC B L96 data loadable	2 CE 1/2 SW1.
3945129107	ELAC B L96 H–A data loadable	2 CE 1/2 SW1.
3945128214	ELAC B L97	2 CE 1/2.
3945129108	ELAC B L97 data loadable	2 CE 1/2 SW1.

(l) Later-Approved Parts

Installation of an ELAC version (part number) approved after the effective date of this AD is an approved method of compliance with the requirements of paragraphs (i) and (j) of this AD, provided the requirements specified in paragraphs (l)(1) and (l)(2) of this AD are met.

(1) The version (part number) must be approved by the Manager, International Branch, ANM–116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA).

(2) The installation must be done using a method approved by the Manager, International Branch, ANM–116, Transport Airplane Directorate, FAA; or the EASA; or Airbus's EASA DOA.

(m) Parts Installation Limitation

As of the applicable time specified in paragraph (m)(1) or (m)(2) of this AD, do not install on any airplane an ELAC unit having a part number identified in table 2 to paragraph (k) of this AD, except as specified in paragraph (m)(3) of this AD.

(1) For an airplane that, as of the effective date of this AD, has any ELAC unit installed having a part number identified in table 2 to paragraph (k) of this AD: After modification of that airplane as required by paragraph (i) of this AD, or as specified in paragraph (j) of this AD.

(2) For an airplane that, as of the effective date of this AD, does not have any ELAC unit installed having a part number identified in table 2 to paragraph (k) of this AD: As of the effective date of this AD.

(3) As of the effective date of this AD, a data-loadable ELAC B unit having a part number identified in table 2 to paragraph (k) of this AD can be installed on an airplane provided that L97+ software P/N 3945129109 is uploaded at the applicable time specified in paragraph (m)(3)(i) or (m)(3)(ii) of this AD.

(i) For all airplanes except those identified in paragraph (m)(3)(ii) of this AD: Before further flight after the ELAC B unit installation.

(ii) For airplanes that have not been modified as required by paragraph (i) of this AD: Within the applicable compliance time specified in table 1 to paragraph (i) of this AD.

(n) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs):* The Manager, International Branch, ANM–116, Transport Airplane Directorate FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch send it to ATTN: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM–116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057–3356; telephone 425–227–1405; fax 425–227–1149. Information may be emailed to: *9-ANM-116-AMOC-REQUESTS@faa.gov.*

(i) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(ii) AMOCs approved previously for AD 2003–25–07, Amendment 39–13390 (68 FR 70431, December 18, 2003), are approved as AMOCs for the corresponding provisions of paragraph (g) of this AD.

(iii) AMOCs approved previously for AD 2005–13–39, Amendment 39–14176 (70 FR 38580, July 5, 2005), are approved as AMOCs for the corresponding provisions of paragraph (h) of this AD.

(2) *Contacting the Manufacturer:* As of the effective date of this AD, for any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch, ANM–116, Transport Airplane Directorate, FAA; or the EASA; or Airbus's EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature.

(3) *Required for Compliance (RC):* If any service information contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

(o) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2015–0088R1, dated June 2, 2015, for related information. This MCAI may be found in the AD docket on the Internet at *http://www.regulations.gov* by searching for and locating Docket No. FAA–2016–4226.

(2) For service information identified in this AD, contact Airbus, Airworthiness Office—EIAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email *account.airworth-eas@airbus.com;* Internet *http://www.airbus.com.* You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425–227–1221.

Issued in Renton, Washington, on March 9, 2016.

Michael Kaszycki,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2016–05830 Filed 3–16–16; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF THE TREASURY

Financial Crimes Enforcement Network

31 CFR Part 1010

RIN 1506–AB19

Financial Crimes Enforcement Network; Withdrawal of Notice of Proposed Rulemaking Regarding JSC CredexBank

AGENCY: Financial Crimes Enforcement Network (''FinCEN''), Treasury.

ACTION: Proposed rule; withdrawal.

SUMMARY: This document withdraws FinCEN's proposed rulemaking to impose the first and fifth special measure regarding JSC CredexBank (''Credex''), renamed JSC InterPayBank (''InterPay''), as a financial institution of primary money laundering concern, pursuant to Section 311 of the USA PATRIOT Act (''Section 311'').

Because of material subsequent developments that have mitigated the money laundering risks associated with Credex, FinCEN has determined that Credex is no longer a primary money laundering concern that warrants the implementation of a special measure under Section 311. Elsewhere in this issue of the **Federal Register**, FinCEN is publishing a withdrawal of the related finding regarding Credex.

DATES: As of March 17, 2016 the proposed rule published May 30, 2012, at 77 FR 31794, is withdrawn.

FOR FURTHER INFORMATION CONTACT: The FinCEN Resource Center at (800) 767–2825.

SUPPLEMENTARY INFORMATION:

I. Background

On October 26, 2001, the President signed into law the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001, Public Law 107–56 (the ''USA PATRIOT Act''). Title III of the USA PATRIOT Act amends the anti-money laundering provisions of the Bank Secrecy Act (''BSA''), codified at 12 U.S.C. 1829b, 12 U.S.C. 1951–1959, and 31 U.S.C. 5311–5314, 5316–5332, to promote the prevention, detection, and prosecution of money laundering, tax evasion, the financing of terrorism, and other financial crimes. Regulations implementing the BSA appear at 31 CFR Chapter X. The authority of the Secretary of the Treasury to administer the BSA and its implementing regulations has been delegated to the Director of FinCEN.

Section 311 of the USA PATRIOT Act (''Section 311''), codified at 31 U.S.C.

5318A), grants the Director of FinCEN the authority, upon finding that reasonable grounds exist for concluding that a foreign jurisdiction, foreign financial institution, class of transactions, or type of account is of ''primary money laundering concern,'' to require domestic financial institutions and financial agencies to take certain ''special measures'' to address the primary money laundering concern. The special measures enumerated under Section 311 are prophylactic safeguards that defend the U.S. financial system from money laundering and terrorist financing. FinCEN may impose one or more of these special measures in order to protect the U.S. financial system from these threats. To that end, special measures one through four, codified at 31 U.S.C. 5318A(b)(1–4), impose additional recordkeeping, information collection, and information reporting requirements on covered U.S. financial institutions. The fifth special measure, codified at 31 U.S.C. 5318A(b)(5), allows the Director to prohibit or impose conditions on the opening or maintaining of correspondent or payable-through accounts for the identified institution by U.S. financial institutions.

II. The Finding and Notice of Proposed Rulemaking

A. The Finding and Notice of Proposed Rulemaking

Based upon review and analysis of relevant information, consultations with relevant Federal agencies and departments, and after consideration of the factors enumerated in Section 311, the Director of FinCEN found that reasonable grounds existed for concluding that JSC CredexBank (''Credex'') was a financial institution of primary money laundering concern.[1] FinCEN published a notice of proposed rulemaking proposing to impose the first and fifth special measures on May 30, 2012, pursuant to the authority under 31 U.S.C. 5318A.[2]

B. Subsequent Developments

Since FinCEN's notice of proposed rulemaking regarding Credex, material facts regarding the circumstances of the proposed rulemaking have changed. On May 8, 2015, the National Bank of the Republic of Belarus (''NBRB''), the Belarusian central bank and monetary authority with control over bank supervision and regulation, revoked the banking license of InterPay, the successor of Credex, and delisted InterPay from the list of banks published by the NBRB.[3] In late January 2016, InterPay was also listed by the NBRB as being in the process of bankruptcy and liquidation.[4] Because of the actions taken by the Belarusian banking authorities and the ongoing liquidation of InterPay's assets, InterPay no longer operates as a foreign financial institution.

III. Withdrawal of the Proposed Rule

For the reasons set forth above, FinCEN hereby withdraws the May 30, 2012 proposed rule proposing to impose the first and fifth special measure authorized by 31 U.S.C. 5318A(b)(5) regarding Credex/InterPay. FinCEN's withdrawal of the proposed rule does not acknowledge any remedial measure taken by Credex/InterPay, but results from the fact that Credex/InterPay no longer operates as a foreign financial institution.

Jamal El-Hindi,

Deputy Director, Financial Crimes Enforcement Network.

[FR Doc. 2016–04413 Filed 3–16–16; 8:45 am]

BILLING CODE 4810–02–P

[1] *See* 77 FR 31434 (May 25, 2012).

[2] *See* 77 FR 31794 (May 30, 2012) (RIN 1506–AB19).

[3] *See* Press Release, National Bank of the Republic of Belarus. *About Revocation of the Banking License from 'InterPayBank' Joint Stock Company.* (May 8, 2015). *http://www.nbrb.by/Press/?nId=101&l=en* (accessed January 27, 2016); *see also* Press Release, National Bank of the Republic of Belarus. *Register of Banking Licenses as at 27 January 2016.* (January 27, 2016). *http://www.nbrb.by/engl/system/register.asp* (accessed January 27, 2016).

[4] *See* Press Release, National Bank of the Republic of Belarus. *Information on Banks Under Bankruptcy or Liquidation in the Republic of Belarus as of 27.01.2016.* (accessed January 27, 2016). *http://www.nbrb.by/engl/system/ex-banks.asp* (accessed January 27, 2016).

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 648

RIN 0648–XE502

New England Fishery Management Council; Public Meeting

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of a public meeting.

SUMMARY: The New England Fishery Management Council (Council) is scheduling a public meeting of its *Whiting* Committee on April 5, 2016, to consider actions affecting New England fisheries in the exclusive economic zone (EEZ). Recommendations from this group will be brought to the full Council for formal consideration and action, if appropriate.

DATES: This meeting will be held on Tuesday, April 5, 2016, at 10 a.m.

ADDRESSES: The meeting will be held at the Hilton Garden, 1 Thurber Street, Warwick, RI 02886; telephone: (401) 734–9600; fax: (401) 734–9700.

Council address: New England Fishery Management Council, 50 Water Street, Mill 2, Newburyport, MA 01950.

FOR FURTHER INFORMATION CONTACT: Thomas A. Nies, Executive Director, New England Fishery Management Council; telephone: (978) 465–0492.

SUPPLEMENTARY INFORMATION:

Agenda

The Committee will evaluate options for limited access qualification criteria for Amendment 22. They will discuss other potential measures that could reduce the risk that catches exceed Annual Catch Limits for '*choke*' species, including but not limited to Georges Bank *yellowtail flounder* and northern *red hake.* The Committee will also discuss other business as necessary.

Special Accommodations

This meeting is physically accessible to people with disabilities. Requests for sign language interpretation or other auxiliary aids should be directed to Thomas A. Nies, Executive Director, at (978) 465–0492, at least 5 days prior to the meeting date.

Authority: 16 U.S.C. 1801 *et seq.*

Dated: March 14, 2016.

Tracey L. Thompson,

Acting Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. 2016–06048 Filed 3–16–16; 8:45 am]

BILLING CODE 3510–22–P

Notices

Federal Register

Vol. 81, No. 52

Thursday, March 17, 2016

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

DEPARTMENT OF AGRICULTURE

Forest Service

Hiawatha East Resource Advisory Committee

AGENCY: Forest Service, USDA.

ACTION: Notice of meetings.

SUMMARY: The Hiawatha East Resource Advisory Committee (RAC) will meet in Kincheloe, Michigan. The committee is authorized under the Secure Rural Schools and Community Self-Determination Act (the Act) and operates in compliance with the Federal Advisory Committee Act. The purpose of the committee is to improve collaborative relationships and to provide advice and recommendations to the Forest Service concerning projects and funding consistent with Title II of the Act. RAC information can be found at the following Web site: *http://cloudapps-usda-gov.force.com/FSSRS/RAC_Page?id=001t0000002JcwPAAS.*

DATES: The meeting will be held on April 14, 2016, at 5:00 p.m.

All RAC meetings are subject to cancellation. For status of meeting prior to attendance, please contact the person listed under **FOR FURTHER INFORMATION CONTACT.**

ADDRESSES: The meeting will be held at Chippewa County 911 Center, 4657 West Industrial Park Drive, Kincheloe, Michigan.

Written comments may be submitted as described under **SUPPLEMENTARY INFORMATION**. All comments, including names and addresses when provided, are placed in the record and are available for public inspection and copying. The public may inspect comments received at Hiawatha National Forest Supervisor's Office. Please call ahead to facilitate entry into the building.

FOR FURTHER INFORMATION CONTACT: Janel Crooks, RAC Coordinator, by phone at 906–428–5800 or via email at *HiawathaNF@fs.fed.us.*

Individuals who use telecommunication devices for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1–800–877–8339 between 8:00 a.m. and 8:00 p.m., Eastern Standard Time, Monday through Friday.

SUPPLEMENTARY INFORMATION: The purpose of the meeting is to:

1. Provide updates regarding implementation of past projects;
2. Review the role of the RAC, especially for new members;
3. Review and discuss proposals; and
4. Vote to recommend proposals to the Deciding Federal Official.

The meeting is open to the public. The agenda will include time for people to make oral statements of three minutes or less. Individuals wishing to make an oral statement should request in writing by April 1, 2016, to be scheduled on the agenda. Anyone who would like to bring related matters to the attention of the committee may file written statements with the committee staff before or after the meeting. Written comments and requests for time for oral comments must be sent to Hiawatha National Forest; Attention: RAC; 820 Rains Drive, Gladstone, Michigan 49837; by email to *HiawathaNF@fs.fed.us*; or via facsimile to 906–428–9030.

Meeting Accommodations: If you are a person requiring reasonable accommodation, please make requests in advance for sign language interpreting, assistive listening devices, or other reasonable accommodation. For access to the facility or proceedings, please contact the person listed in the section titled **FOR FURTHER INFORMATION CONTACT**. All reasonable accommodation requests are managed on a case by case basis.

Dated: February 26, 2016.

Robert West,

District Ranger.

[FR Doc. 2016–06013 Filed 3–16–16; 8:45 am]

BILLING CODE 3411–15–P

DEPARTMENT OF AGRICULTURE

Forest Service

Hiawatha East Resource Advisory Committee

AGENCY: Forest Service, USDA.

ACTION: Notice of meetings.

SUMMARY: The Hiawatha East Resource Advisory Committee (RAC) will meet in Kincheloe, Michigan. The committee is authorized under the Secure Rural Schools and Community Self-Determination Act (the Act) and operates in compliance with the Federal Advisory Committee Act. The purpose of the committee is to improve collaborative relationships and to provide advice and recommendations to the Forest Service concerning projects and funding consistent with Title II of the Act. RAC information can be found at the following Web site: *http://cloudapps-usda-gov.force.com/FSSRS/RAC_Page?id=001t0000002JcwPAAS.*

DATES: The meeting will be held on April 21, 2016, at 5:00 p.m.

All RAC meetings are subject to cancellation. For status of meeting prior to attendance, please contact the person listed under **FOR FURTHER INFORMATION CONTACT**.

ADDRESSES: The meeting will be held at Chippewa County 911 Center, 4657 West Industrial Park Drive, Kincheloe, Michigan.

Written comments may be submitted as described under **SUPPLEMENTARY INFORMATION**. All comments, including names and addresses when provided, are placed in the record and are available for public inspection and copying. The public may inspect comments received at Hiawatha National Forest Supervisor's Office. Please call ahead to facilitate entry into the building.

FOR FURTHER INFORMATION CONTACT: Janel Crooks, RAC Coordinator, by phone at 906–428–5800 or via email at *HiawathaNF@fs.fed.us.*

Individuals who use telecommunication devices for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1–800–877–8339 between 8:00 a.m. and 8:00 p.m., Eastern Standard Time, Monday through Friday.

SUPPLEMENTARY INFORMATION: The purpose of the meeting is to:

1. Provide updates regarding implementation of past projects;
2. Review the role of the RAC, especially for new members;
3. Review and discuss proposals; and
4. Vote to recommend proposals to the Deciding Federal Official.

The meeting is open to the public. The agenda will include time for people to make oral statements of three minutes or less. Individuals wishing to make an oral statement should request in writing by April 1, 2016, to be scheduled on the agenda. Anyone who would like to bring related matters to the attention of the committee may file written statements with the committee staff before or after the meeting. Written comments and requests for time for oral comments must be sent to Hiawatha National Forest; Attention: RAC; 820 Rains Drive, Gladstone, Michigan 49837; by email to *HiawathaNF@fs.fed.us*; or via facsimile to 906–428–9030.

Meeting Accommodations: If you are a person requiring reasonable accommodation, please make requests in advance for sign language interpreting, assistive listening devices, or other reasonable accommodation. For access to the facility or proceedings, please contact the person listed in the section titled **FOR FURTHER INFORMATION CONTACT**. All reasonable accommodation requests are managed on a case by case basis.

Dated: February 26, 2016.

Robert West,

District Ranger.

[FR Doc. 2016–06014 Filed 3–16–16; 8:45 am]

BILLING CODE 3411–15–P

DEPARTMENT OF AGRICULTURE

Natural Resources Conservation Service

[Docket No. NRCS–2016–0002]

Notice of Meeting of the Agricultural Air Quality Task Force

AGENCY: Natural Resources Conservation Service, Department of Agriculture.

ACTION: Notice of Meeting.

SUMMARY: The U.S. Department of Agriculture (USDA) Agricultural Air Quality Task Force (AAQTF) will meet for discussions on critical air quality issues relating to agriculture. Special emphasis will be placed on obtaining a greater understanding about the relationship between agricultural production and air quality. The meeting is open to the public, and a draft agenda is included in this notice.

DATES: The meeting will convene at 8:00 a.m. EDT on Wednesday and Thursday April 6–7, 2016. A public comment period will be held on the morning of April 7. The meeting will end at approximately 3:00 p.m. on April 7.

ADDRESSES: The meeting will be held at the DoubleTree Hilton Hotel, 300 Army Navy Drive, Arlington, Virginia 22202.

FOR FURTHER INFORMATION CONTACT: Questions and comments should be directed to Dr. Greg Johnson, Designated Federal Official, USDA, NRCS, 1201 Lloyd Boulevard, Suite 800, Portland Oregon 97232; telephone: (503) 273–2424; fax: (503) 273–2401; or email: *greg.johnson@por.usda.gov.*

SUPPLEMENTARY INFORMATION: Notice of this meeting is given under the Federal Advisory Committee Act, 5 U.S.C. App. 2. Additional information concerning AAQTF, including revised agendas for the April 6–7, 2016 meeting that occurs after this **Federal Register** Notice is published, may be viewed at: *www.nrcs.usda.gov/wps/portal/nrcs/detail/national/air/taskforce*

Draft Agenda

Meeting of the AAQTF

April 6–7, 2016 Arlington, Virginia

A. Welcome remarks and introductions
B. U.S. Department of Agriculture (USDA) and the Environmental Protection Agency (EPA) Leadership Remarks
C. AAQTF Charge, History and Direction
D. Federal Advisory Committee Rules and Guidelines
E. USDA Climate Change Building Blocks, Greenhouse Gas Mitigation, and US Agriculture
F. Update on agricultural air quality regulatory issues at the EPA
G. Updates from USDA agencies (Forest Service, NRCS, National Institute of Food and Agriculture, and Agricultural Research Service)
H. AAQTF Subcommittee Formation and Break Out Sessions
I. Agricultural Air Quality Issues and Solutions
J. Ammonia Emissions Measurement and Modeling, and USDA–EPA Collaboration
K. Public Input (Individual presentations limited to 5 minutes)

Please note that the timing of events in the agenda is subject to change to accommodate changing schedules of expected speakers and or extended discussions.

Procedural

This meeting is open to the public. On April 7, 2016, the public will have an opportunity to provide up to 5 minutes of input to the AAQTF.

Information on Services for Individuals With Disabilities

For information on facilities or services for individuals with disabilities or to request special assistance at the meeting, please contact Greg Johnson (contact information listed above). USDA prohibits discrimination in its programs and activities on the basis of race, color, national origin, gender, religion, age, sexual orientation, or disability. Additionally, discrimination on the basis of political beliefs and marital or family status is also prohibited by statutes enforced by USDA. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternate means for communication of program information (Braille, large print, audio tape, etc.) should contact the USDA's Target Center at (202) 720–2000 (voice and TDD).

Signed this 10th day of March 2016, in Washington, DC

Jason A. Weller,

Chief.

[FR Doc. 2016–06078 Filed 3–16–16; 8:45 am]

BILLING CODE 3410–16–P

DEPARTMENT OF AGRICULTURE

Rural Business-Cooperative Service

Inviting Applications for the Rural Business Development Grant Program To Provide Technical Assistance for Rural Transportation Systems

AGENCY: Rural Business-Cooperative Service, USDA.

ACTION: Notice.

SUMMARY: This notice is to invite applications for grants to provide technical assistance for rural transportation (RT) systems under the Rural Business Development Grant (RBDG) program for fiscal year (FY) 2016. Funding shall be made available to qualified national organizations to provide technical assistance for RT systems and for RT systems to Federally Recognized Native American Tribes' (FRNAT) (collectively ''Programs'') from funds appropriated for the RBDG program. The Rural Business-Cooperative Service (RBS) will administer these awards for FY 2016 under the RBDG program and the Consolidated Farm and Rural Development Act. This notice is subject to the terms and funds for the Programs made available in the Consolidated Appropriations Act, 2016 (Pub. L. 114–113) (FY 2016 appropriation).

All applicants are responsible for any expenses incurred in developing their applications.

DATES: Completed applications must be received in the USDA Rural Development State Office no later than

4:30 p.m. (local time) on March 31, 2016. Applications received at a USDA Rural Development State Office after this date will not be considered for FY 2016 funding.

ADDRESSES: Submit applications in paper format to the USDA Rural Development State Office for the State where the project is located. A list of the USDA Rural Development State Office contacts can be found at: *http://www.rurdev.usda.gov/StateOfficeAddresses.html.*

FOR FURTHER INFORMATION CONTACT: Cindy Mason and Kristi Kubista-Hovis, Specialty Programs Division, Business Programs, Rural Business-Cooperative Service, U.S. Department of Agriculture, 1400 Independence Avenue SW., MS 3226, Room 4204-South, Washington, DC 20250–3226, or call 202–720–1400. For further information on this notice, please contact the USDA Rural Development State Office in the State in which the applicant's headquarters is located.

SUPPLEMENTARY INFORMATION:

Overview

Solicitation Opportunity Title: Rural Business Development Grants.

Announcement Type: Initial Announcement.

Catalog of Federal Domestic Assistance Number: 10.351.

Dates: Completed applications must be received in the USDA Rural Development State Office no later than 4:30 p.m. (local time) on March 31, 2016, to be eligible for FY 2016 grant funding. Applications received after this date will not be eligible for FY 2016 grant funding.

A. Program Description

1. *Purpose of the Program.* The purpose of this program is to improve the economic conditions of rural areas.

2. *Statutory Authority.* This program is authorized under section 310B(c) of the Consolidated Farm and Rural Development Act (7 U.S.C. 1932(c)). Regulations are contained in 7 CFR part 4280, subpart E. The program is administered on behalf of RBS at the State level by the USDA Rural Development State Offices. Assistance provided to rural areas under the program may include the provision of on-site technical assistance to local and regional governments, public transit agencies, and related non-profit and for-profit organizations in rural areas; the development of training materials; and the provision of necessary training assistance to local officials and agencies in rural areas.

Awards under the RBDG passenger transportation program will be made on a competitive basis using specific selection criteria contained in 7 CFR part 4280, subpart E, and in accordance with section 310B(c) of the Consolidated Farm and Rural Development Act (7 U.S.C. 1932(c)). Information required to be in the application package includes Standard Form (SF) 424, ''Application for Federal Assistance;'' RD 1940–20, ''Request for Environmental Information;'' Scope of Work Narrative; Income Statement; Balance Sheet or Audit for previous 3 years; AD–1047, ''Debarment/Suspension Certification;'' AD–1048, ''Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion;'' AD–1049, ''Certification Regarding Drug-Free Workplace Requirements;'' SF LLL, ''Disclosure of Lobbying Activities;'' RD 400–1, ''Equal Opportunity Agreement;'' RD 400–4, ''Assurance Agreement;'' and a letter stating Board authorization to obtain assistance. For the FRNAT grant, which must benefit FRNATs, at least 75 percent of the benefits of the project must be received by members of FRNATs. The project that scores the greatest number of points based on the RBDG selection criteria and the discretionary points will be selected for each grant.

Applicants must be qualified national non-profit organizations with experience in providing technical assistance and training to rural communities nationwide for the purpose of improving passenger transportation service or facilities. To be considered ''national,'' RBS requires a qualified organization to provide evidence that it operates RT assistance programming Nation-wide. There is not a requirement to use the grant funds in a multi-State area. Grants will be made to qualified national non-profit organizations for the provision of technical assistance and training to rural communities for the purpose of improving passenger transportation services or facilities.

3. *Definition of Terms.* The definitions applicable to this notice are published at 7 CFR 4280.403.

4. *Application Awards.* The Agency will review, evaluate, and score applications received in response to this notice based on the provisions in 7 CFR 4280, subpart E and as indicated in this notice. However, the Agency advises all interested parties that the applicant bears the burden in preparing and submitting an application in response to this notice.

B. Federal Award Information

Type of Award: Grants.

Fiscal Year Funds: FY 2016.

Approximate Number of Awards: To be determined based on qualified applications received. Historically two awards have been made.

Expected Amounts of Individual Awards and Amount of Funding per Federal Award: $500,000 and $250,000 depending on the number of applicants.

Maximum Awards: A total of $500,000 will be awarded for technical assistance for rural transportation systems and a maximum of $250,000 for FRNATs.

Award Date: Prior to September 30, 2016.

Performance Period: October 1, 2016, through September 30, 2017.

Renewal or Supplemental Awards: None.

C. Eligibility Information

1. Eligible Applicants

To be considered eligible, an entity must be a qualified national non-profit organization serving rural areas as evidenced in its organizational documents and demonstrated experience, per 7 CFR part 4280, subpart E. Grants will be competitively awarded to qualified national non-profit organizations.

The Agency requires the following information to make an eligibility determination that an applicant is a national non-profit organization. These applications must include, but are not limited to, the following:

(a) An original and one copy of SF 424, ''Application for Federal Assistance (For Non-construction);''

(b) Copies of applicant's organizational documents showing the applicant's legal existence and authority to perform the activities under the grant;

(c) A proposed scope of work, including a description of the proposed Project, details of the proposed activities to be accomplished and timeframes for completion of each task, the number of months duration of the Project, and the estimated time it will take from grant approval to beginning of Project implementation;

(d) A written narrative that includes, at a minimum, the following items:

(i) An explanation of why the Project is needed, the benefits of the proposed Project, and how the Project meets the grant eligible purposes;

(ii) Area to be served, identifying each governmental unit, *i.e.,* town, county, etc., to be affected by the Project;

(iii) Description of how the Project will coordinate Economic Development activities with other Economic Development activities within the Project area;

(iv) Businesses to be assisted, if appropriate, and Economic Development to be accomplished;

(v) An explanation of how the proposed Project will result in newly created, increased, or supported jobs in the area and the number of projected new and supported jobs within the next 3 years;

(vi) A description of the applicant's demonstrated capability and experience in providing the proposed Project assistance, including experience of key staff members and persons who will be providing the proposed Project activities and managing the Project;

(vii) The method and rationale used to select the areas and businesses that will receive the service;

(viii) A brief description of how the work will be performed, including whether organizational staff or consultants or contractors will be used; and

(ix) Other information the Agency may request to assist it in making a grant award determination.

(e) The latest 3 years of financial information to show the applicant's financial capacity to carry out the proposed work. If the applicant is less than 3 years old, at a minimum, the information should include all balance sheet(s), income statement(s) and cash flow statement(s). A current audited report is required if available;

(f) Documentation regarding the availability and amount of other funds to be used in conjunction with the funds from RBDG;

(g) A budget which includes salaries, fringe benefits, consultant costs, indirect costs, and other appropriate direct costs for the Project.

2. Cost Sharing or Matching.

Matching funds are not required.

3. Other

Applications will only be accepted from qualified national non-profit organizations to provide technical assistance for RT. There are no ''responsiveness,'' or ''threshold'' eligibility criteria for these grants. There is no limit on the number of applications an applicant may submit under this announcement. In addition to the forms listed under program description, Form AD–3030 ''Representations Regarding Felony Conviction and Tax Delinquent Status for Corporate Applicants,'' must be completed in the affirmative.

None of the funds made available by this or any other Act may be used to enter into a contract, memorandum of understanding, or cooperative agreement with, make a grant to, or provide a loan or loan guarantee to, any corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability, where the awarding agency is aware of the unpaid tax liability, unless a Federal agency has considered suspension or debarment of the corporation and has made a determination that this further action is not necessary to protect the interests of the Government.

None of the funds made available by this or any other Act may be used to enter into a contract, memorandum of understanding, or cooperative agreement with, make a grant to, or provide a loan or loan guarantee to, any corporation that was convicted of a felony criminal violation under any Federal law within the preceding 24 months, where the awarding agency is aware of the conviction, unless a Federal agency has considered suspension or debarment of the corporation and has made a determination that this further action is not necessary to protect the interests of the Government.

4. Completeness Eligibility

Applications will not be considered for funding if they do not provide sufficient information to determine eligibility or are missing required elements.

D. Application and Submission Information

1. Address To Request Application Package

For further information, entities wishing to apply for assistance should contact the USDA Rural Development State Office provided in the **ADDRESSES** section of this notice to obtain copies of the application package.

Applications must be submitted in paper format. Applications submitted to a Rural Development State Office must be received by the closing date and local time deadline.

2. Content and Form of Application Submission

An application must contain all of the required elements. Each application received in a USDA Rural Development State Office will be reviewed to determine if it is consistent with the eligible purposes contained in section 310B(c) of the Consolidated Farm and Rural Development Act (7 U.S.C. 1932(c)). Each selection priority criterion outlined in 7 CFR 4280.435 must be addressed in the application. Failure to address any of the criterion will result in a zero-point score for that criterion and will impact the overall evaluation of the application. Copies of 7 CFR part 4280, subpart E, will be provided to any interested applicant making a request to a USDA Rural Development State Office.

All projects to receive technical assistance through these passenger transportation grant funds are to be identified when the applications are submitted to the USDA Rural Development State Office. Multiple project applications must identify each individual project, indicate the amount of funding requested for each individual project, and address the criteria as stated above for each individual project.

For multiple-project applications, the average of the individual project scores will be the score for that application.

The applicant documentation and forms needed for a complete application are located in the Program Description section of this notice, and 7 CFR part 4280, subpart E.

(a) There are no specific formats, specific limitations on number of pages, font size and type face, margins, paper size, number of copies, and the sequence or assembly requirements.

(b) The component pieces of this application should contain original signatures on the original application.

(c) Since these grants are for technical assistance for transportation purposes, no additional information requirements other than those described in this notice and 7 CFR part 4280, subpart E are required.

3. Unique Entity identifier and System for Award Management (SAM)

All applicants must have a Dun and Bradstreet Data Universal Numbering System (DUNS) number which can be obtained at no cost via a toll-free request line at (866) 705–5711 or at *http://fedgov.dnb.com/webform.* Each applicant (unless the applicant is an individual or Federal awarding agency that is excepted from the requirements under 2 CFR 25.110(b) or (c) or has an exception approved by the Federal awarding agency under 2 CFR 25.110(d)) is required to: (i) Be registered in the System for Award Management (SAM) before submitting its application; (ii) provide a valid unique entity identifier in its application; and (iii) continue to maintain an active SAM registration with current information at all times during which it has an active Federal award or an application or plan under consideration by a Federal awarding

agency. The Federal awarding agency may not make a Federal award to an applicant until the applicant has complied with all applicable unique entity identifier and SAM requirements and, if an applicant has not fully complied with the requirements by the time the Federal awarding agency is ready to make a Federal award, the Federal awarding agency may determine that the applicant is not qualified to receive a Federal award and use that determination as a basis for making a Federal award to another applicant.

4. Submission Dates and Times

(a) Application Deadline Date: No later than 4:30 p.m. (local time) on March 31, 2016.

Explanation of Deadlines: Applications must be in the USDA Rural Development State Office by the local deadline date and time as indicated above. If the due date falls on a Saturday, Sunday, or Federal holiday, the application is due the next business day.

(b) The deadline date means that the completed application package must be received in the USDA Rural Development State Office by the deadline date established above. All application documents identified in this notice are required.

(c) If completed applications are not received by the deadline established above, the application will neither be reviewed nor considered under any circumstances. (d) The Agency will determine the application receipt date based on the actual date postmarked.

(e) This notice is for RT technical assistance grants only and therefore, intergovernmental reviews are not required.

(f) These grants are for RT technical assistance grants only, no construction or equipment purchases are permitted. If the grantee has a previously approved indirect cost rate, it is permissible, otherwise, the applicant may elect to charge the 10 percent indirect cost permitted under 2 CFR 200.414(f) or request a determination of its Indirect Cost Rate. Due to the time required to evaluate Indirect Cost Rates, it is likely that all funds will be awarded by the time the Indirect Cost Rate is determined. No foreign travel is permitted. Pre-Federal award costs will only be permitted with prior written approval by the Agency.

(g) Applicants must submit applications in hard copy format as previously indicated in the Application and Submission Information section of this notice. If the applicant wishes to hand deliver its application, the addresses for these deliveries can be located in the **ADDRESSES** section of this notice.

(h) If you require alternative means of communication for program information (*e.g.,* Braille, large print, audiotape, etc.) please contact USDA's TARGET Center at (202) 720–2600 (voice and TDD).

E. Application Review Information

1. Criteria

All eligible and complete applications will be evaluated and scored based on the selection criteria and weights contained in 7 CFR 4280.435 and will select grantees subject to the grantees' satisfactory submission of the additional items required by 7 CFR part 4280, subpart E and the USDA Rural Development Letter of Conditions. Failure to address any one of the criteria by the application deadline will result in the application being determined ineligible, and the application will not be considered for funding. The amount of an RT grant may be adjusted, at RBS's discretion, to enable RBS to award RT grants to the applications with the highest priority scores in each category.

2. Review and Selection Process

The State Offices will review applications to determine if they are eligible for assistance based on requirements contained in 7 CFR 4280.416 and 4280.417. If determined eligible, your application will be submitted to the National Office. Funding of projects is subject to the applicant's satisfactory submission of the additional items required by that subpart and the USDA Rural Development Letter of Conditions. The Agency reserves the right to award additional discretionary points under 7 CFR 4280.435(k).

In awarding discretionary points, the Agency scoring criteria regularly assigns points to applications that direct loans or grants to projects based in or serving census tracts with poverty rates greater than or equal to 20 percent. This emphasis will support Rural Development's mission of improving the quality of life for rural Americans and commitment to directing resources to those who most need them.

F. Federal Award Administration Information

1. Federal Award Notices

Successful applicants will receive notification for funding from the USDA Rural Development State Office. Applicants must comply with all applicable statutes and regulations before the grant award will be approved. Unsuccessful applications will receive notification by mail.

2. Administrative and National Policy Requirements

Additional requirements that apply to grantees selected for this program can be found in 7 CFR 4280.408, 4280.410, and 4280.439. Awards are subject to USDA grant regulations at 2 CFR chapter IV which incorporates the new Office of Management and Budget (OMB) regulations 2 CFR part 200.

All successful applicants will be notified by letter, which will include a letter of conditions, and a letter of intent to meet the conditions. This letter is not an authorization to begin performance. If the applicant wishes to consider beginning performance prior to the grant being officially closed, all pre-award costs must be approved in writing and in advance by the Agency. The grant will be considered officially awarded when all conditions in the letter of conditions have been met and the Agency obligates the funding for the project.

Additional requirements that apply to grantees selected for this program can be found in 7 CFR part 4280, subpart E; the Grants and Agreements regulations of the U.S. Department of Agriculture codified in 2 CFR parts 400.1 to 400.18, and successor regulations to these parts.

In addition, all recipients of Federal financial assistance are required to report information about first-tier sub-awards and executive compensation (see 2 CFR part 170). You will be required to have the necessary processes and systems in place to comply with the Federal Funding Accountability and Transparency Act of 2006 (Pub. L. 109–282) reporting requirements (see 2 CFR 170.200(b), unless you are exempt under 2 CFR 170.110(b)). More information on these requirements can be found at *http://www.rd.usda.gov/programs-services/value-added-producer-grants.*

The following additional requirements apply to grantees selected for this program:

(a) Form RD 4280–2 ''Rural Business-Cooperative Service Financial Assistance Agreement.''

(b) Letter of Conditions.

(c) Form RD 1940–1, ''Request for Obligation of Funds.''

(d) Form RD 1942–46, ''Letter of Intent to Meet Conditions.''

(e) Form AD–1047, ''Certification Regarding Debarment, Suspension, and Other Responsibility Matters-Primary Covered Transactions.''

(f) Form AD–1048, ''Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions.''

(g) Form AD–1049, ''Certification Regarding a Drug-Free Workplace Requirement (Grants).''

(h) Form AD–3030, ''Representation Regarding Felony Conviction and Tax Delinquent Status for Corporate Applicants.'' Must be signed by corporate applicants who receive an award under this notice.

(i) Form RD 400–4, ''Assurance Agreement.''

(j) SF LLL, ''Disclosure of Lobbying Activities,'' if applicable.

(k) use Form SF 270, ''Request for Advance or Reimbursement.''

3. Reporting

(a) A Financial Status Report and a project performance activity report will be required of all grantees on a quarterly basis until initial funds are expended and yearly thereafter, if applicable, based on the Federal fiscal year. The grantee will cause the project to be completed within the total sums available to it in accordance with the Scope of Work and any necessary modifications thereof prepared by the grantee and approved by the Agency. A final project performance report will be required with the final Financial Status Report. The final report may serve as the last quarterly report. The final report must provide complete information regarding the jobs created and supported as a result of the grant if applicable. Grantees must continuously monitor performance to ensure that time schedules are being met, projected work by time periods is being accomplished, and other performance objectives are being achieved. Grantees must submit an original of each report to the Agency no later than 30 days after the end of the quarter. The project performance reports must include, but not be limited to, the following:

(1) A comparison of actual accomplishments to the objectives established for that period;

(2) Problems, delays, or adverse conditions, if any, which have affected or will affect attainment of overall project objectives, prevent meeting time schedules or objectives, or preclude the attainment of particular project work elements during established time periods. This disclosure shall be accompanied by a statement of the action taken or planned to resolve the situation;

(3) Objectives and timetable established for the next reporting period;

(4) Any special reporting requirements, such as jobs supported and created, businesses assisted, or economic development which results in improvements in median household incomes, and any other specific requirements, should be placed in the reporting section in the Letter of Conditions; and

(5) Within 90 days after the conclusion of the project, the grantee will provide a final project evaluation report. The last quarterly payment will be withheld until the final report is received and approved by the Agency. Even though the grantee may request reimbursement on a monthly basis, the last 3 months of reimbursements will be withheld until a final project, project performance, and financial status report are received and approved by the Agency.

G. Federal Awarding Agency Contact(s)

For general questions about this announcement, please contact your USDA Rural Development State Office provided in the **ADDRESSES** section of this notice.

H. Other Information

Paperwork Reduction Act

In accordance with the Paperwork Reduction Act, the paperwork burden has been cleared by OMB.

Federal Funding Accountability and Transparency Act

All applicants, in accordance with 2 CFR part 25, must have a DUNS number, which can be obtained at no cost via a toll-free request line at (866)705–5711 or online at *http://fedgov.dnb.com/webform.* Similarly, all applicants must be registered in SAM prior to submitting an application. Applicants may register for the SAM at *http://www.sam.gov.* All recipients of Federal financial assistance are required to report information about first-tier sub-awards and executive total compensation in accordance with 2 CFR part 170.

I. Nondiscrimination

The U.S. Department of Agriculture prohibits discrimination against its customers, employees, and applicants for employment on the bases of race, color, national origin, age, disability, sex, gender identity, religion, reprisal, and where applicable, political beliefs, marital status, familial or parental status, sexual orientation, or all or part of an individual's income is derived from any public assistance program, or protected genetic information in employment, or in any program or activity conducted or funded by the Department. (Not all prohibited bases will apply to all programs and/or employment activities.)

If you wish to file a Civil Rights program complaint of discrimination, complete the USDA Program Discrimination Complaint Form (PDF), found online at *http://www.ascr.usda.gov/complaint_filing_cust.html,* or at any USDA office, or call (866) 632–9992 to request the form. You may also write a letter containing all of the information requested in the form. Send your completed complaint form or letter to us by mail at U.S. Department of Agriculture, Director, Office of Adjudication, 1400 Independence Avenue SW., Washington, DC 20250–9410, by fax (202) 690–7442 or email at *program.intake@usda.gov.*

Individuals who are deaf, hard of hearing, or have speech disabilities and wish to file either an EEO or program complaint may contact USDA through the Federal Relay Service at (800) 877–8339 or (800) 845–6136 (in Spanish).

Persons with disabilities, who wish to file a program complaint, please see information above on how to contact us by mail directly or by email.

Dated: March 9, 2016.

Samuel H. Rikkers,

Administrator, Rural Business-Cooperative Service.

[FR Doc. 2016–06036 Filed 3–16–16; 8:45 am]

BILLING CODE 3410–XY–P

DEPARTMENT OF AGRICULTURE

Rural Business-Cooperative Service

Inviting Applications for the Rural Economic Development Loan and Grant Programs for Fiscal Year 2016

AGENCY: Rural Business-Cooperative Service, USDA.

ACTION: Notice.

SUMMARY: This notice is to invite applications for loans and grants under the Rural Economic Development Loan and Grant (REDLG) programs for fiscal year (FY) 2016. Funding to support up to $37 million in loans and $11 million in grants is currently available. The commitment of program dollars will be made to applicants of selected responses that have fulfilled the necessary requirements for obligation.

All applicants are responsible for any expenses incurred in developing their applications.

DATES: The deadlines for completed applications to be received in the USDA Rural Development State Office no later than 4:30 p.m. (local time) are: Third Quarter, March 31, 2016; and Fourth Quarter, June 30, 2016.

ADDRESSES: Submit applications in paper format to the USDA Rural Development State Office for the State where the project is located. A list of the USDA Rural Development State Office contacts can be found at: *http://*

www.rurdev.usda.gov/StateOfficeAddresses.html.

FOR FURTHER INFORMATION CONTACT: Cindy Mason at (202) 690–1433, *Cindy.Mason@wdc.usda.gov,* and Kristi Kubista-Hovis at (202) 720–1400, *Kristi.Kubista-Hovis@wdc.usda.gov.* Please contact the USDA Rural Development State Office in which the project will be located.

SUPPLEMENTARY INFORMATION:

Overview

Solicitation Opportunity Type: Rural Economic Development Loans and Grants.

Announcement Type: Initial Announcement.

Catalog of Federal Domestic Assistance Number: 10.854.

Dates: The deadline for completed applications to be received in the USDA Rural Development State Office no later than 4:30 p.m. (local time) are: Third Quarter, March 31, 2016; and Fourth Quarter, June 30, 2016.

A. Program Description

1. *Purpose of the Program.* The purpose of the program is to promote rural economic development and job creation projects.

2. *Statutory Authority.* These programs are authorized under 7 U.S.C. 940c and 7 CFR part 4280, subpart A. Assistance provided to rural areas, as defined, under this program may include business startup costs, business expansion, business incubators, technical assistance feasibility studies, advanced telecommunications services and computer networks for medical, educational, and job training services, and community facilities projects for economic development.

Awards under the REDLG programs will be made on a competitive basis using specific selection criteria contained in 7 CFR part 4280, subpart A. Information required to be in the application package includes Standard Form (SF) 424, ''Application for Federal Assistance;'' a Resolution of the Board of Directors; AD–1047, ''Debarment/Suspension Certification;'' AD–1049 ''Certification Regarding Drug-Free Workplace Requirements;'' SF LLL, Restrictions on Lobbying; RD 400–1, ''Equal Opportunity Agreement;'' RD 400–4, ''Assurance Agreement;'' Assurance Statement for the Uniform Act; Seismic Certification (if construction); paperwork required in accordance with 7 CFR 1940, subpart G, ''Environmental Program.'' If the proposal involves new construction; large increases in employment; hazardous waste; a change in use, size, capacity, purpose or location from an original facility; or is publicly controversial, the following is required: RD 1940–20, ''Request for Environmental Information;'' RUS Form 7, ''Financial and Statistical Report;'' and RUS Form 7a, ''Investments, Loan Guarantees, and Loans,'' or similar information; and written narrative of project description. Applications will be tentatively scored by the State Offices and submitted to the National Office for review.

3. *Definition of Terms.* The definitions applicable to this notice are published at 7 CFR 4280.3.

4. *Application Awards.* The Agency will review, evaluate, and score applications received in response to this notice based on the provisions found in 7 CFR part 4280, subpart A, and as indicated in this notice. However, the Agency advises all interested parties that the applicant bears the burden in preparing and submitting an application in response to this notice whether or not funding is appropriated for these programs in FY 2016.

B. Federal Award Information

Type of Awards: Loans and Grants.

Fiscal Year Funds: FY 2016.

Available Funds: Loans: $37 million ; Grants: $11 million.

Maximum Award: The Agency anticipates the following maximum amounts per award: Loans—$1,000,000; Grants—$300,000.

Award Dates: Second Quarter, March 16, 2016; Third Quarter, June 15, 2016; and Fourth Quarter, September 15, 2016.

Performance Period: October 1, 2015, through September 30, 2016.

Renewal or Supplemental Awards: None.

C. Eligibility Information

1. Eligible Applicants

Loans and grants may be made to any entity that is identified by USDA Rural Development as an eligible borrower under the Rural Electrification Act of 1936, as amended (Act). In accordance with 7 CFR 4280.13, applicants that are not delinquent on any Federal debt or otherwise disqualified from participation in these programs are eligible to apply. An applicant must be eligible under 7 U.S.C. 940c. Notwithstanding any other provision of law, any former Rural Utilities Service borrower that has repaid or prepaid an insured, direct, or guaranteed loan under the Act, or any not-for-profit utility that is eligible to receive an insured or direct loan under such Act shall be eligible for assistance under section 313(b)(2)(B) of such Act in the same manner as a borrower under such Act. All other restrictions in this notice will apply.

The Agency requires the following information to make an eligibility determination. These applications must include, but are not limited to, the following:

(a) An original and one copy of SF 424, ''Application for Federal Assistance (For Non-construction);''

(b) Copies of applicant's organizational documents showing the applicant's legal existence and authority to perform the activities under the grant;

(c) A proposed scope of work, including a description of the proposed project, details of the proposed activities to be accomplished and timeframes for completion of each task, the number of months duration of the project, and the estimated time it will take from grant approval to beginning of project implementation;

(d) A written narrative that includes, at a minimum, the following items:

(i) An explanation of why the project is needed, the benefits of the proposed project, and how the project meets the grant eligible purposes;

(ii) Area to be served, identifying each governmental unit, *i.e.,* town, county, etc., to be affected by the project;

(iii) Description of how the project will coordinate Economic Development activities with other Economic Development activities within the project area;

(iv) Businesses to be assisted, if appropriate, and Economic Development to be accomplished;

(v) An explanation of how the proposed project will result in newly created, increased, or supported jobs in the area and the number of projected new and supported jobs within the next 3 years;

(vi) A description of the applicant's demonstrated capability and experience in providing the proposed project assistance, including experience of key staff members and persons who will be providing the proposed project activities and managing the project;

(vii) The method and rationale used to select the areas and businesses that will receive the service;

(viii) A brief description of how the work will be performed, including whether organizational staff or consultants or contractors will be used; and

(ix) Other information the Agency may request to assist it in making a grant award determination.

(e) The latest 3 years of financial information to show the applicant's financial capacity to carry out the

proposed work. If the applicant is less than 3 years old, at a minimum, the information should include all balance sheet(s), income statement(s) and cash flow statement(s). A current audited report is required if available;

(f) Documentation regarding the availability and amount of other funds to be used in conjunction with the funds from REDLG; and

(g) A budget which includes salaries, fringe benefits, consultant costs, indirect costs, and other appropriate direct costs for the project.

2. Cost Sharing or Matching

For loans, either the Ultimate Recipient or the Intermediary must provide supplemental funds for the project equal to at least 20 percent of the loan to the Intermediary. For grants, the Intermediary must establish a Revolving Loan Fund and contribute an amount equal to at least 20 percent of the Grant. The supplemental contribution must come from Intermediary's funds which may not be from other Federal Grants, unless permitted by law.

3. Other

Applications will only be accepted for projects that promote rural economic development and job creation.

There are no ''responsiveness'' or ''threshold'' eligibility criteria for these loans and grants. There is no limit on the number of applications an applicant may submit under this announcement. In addition to the forms listed under the program description, Form AD 3030 ''Representations Regulation Felony Conviction and Tax Delinquent Status for Corporate Applicants,'' must be completed in the affirmative.

None of the funds made available by this or any other Act may be used to enter into a contract, memorandum of understanding, or cooperative agreement with, make a grant to, or provide a loan or loan guarantee to, any corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability, where the awarding agency is aware of the unpaid tax liability, unless a Federal agency has considered suspension or debarment of the corporation and has made a determination that this further action is not necessary to protect the interests of the Government.

None of the funds made available by this or any other Act may be used to enter into a contract, memorandum of understanding, or cooperative agreement with, make a grant to, or provide a loan or loan guarantee to, any corporation that was convicted of a felony criminal violation under any Federal law within the preceding 24 months, where the awarding agency is aware of the conviction, unless a Federal agency has considered suspension or debarment of the corporation and has made a determination that this further action is not necessary to protect the interests of the Government.

4. Completeness Eligibility

Applications will not be considered for funding if they do not provide sufficient information to determine eligibility or are missing required elements.

D. Application and Submission Information

1. Address To Request Application Package

For further information, entities wishing to apply for assistance should contact the USDA Rural Development State Office provided in the **ADDRESSES** section of this notice to obtain copies of the application package.

Applications must be submitted in paper format. Applications submitted to a Rural Development State Office must be received by the closing date and local time deadline.

All applicants must have a Dun and Bradstreet Data Universal Numbering System (DUNS) number which can be obtained at no cost via a toll-free request line at (866) 705–5711 or at *http://fedgov.dnb.com/webform.* Each applicant (unless the applicant is an individual or Federal awarding agency that is exempt from the requirements under 2 CFR 25.110(b) or (c) or has an exception approved by the Federal awarding agency under 2 CFR 25.110(d)) is required to: (i) Be registered in the System for Award Management (SAM) before submitting its application; (ii) provide a valid unique entity identifier in its application; and (iii) continue to maintain an active SAM registration with current information at all times during which it has an active Federal award or an application or plan under consideration by a Federal awarding agency. The Federal awarding agency may not make a Federal award to an applicant until the applicant has complied with all applicable unique entity identifier and SAM requirements and, if an applicant has not fully complied with the requirements by the time the Federal awarding agency is ready to make a Federal award, the Federal awarding agency may determine that the applicant is not qualified to receive a Federal award and use that determination as a basis for making a Federal award to another applicant.

Please note that applicants must locate the downloadable application package for this program by the Catalog of Federal Domestic Assistance Number or FedGrants Funding Opportunity Number, which can be found at *http://www.grants.gov.*

2. Content and Form of Application Submission

An application must contain all of the required elements. Each selection priority criterion outlined in 7 CFR 4280.42(b) must be addressed in the application. Failure to address any of the criterion will result in a zero-point score for that criterion and will impact the overall evaluation of the application. Copies of 7 CFR part 4280, subpart A, will be provided to any interested applicant making a request to a Rural Development State Office. An original copy of the application must be filed with the Rural Development State Office for the State where the Intermediary is located.

The applicant documentation and forms needed for a complete application are located in the Program Description section of this notice, and 7 CFR part 4280, subpart A. There are no specific formats required per this notice, and applicants may request forms and addresses from the **ADDRESSES** section of this notice.

(a) There are no specific limitations on the number of pages or other formatting requirements other than those described in the Program Description section.

(b) There are no specific limitations on the number of pages, font size and type face, margins, paper size, number of copies, and the sequence or assembly requirements.

(c) The component pieces of this application should contain original signatures on the original application.

3. Submission Dates and Times

(a) *Application Deadline Dates:* No later than 4:30 p.m. (local time) on: Third Quarter, March 31, 2016; and Fourth Quarter, June 30, 2016.

Explanation of Dates: Applications must be in the USDA Rural Development State Office by the dates and times as indicated above. If the due date falls on a Saturday, Sunday, or Federal holiday, the application is due the next business day.

(b) The deadline date means that the completed application package must be received in the USDA Rural

Development State Office by the deadline date and time established above. All application documents identified in this notice are required.

(c) If completed applications are not received by the deadline established above, the application will neither be reviewed nor considered under any circumstances.

(d) The Agency will determine the application receipt date based on the actual date postmarked.

(e) If the grantee has a previously approved indirect cost rate, it is permissible, otherwise, the applicant may elect to charge the 10 percent indirect cost permitted under 2 CFR 200.414(f). Due to the time required to evaluate Indirect Cost Rates, it is likely that all funds will be awarded by the time the Indirect Cost Rate is determined. No foreign travel is permitted. Pre-Federal award costs will only be permitted with prior written approval by the Agency.

(f) Applicants must submit applications in hard copy format as previously indicated in the Application and Submission Information section of this notice. If the applicant wishes to hand deliver its application, the addresses for these deliveries can be located in the **ADDRESSES** section of this notice.

(g) If you require alternative means of communication for program information (*e.g.,* Braille, large print, audiotape, etc.) please contact USDA's TARGET Center at (202) 720–2600 (voice and TDD).

E. Application Review Information

1. Criteria

All eligible and complete applications will be evaluated and scored based on the selection criteria and weights contained in 7 CFR part 4280, subpart A. Failure to address any one of the criteria by the application deadline will result in the application being determined ineligible, and the application will not be considered for funding.

2. Review and Selection Process

The State Offices will review applications to determine if they are eligible for assistance based on requirements contained in 7 CFR part 4280, subpart A. If determined eligible, your application will be submitted to the National Office. Funding of projects is subject to the Intermediary's satisfactory submission of the additional items required by that subpart and the USDA Rural Development Letter of Conditions. The Agency reserves the right to award additional discretionary points under 7 CFR 4280.43.

In order to distribute funds among the greatest number of projects possible, applications will be reviewed, prioritized, and funded by ranking each State's highest scoring project in highest to lowest score order. The highest scoring project from each State will be considered that State's Priority One project. Priority One projects will be ranked according to score from highest to lowest. The second highest scoring project from each State will be considered the State's Priority Two project. Priority Two projects will be ranked according to score from highest to lowest and so forth until all projects have been scored and ranked in priority order. All Priority One projects will be funded before any Priority Two projects and so forth until funds are depleted, so as to ensure broad geographic distribution of funding.

F. Federal Award Administration Information

1. Federal Award Notices

Successful applicants will receive notification for funding from the Rural Development State Office. Applicants must comply with all applicable statutes and regulations before the loan/grant award can be approved. Provided the application and eligibility requirements have not changed, an application not selected will be reconsidered in three subsequent quarterly funding competitions for a total of four competitions. If an application is withdrawn, it can be resubmitted and will be evaluated as a new application.

2. Administrative and National Policy Requirements

Additional requirements that apply to intermediaries/grantees selected for these programs can be found in 7 CFR part 4280, subpart A. Awards are subject to USDA grant regulations at 2 CFR chapter IV which incorporated the Office of Management and Budget (OMB) regulations 2 CFR part 200.

All successful applicants will be notified by letter which will include a letter of conditions, and a letter of intent to meet the conditions. This letter is not an authorization to begin performance. If the applicant wishes to consider beginning performance prior to the loan or grant being officially closed, all pre-award costs must be approved in writing and in advance by the Agency. The loan or grant will be considered officially awarded when all conditions in the Letter of Conditions have been met and the Agency obligates the funding for the project.

Additional requirements that apply to intermediaries or grantees selected for these programs can be found in 7 CFR part 4280, subpart A; the Grants and Agreements regulations of the U.S. Department of Agriculture codified in 2 CFR 400.1 to 400.18, and successor regulations to these parts.

In addition, all recipients of Federal financial assistance are required to report information about first-tier sub-awards and executive compensation (see 2 CFR part 170). You will be required to have the necessary processes and systems in place to comply with the Federal Funding Accountability and Transparency Act of 2006 (Pub. L. 109–282) reporting requirements (see 2 CFR 170.200(b), unless you are exempt under 2 CFR 170.110(b)).

The following additional requirements apply to intermediaries/grantees selected for these programs:

(a) Form RD 4280–2 ''Rural Business-Cooperative Service Financial Assistance Agreement.''

(b) Letter of Conditions

(c) Form RD 1940–1, ''Request for Obligation of Funds.''

(d) Form RD 1942–46, ''Letter of Intent To Meet Conditions.''

(e) Form AD–1047, ''Certification Regarding Debarment, Suspension, and Other Responsibility Matters-Primary Covered Transactions.''

(f) Form AD–1048 ''Certification Regarding Debarment, Suspension, Ineligibility and voluntary Exclusion-Lower Tier Covered Transactions.''

(g) Form AD–1049, ''Certification Regarding a Drug-Free Workplace Requirement (Grants).''

(h) Form AD–3031, ''Assurance Regarding Felony Conviction or Tax Delinquent Status for Corporate Applicants.'' Must be signed by corporate applicants who receive an award under this notice.

(i) Form RD 400–4, ''Assurance Agreement.''

(j) SF LLL, ''Disclosure of Lobbying Activities,'' if applicable.

(k) Use Form SF 270, ''Request for Advance or Reimbursement.''

3. Reporting

(a) A Financial Status Report and a project performance activity report will be required of all grantees on a quarterly basis until initial funds are expended and yearly thereafter, if applicable, based on the Federal fiscal year. The grantee will cause the project to be completed within the total sums available to it in accordance with the Scope of Work and any necessary modifications thereof prepared by the grantee and approved by the Agency. A final project performance report will be required with the final Financial Status Report. The final report may serve as the

last quarterly report. The final report must provide complete information regarding the jobs created and supported as a result of the grant if applicable. Grantees must continuously monitor performance to ensure that time schedules are being met, projected work by time periods is being accomplished, and other performance objectives are being achieved. Grantees must submit an original of each report to the Agency no later than 30 days after the end of the quarter. The project performance reports must include, but not be limited to, the following:

(1) A comparison of actual accomplishments to the objectives established for that period;

(2) Problems, delays, or adverse conditions, if any, which have affected or will affect attainment of overall project objectives, prevent meeting time schedules or objectives, or preclude the attainment of particular project work elements doing established time periods. This disclosure shall be accompanied by a statement of the action taken or planned to resolve the situation; and

(3) Objectives and timetable established for the next reporting period.

(4) Any special reporting requirements, such as jobs supported and created, businesses assisted, or economic development which results in improvements in median household incomes, and any other specific requirements, should be placed in the reporting section of the Letter of Conditions.

(5) Within 90 after the conclusion of the project, the grantee will provide a final project evaluation report. The last quarterly payment will be withheld until the final report is received and approved by the Agency. Even though the grantee may request reimbursement on a monthly basis, the last 3 months of reimbursements will be withheld until a final report, project performance, and financial status report are received and approved by the Agency.

In addition to any reports required by 2 CFR part 200 and 2 CFR 400.1 to 400.18, the intermediary/grantee must provide reports as required by 7 CFR part 4280, subpart A.

G. Federal Awarding Agency Contact(s)

For general questions about this announcement, please contact your USDA Rural Development State Office provided in the **ADDRESSES** section of this notice.

H. Other Information

VIII. Paperwork Reduction Act

In accordance with the Paperwork Reduction, the paperwork burden has been cleared by OMB.

Federal Funding Accountability and Transparency Act

All applicants, in accordance with 2 CFR part 25, must have a DUNS number, which can be obtained at no cost via a toll-free request line at (866) 705–5711 or online at *http://fedgov.dnb.com/webform.* Similarly, all applicants must be registered in SAM prior to submitting an application. Applicants may register for the SAM at *http://www.sam.gov.* All recipients of Federal financial grant assistance are required to report information about first-tier sub-awards and executive total compensation in accordance with 2 CFR part 170.

I. Nondiscrimination Statement

The U.S. Department of Agriculture (USDA) prohibits discrimination against its customers, employees, and applicants for employment on the bases of race, color, national origin, age, disability, sex, gender identity, religion, reprisal, and where applicable, political beliefs, marital status, familial or parental status, sexual orientation, or all or part of an individual's income is derived from any public assistance program, or protected genetic information in employment or in any program or activity conducted or funded by the Department. (Not all prohibited bases will apply to all programs and/or employment activities.)

If you wish to file a Civil Rights program complaint of discrimination, complete the USDA Program Discrimination Complaint Form (PDF), found online at *http://www.ascr.usda.gov/complaint_filing_cust.html,* or at any USDA office, or call (866) 632–9992 to request the form. You may also write a letter containing all of the information requested in the form. Send your completed complaint form or letter to us by mail at U.S. Department of Agriculture, Director, Office of Adjudication, 1400 Independence Avenue SW., Washington, DC 20250–9410, by fax (202) 690–7442 or email at *program.intake@usda.gov.*

Individuals who are deaf, hard of hearing, or have speech disabilities and wish to file either an EEO or program complaint may contact USDA through the Federal Relay Service at (800) 877–8339 or (800) 845–6136 (in Spanish).

Persons with disabilities, who wish to file a program complaint, please see information above on how to contact us by mail directly or by email. If you require alternative means of communication for program information (*e.g.,* Braille, large print, audiotape, etc.) please contact USDA's TARGET Center at (202) 720–2600 (voice and TDD).

Dated: March 10, 2016.

Samuel H. Rikkers,

Administrator, Rural Business-Cooperative Service.

[FR Doc. 2016–06034 Filed 3–16–16; 8:45 am]

BILLING CODE 3410–XY–P

DEPARTMENT OF AGRICULTURE

Rural Business-Cooperative Service

Rural Housing Service

Rural Utilities Service

Farm Bill: Strategic Economic and Community Development—Reservation of Fiscal Year 2016 Program Funds

AGENCY: Rural Business-Cooperative Service, Rural Housing Service, Rural Utilities Service, USDA.

ACTION: Notice.

SUMMARY: Section 6025 of the Agricultural Act of 2014 (2014 Farm Bill) provides the Secretary of Agriculture the authority to give priority to projects that support strategic economic development or community development plans. The Agency has the authority to reserve funds for those programs (referred to as the ''underlying programs'') included in 7 CFR part 1980, subpart K, Strategic Economic and Community Development (SECD), for projects that support multi-jurisdictional strategic economic and community development plans. This notice identifies for fiscal year 2016 the underlying programs from which funds will be reserved for Section 6025 SECD requirements. Those programs are listed in the **SUPPLEMENTARY INFORMATION** section.

DATES: *Effective Date:* October 1, 2015.

FOR FURTHER INFORMATION CONTACT: For more information, please contact your respective Rural Development State Office listed here: *http://www.rd.usda.gov/browse-state.* A checklist of all required application information for Section 6025 SECD can be found at: *http://www.rd.usda.gov/programs-services/strategic-economic-and-community-development.*

For all other inquiries, contact Regional Community Economic Development Coordinators as follows:

- Midwest Region—Christine Sorensen: 202–568–9832, *Christine.Sorensen@wdc.usda.gov.*

• Northeast Region—Angela Callie: 610–791–9810 ext. 123, *Angela.Callie@wdc.usda.gov*.

• Southern Region—Greg Dale: (870) 633–3055 Ext. 123, *Gregory.Dale@wdc.usda.gov*.

• National Office—Farah Ahmad, Program Manager: Rural Business-Cooperative Service, U.S. Department of Agriculture, Stop 3254, 1400 Independence Avenue SW., Washington, DC 20250–0783, Email: *RDCED@wdc.usda.gov.*

SUPPLEMENTARY INFORMATION: This action has been reviewed and determined not to be a rule or regulation as defined in Executive Order 12866, as amended by Executive Order 13258.

As provided for in 7 CFR 1980.1004, this notice identifies for fiscal year 2016 the underlying programs from which funds will be reserved for Section 6025 SECD requirements. The following table specifies the level of program funding allocations from which the Section 6025 SECD reserved funds will be drawn, and the percentage of funds being reserved from the underlying program funding allocations.

Program	Level of funding allocations	Percentage of funds reserved for section 6025
Community Facility Loans (7 CFR part 1942, subpart A)	State	5 percent.
Fire and Rescue and Other Small Community Facilities Projects (7 CFR part 1942, subpart C).	State	5 percent.
Community Facilities Grant Program (7 CFR part 3570, subpart B)	State	10 percent.
Community Programs Guaranteed Loans (7 CFR part 3575, subpart A).	National	10 percent.
Water and Waste Disposal Programs Guaranteed Loans (7 CFR part 1779).	National	10 percent.
Water and Waste Loans and Grants (7 CFR part 1780, subparts A, B, C, and D).	National	10 percent loan; 5 percent grant.
Business and Industry Guaranteed Loanmaking and Servicing (7 CFR part 4279, subparts A and B; 7 CFR part 4287, subpart B).	National	5 percent.
Rural Business Development Grants (7 CFR part 4280, subpart E)	State	5 percent.

The U.S. Department of Agriculture remains committed to assisting high-poverty communities as one of its strategic priorities. The programs listed above consider poverty-related criteria in its application requirements. For this reason, Section 6025 offers an incentive for high poverty communities to have increased access to these programs so long as they have eligible projects that support the implementation of a multi-jurisdictional plan. This is particularly beneficial for areas such as Promise Zones, the Delta, Appalachia, Colonias, and other rural places with persistent poverty issues.

If submitting projects for consideration for the underlying program's Section 6025 SECD reserved funds, applicants must (1) meet the eligibility requirements of the underlying program based on its annual notice, policies and/or regulations, including application deadlines; (2) meet the eligibility requirements of Section 6025 SECD in accordance with this Notice and 7 CFR part 1980, subpart K; and (3) submit Form RD 1980–88 and supporting documentation. Applicants are encouraged to submit Form RD 1980–88 and supporting documentation concurrent with the application for the underlying program for which the applicant is applying, in an effort to avoid improper or duplicative awards to recipients as required by law. Rural Development will work with programs to ensure the review process is compliant and consistent with Section 6025 SECD regulation.

All of the underlying program's reserves for Section 6025 SECD competition must be obligated by the Agency no later than June 30, 2016. As provided for in 7 CFR 1980.1004(c), the Agency will return any reserved funds that are not obligated by June 30, 2016, to the underlying program's regular funding account for obligation to all eligible projects in that program. After June 30, 2016, any project that supports a multi-jurisdictional strategic economic and community development plan may be competed with all other projects within the applicable underlying program for the remainder of FY 2016, but without the benefit of any mandated priority points and access to reserved funds available under 7 CFR part 1980, subpart K.

This notice establishes the listed percentages of funds reserved for Section 6025 and is effective October 1, 2015 for the entirety of FY 2016 and the entirety of each succeeding fiscal year unless changed in accordance with 7 CFR 1980.1004(b).

USDA Non-Discrimination Statement

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

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

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD–3027, found online at *http://www.ascr.usda.gov/complaint_filing_cust.html* and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632–9992. Submit your completed form or letter to USDA by:

1. *Mail:* U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue SW., Washington, DC 20250–9410;

2. *Fax:* (202) 690–7442; or

3. *Email: program.intake@usda.gov.*

USDA is an equal opportunity provider, employer, and lender.

Dated: March 3, 2016.

Lisa Mensah,

Under Secretary, Rural Development.

[FR Doc. 2016–06035 Filed 3–16–16; 8:45 am]

BILLING CODE 3410–XY–P

DEPARTMENT OF COMMERCE

Economic Development Administration

Proposed Information Collection; Comment Request; Form ED–840P Petition by a Firm for Certification of Eligibility To Apply for Trade Adjustment Assistance; Trade Adjustment Assistance for Firms Program

AGENCY: Economic Development Administration (EDA), Department of Commerce.

ACTION: Notice.

SUMMARY: The Department of Commerce, as part of its continuing effort to reduce paperwork and respondent burden, invites the general public and other federal agencies to take this opportunity to comment on the proposed and/or continuing information collections, as required by the Paperwork Reduction Act of 1995.

DATES: Written comments must be submitted on or before May 16, 2016.

ADDRESSES: Direct all written comments and recommendations for the proposed information collection to Jennifer Jessup, Departmental Paperwork Clearance Officer, Department of Commerce, Room 6616, 14th and Constitution Avenue NW., Washington, DC 20230 (or via the Internet at *jjessup@doc.gov.*

FOR FURTHER INFORMATION CONTACT: Requests for additional information or copies of the information collection instrument and instructions should be directed to Miriam Kearse, Lead Program Analyst, Trade Adjustment Assistance Division, Room 71030, Economic Development Administration, 1401 Constitution Ave. NW., Washington, DC 20230, telephone (202) 482–3963, facsimile (202) 482–2883 (or via the Internet at *mkearse@eda.gov*).

SUPPLEMENTARY INFORMATION:

I. Abstract

EDA administers the Trade Adjustment Assistance for Firms (TAAF) Program, which is authorized under chapters 3 and 5 of title II of the Trade Act of 1974, as amended (19 U.S.C. 2341 *et seq.*) (Trade Act), and the Trade Adjustment Assistance Reauthorization Act of 2015 (Pub. L. 114–27) which reauthorized the program, through a national network of non-profit and university-affiliated Trade Adjustment Assistance Centers (TAACs), each of which serves a different geographic service region. EDA certifies firms as eligible to participate in the TAAF Program and provides funding to allow eligible client-firms to receive adjustment assistance through the TAACs. The information collected on Form ED–840P and relevant supporting documentation is used to determine if a firm is eligible to participate in the program. In accordance with the Trade Act and EDA's regulations as set out at 13 CFR part 315, EDA must verify that the following have occurred: (1) A significant reduction in the number or proportion of the workers in the firm, a reduction in the workers' wage or work hours, or an imminent threat of such reductions; (2) sales or production of the firm have decreased absolutely, as defined in EDA's regulations, or sales or production, or both, of any article or service accounting for at least 25 percent of the firm's sales or production has decreased absolutely; and (3) an increase in imports of articles or services like or directly competitive with those produced or provided by the petitioning firm, which has contributed importantly to the decline in employment and sales or production of that firm. Additionally, the firm must demonstrate that its customers have reduced purchases from the firm in favor of buying items or services from foreign suppliers. The use of the form standardizes and limits the information collected as part of the certification process and eases the burden on applicants and reviewers alike.

In addition, after being determined eligible for TAAF Program assistance using Form ED–840P, firms must create an EDA-approved adjustment proposal, which is each firm's business plan to remain viable in the current global economy, in order to receive financial assistance under the TAAF Program. Each adjustment proposal must meet certain requirements as set out in the Trade Act and EDA's regulation at 13 CFR 315.6. This notice also includes an estimate for adjustment proposals.

II. Method of Collection

Form ED–840P may be obtained in Portable Document Format (PDF) from EDA or the TAACs upon request. TAACs are responsible for preparing the application on the firm's behalf. Although there is no form associated with adjustment proposals, they must meet the requirements for adjustment proposals set out in EDA's regulation at 13 CFR 315.16. Both petitions for certification on Form ED–840P and adjustment proposals may be submitted via email to *taac@eda.gov* or in hard copy to EDA at Trade Adjustment Assistance for Firms, 1401 Constitution Avenue NW., Room 71030, Washington DC 20230.

III. Data

OMB Control Number: 0610–0091.

Form Number(s): ED–840P.

Type of Review: Regular submission.

Affected Public: Businesses or other for-profit organizations.

Estimated Number of Respondents: 800 (500 petitions for certification and 300 adjustment proposals).

Estimated Time per Response: 128.2 hours (8.2 for petitions for certification and 120 for adjustment proposals).

Estimated Total Annual Burden Hours: 40,100 (4,100 for petitions for certification and 36,000 for adjustment proposals).

Estimated Total Annual Cost to Public: $1,664,000 ($179,550 for petitions for certification and $1,485,000 for adjustment proposals).

IV. Request for Comments

Comments are invited on: (1) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (2) the accuracy of the agency's estimate of the burden (including hours and cost) of the proposed collection of information; (3) ways to enhance the quality, utility, and clarity of the information to be collected; and (4) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology.

Comments submitted in response to this notice will be summarized and/or included in the request for OMB approval of this information collection; they also will become a matter of public record.

Dated: March 14, 2016.

Glenna Mickelson,

Management Analyst, Office of the Chief Information Officer.

[FR Doc. 2016–06006 Filed 3–16–16; 8:45 am]

BILLING CODE 3510–WH–P

DEPARTMENT OF COMMERCE

International Trade Administration

Notice of Scope Rulings

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

DATES: *Effective Date:* March 17, 2016.

SUMMARY: The Department of Commerce (''Department'') hereby publishes a list of scope rulings and anticircumvention determinations made between July 1, 2015, and September 30, 2015, inclusive. We intend to publish future lists after the close of the next calendar quarter.

FOR FURTHER INFORMATION CONTACT: Brenda E. Waters, AD/CVD Operations, Customs Liaison Unit, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone: 202–482–4735.

SUPPLEMENTARY INFORMATION:

Background

The Department's regulations provide that the Secretary will publish in the **Federal Register** a list of scope rulings on a quarterly basis.[1] Our most recent notification of scope rulings was published on September 23, 2015.[2] This current notice covers all scope rulings and anticircumvention determinations made by Enforcement and Compliance between July 1, 2015, and September 30, 2015, inclusive. Subsequent lists will follow after the close of each calendar quarter.

Scope Rulings Made Between July 1, 2015 and September 31, 2015

Mexico

A–201–805: Circular Welded Non-Alloy Steel Pipe From Mexico

Requestor: Maquilacero, S.A. de C.V. (Maquilacero); Maquilacero's black pipe manufactured to the ASTM A–513 specification is within the scope of the order, as it does not meet the exclusion for mechanical tubing set forth in the Order; July 27, 2015.

A–201–805: Circular Welded Non-Alloy Steel Pipe From Mexico

Requestor: Perfiles y Herrajes LM, S.A. de C.V. (Perfiles); Perfiles' black pipe manufactured to the ASTM A–513 specification meets the exclusion for mechanical tubing set forth in the Order and is, therefore, outside the scope of the order; August 19, 2015.

Japan

A–588–845: Stainless Steel Sheet and Strip in Coils From Japan

Requestor: American BOA, Inc. (ABI); ABI's precision strip products are within the scope of the order because they possess all of the essential physical characteristics of subject stainless steel sheet and strip in coils; July 22, 2015.

People's Republic of China

A–570–967 and C–570–968: Aluminum Extrusions From the People's Republic of China

Requestor: Agilent Technologies, Inc. (Agilent); Agilent's Foreline Hose Assembly is excluded from the scope because (a) when assembled, it represents finished merchandise fully and permanently completed and assembled containing aluminum extrusions as well as non-extruded aluminum components; and (b) when unassembled, it is a finished goods kit, imported as a combination of all necessary parts to assemble a finished good, and requires no further finishing or fabrication after importation; August 27, 2015.

A–570–967 and C–570–968: Aluminum Extrusions From the People's Republic of China

Requestor: Ruubermaid Commercial Products LLC (Rubbermaid); Rubbermaid's 13 product models, which fall into three categories of floor cleaning products: Quick-Connect frames, Quick-Connect handles, and mopping kits, are excluded from the AD and CVD scope pursuant to the CIT's remand order in *Rubbermaid Commercial Products LLC* v. *United States,* Court No. 11–00463, Slip Op. 14–113 (CIT September 23, 2014) (*Rubbermaid I*). Specifically, on remand, the Department found that Rubbermaid's quick-connect frames and quick-connect handles meet the description of excluded finished merchandise, and that its mopping kits meet the description of excluded finished goods kits; see Aluminum Extrusions From the People's Republic of China: Notice of Court Decision Not in Harmony With Final Scope Ruling and Notice of Amended Final Scope Ruling Pursuant to Court Decision, 80 FR 51535; August 25, 2015.

A–570–967 and C–570–968: Aluminum Extrusions From the People's Republic of China

Requestor: Ace Hardware, Inc.; Ace's telescoping extension poles are outside the scope of the order because they are finished merchandise fully and permanently completed and assembled containing aluminum extrusions as well as non-extruded aluminum components; September 3, 2015.

A–570–967 and C–570–968: Aluminum Extrusions From the People's Republic of China

Requestor: Blue Blade, Inc. (Blue Blade); Blue Blade's extension tension poles are outside the scope of the order because they are finished merchandise fully and permanently completed and assembled containing aluminum extrusions as well as non-extruded aluminum components; September 30, 2015.

A–570–983 and C–570–984: Drawn Stainless Steel Sinks From the People's Republic of China

Requestor: Component Hardware Group Inc.; Industrial Handwashing Sinks are within the scope of the order because they possess all the physical characteristics of subject drawn stainless steel sinks; July 2, 2015.

A–570–909: Certain Steel Nails From the People's Republic of China

Requestor: Lumber Liquidators Services, LLC; Lumber Liquidators' L-Cleat Brads were within the scope of the order based on 19 CFR 351.225(k)(2); July 23, 2015.

A–570–970: Multilayered Wood Flooring From the People's Republic of China

Requestor: Zhejiang Dadongwo GreenHome Wood Co., Ltd.; GreenHome's two-layer wood flooring is not within the scope because it lacks two or more layers of plies of wood veneer(s) in combination with a core; August 6, 2015.

A–570–832: Pure Magnesium From the People's Republic of China

Requestor: Dead Sea Magnesium Ltd. (''DSM''); DSM's patented magnesium alloys are subject to the order on Pure Magnesium from the People's Republic of China because they contain 50 percent or greater, but less than 99.8 percent primary magnesium, by weight, and do not conform to ASTM specifications for alloy magnesium. DSM's magnesium alloys are not subject to the order on Magnesium Metal from the People's Republic of China; July 16, 2015.

Republic of Korea

A–580–834 and A–580–835: Stainless Steel Sheet and Strip in Coils From Republic of Korea

Requestor: American BOA, Inc. (ABI); ABI's precision strip products are within the scope of the order because they possess all of the essential physical characteristics of subject stainless steel sheet and strip in coils; July 22, 2015.

[1] *See* 19 CFR 351.225(o).

[2] *See Notice of Scope Rulings,* 80 FR 57339 (September 23, 2015).

Taiwan

A–583–831: Stainless Steel Sheet and Strip in Coils From Taiwan

Requestor: American BOA, Inc. (ABI); ABI's precision strip products are within the scope of the order because they possess all of the essential physical characteristics of subject stainless steel sheet and strip in coils; July 22, 2015.

Anticircumvention Determinations Made Between July 1, 2015, and September 30, 2015

United Arab Emirates

A–520–803: Polyethylene Terephthalate Film, Sheet, and Strip From the United Arab Emirates

Requestor: Polyplex USA LLC and Flex USA Inc.; PET film produced in Bahrain by JBF Bahrain from inputs (PET chips and silica chips) manufactured in the United Arab Emirates, and that is subsequently exported from Bahrain to the United States undergoes a process of completion or assembly that is not minor or insignificant and, therefore, should not be included within the scope of the order.

Interested parties are invited to comment on the completeness of this list of completed scope and anticircumvention inquiries. Any comments should be submitted to the Deputy Assistant Secretary for AD/CVD Operations, Enforcement and Compliance, International Trade Administration, 14th Street and Constitution Avenue NW., APO/Dockets Unit, Room 1870, Washington, DC 20230.

This notice is published in accordance with 19 CFR 351.225(o).

Dated: March 11, 2016.

Christian Marsh,

Deputy Assistant Secretary for Antidumping and Countervailing Duty Operations.

[FR Doc. 2016–06042 Filed 3–16–16; 8:45 am]

BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

Submission for OMB Review; Comment Request

The Department of Commerce will submit to the Office of Management and Budget (OMB) for clearance the following proposal for collection of information under the provisions of the Paperwork Reduction Act (44 U.S.C. Chapter 35).

Agency: National Oceanic and Atmospheric Administration (NOAA).

Title: International Dolphin Conservation Program.

OMB Control Number: 0648–0387.

Form Number(s): None.

Type of Request: Emergency revision of a currently approved information collection. Per the Paperwork Reduction Act regulations, 5 CFR 1320.13, we believe that use of this emergency process is essential to the mission of the agency. NOAA finds good cause to issue this interim final rule without advance notice in a proposed rule, and to make the rule effective immediately without providing a 30-day delay, because the limited time available to the United States to come into compliance with its World Trade Organization obligations makes advance notice and comment or delaying the effectiveness *contrary to the public interest.* Furthermore, because this interim final rule involves a foreign affairs function of the United States, the procedural requirements of the Administrative Procedure Act, 5 U.S.C. 553, are not applicable. However, NMFS will consider public comments on this interim final rule and issue a final rule.

Number of Respondents: 144.

Average Hours per Response: 30 minutes.

Burden Hours: This change would add an additional 130 responses per year at 30 minutes per response, or 65 hours, to the currently approve burden of 183 hours.

Needs and Uses: This is a request for comments on the proposed revision of OMB Control No. 0648–0387, in conjunction with Interim Final Rule 0648–BF73. The information collection currently approved under OMB Control No. 0648–0387 was developed to implement the International Dolphin Conservation Program Act (Act). The Act allows entry of yellowfin tuna into the United States (U.S.), under specific conditions, from nations in the International Dolphin Conservation Program that would otherwise be under embargo. The Act also allows U.S. fishing vessels to participate in the yellowfin tuna fishery in the eastern tropical Pacific Ocean on terms equivalent with the vessels of other nations. NOAA collects information to allow tracking and verification of dolphin-safe and non-dolphin-safe tuna products from catch through the U.S. market.

This revision will add the requirement that, for a fishing trip that begins on or after 60 days of the Interim Final Rule publishing date, related information may be selected for audit (at random or as a result of screening/targeting), and thus there may be a burden on the importer of record to locate and provide copies of supporting documentation. In some instances, NMFS may be able to complete an audit (verify the information about the harvest event and chain-of-custody) based on the information submitted via the Customs and Border Protectcion ACE portal. In other instances, NMFS may contact the importer of record to provide supporting documentation to corroborate the information submitted via the ACE portal.

Affected Public: Businesses and other for-profit organizations.

Frequency: On occasion.

Respondent's Obligation: Mandatory.

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

Written comments and recommendations for the proposed information collection should be sent within 10 days of publication of this notice to *OIRA_Submission@omb.eop.gov* or fax to (202) 395–5806.

Dated: March 11, 2016.

Sarah Brabson,

NOAA PRA Clearance Officer.

[FR Doc. 2016–05984 Filed 3–16–16; 8:45 am]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

RIN 0648–XE500

Mid-Atlantic Fishery Management Council (MAFMC); Public Meeting

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of public meeting.

SUMMARY: The Mid-Atlantic Fishery Management Council's (Council) *Tilefish* Advisory Panel will hold a public meeting.

DATES: The meeting will be held Tuesday, April 5, 2016, from 10 a.m. to 12 p.m., to view the agenda, see **SUPPLEMENTARY INFORMATION**.

ADDRESSES: The meeting will be held via webinar with a telephone-only connection option.

Council address: Mid-Atlantic Fishery Management Council, 800 N. State St., Suite 201, Dover, DE 19901; telephone: (302) 674–2331.

FOR FURTHER INFORMATION CONTACT: Christopher M. Moore, Ph.D. Executive Director, Mid-Atlantic Fishery Management Council; telephone: (302)

526–5255. The Council's Web site, *www.mafmc.org* also has details on the proposed agenda, webinar listen-in access, and briefing materials.

SUPPLEMENTARY INFORMATION:

Agenda

This meeting will gather input on Framework 2 to the *Golden Tilefish* Fishery Management Plan. Specifically, *Golden Tilefish* Advisory Panel Members input will be sought on the overall framework (and following measure in specific: ''That the Council restricts the recreational *Golden Tilefish* Fishery to rod and real fishery only (with a five hook limit)).'' The Council will take action on this Framework at the April 2016 Council meeting.

Although non-emergency issues not contained in this agenda may come before this group for discussion, in accordance with the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), those issues may not be the subject of formal action during these meetings. Actions will be restricted to those issues specifically identified in this notice and any issues arising after publication of this notice that require emergency action under section 305(c) of the Magnuson-Stevens Act, provided the public has been notified of the Council's intent to take final action to address the emergency.

Special Accommodations

This meeting is physically accessible to people with disabilities. Requests for sign language interpretation or other auxiliary aid should be directed to M. Jan Saunders, (302) 526–5251, at least 5 working days prior to the meeting date.

Authority: 16 U.S.C. 1801 *et seq.*

Dated: March 14, 2016.

Tracey L. Thompson,

Acting Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. 2016–06047 Filed 3–16–16; 8:45 am]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE

National Telecommunications and Information Administration

Multistakeholder Process To Develop Consumer Data Privacy Code of Conduct Concerning Facial Recognition Technology

AGENCY: National Telecommunications and Information Administration, U.S. Department of Commerce.

ACTION: Notice of open meeting.

SUMMARY: The National Telecommunications and Information Administration (NTIA) will convene a meeting of a privacy multistakeholder process concerning the commercial use of facial recognition technology on March 29, 2016.

DATES: The meeting will be held on March 29, 2016 from 1:00 p.m. to 5:00 p.m., Eastern Time. See **SUPPLEMENTARY INFORMATION** for details.

ADDRESSES: The meeting will be held in the Boardroom at the American Institute of Architects, 1735 New York Avenue NW., Washington, DC 20006.

FOR FURTHER INFORMATION CONTACT: John Verdi, National Telecommunications and Information Administration, U.S. Department of Commerce, 1401 Constitution Avenue NW, Room 4725, Washington, DC 20230; telephone (202) 482–8238; email *jverdi@ntia.doc.gov.* Please direct media inquiries to NTIA's Office of Public Affairs, (202) 482–7002; email *press@ntia.doc.gov.*

SUPPLEMENTARY INFORMATION:

Background: On February 23, 2012, the White House released *Consumer Data Privacy in a Networked World: A Framework for Protecting Privacy and Promoting Innovation in the Global Digital Economy* (the ''Privacy Blueprint'').[1] The Privacy Blueprint directs NTIA to convene multistakeholder processes to develop legally enforceable codes of conduct that specify how the Consumer Privacy Bill of Rights applies in specific business contexts.[2] On December 3, 2013, NTIA announced that it would convene a multistakeholder process with the goal of developing a code of conduct to protect consumers' privacy and promote trust regarding facial recognition technology in the commercial context.[3] On February 6, 2014, NTIA convened the first meeting of the multistakeholder process, followed by additional meetings through July 2015.

Matters To Be Considered: The March 29, 2016 meeting is a continuation of a series of NTIA-convened multistakeholder discussions concerning facial recognition technology. Stakeholders will engage in an open, transparent, consensus-driven process to develop a code of conduct regarding facial recognition technology. The March 29, 2016 meeting will build on stakeholders' previous work. More information about stakeholders' work is available at: *http://www.ntia.doc.gov/other-publication/2015/privacy-multistakeholder-process-facial-recognition-technology.*

Time and Date: NTIA will convene a meeting of the privacy multistakeholder process regarding facial recognition technology on March 29, 2016, from 1:00 p.m. to 5:00 p.m., Eastern Time. The meeting date and time are subject to change. The meeting is subject to cancellation if stakeholders complete their work developing a code of conduct. Please refer to NTIA's Web site, *http://www.ntia.doc.gov/other-publication/2015/privacy-multistakeholder-process-facial-recognition-technology,* for the most current information.

Place: The meeting will be held in the Boardroom at the American Institute of Architects, 1735 New York Avenue NW., Washington, DC 20006. The location of the meeting is subject to change. Please refer to NTIA's Web site, *http://www.ntia.doc.gov/other-publication/2015/privacy-multistakeholder-process-facial-recognition-technology,* for the most current information.

Other Information: The meeting is open to the public and the press. The meeting is physically accessible to people with disabilities. Requests for sign language interpretation or other auxiliary aids should be directed to John Verdi at (202) 482–8238 or *jverdi@ntia.doc.gov* at least seven (7) business days prior to the meeting. The meeting will also be webcast. Requests for real-time captioning of the webcast or other auxiliary aids should be directed to John Verdi at (202) 482–8238 or *jverdi@ntia.doc.gov* at least seven (7) business days prior to the meeting. There will be an opportunity for stakeholders viewing the webcast to participate remotely in the meeting through a moderated conference bridge, including polling functionality. Access details for the meeting are subject to change. Please refer to NTIA's Web site, *http://www.ntia.doc.gov/other-publication/2015/privacy-multistakeholder-process-facial-recognition-technology,* for the most current information.

Dated: March 14, 2016.

Kathy Smith,

Chief Counsel, National Telecommunications and Information Administration.

[FR Doc. 2016–06028 Filed 3–16–16; 8:45 am]

BILLING CODE 3510–60–P

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[1] The Privacy Blueprint is available at *http://www.whitehouse.gov/sites/default/files/privacy-final.pdf.*

[2] *Id.*

[3] NTIA, *Facial Recognition Technology, http://www.ntia.doc.gov/other-publication/2015/privacy-multistakeholder-process-facial-recognition-technology.*

DEPARTMENT OF COMMERCE

National Telecommunications and Information Administration

Multistakeholder Process To Develop Best Practices for Privacy, Transparency, and Accountability Regarding Commercial and Private Use of Unmanned Aircraft Systems

AGENCY: National Telecommunications and Information Administration, U.S. Department of Commerce.

ACTION: Notice of open meeting.

SUMMARY: The National Telecommunications and Information Administration (NTIA) will convene a meeting of a multistakeholder process concerning privacy, transparency, and accountability issues regarding commercial and private use of unmanned aircraft systems on April 8, 2016.

DATES: The meeting will be held on April 8, 2016 from 1 p.m. to 5 p.m., Eastern Time. See Supplementary Information for details.

ADDRESSES: The meeting will be held in the Boardroom at the American Institute of Architects, 1735 New York Avenue NW., Washington, DC 20006.

FOR FURTHER INFORMATION CONTACT: John Verdi, National Telecommunications and Information Administration, U.S. Department of Commerce, 1401 Constitution Avenue NW., Room 4725, Washington, DC 20230; telephone (202) 482–8238; email *jverdi@ntia.doc.gov.* Please direct media inquiries to NTIA's Office of Public Affairs, (202) 482–7002; email *press@ntia.doc.gov.*

SUPPLEMENTARY INFORMATION:

Background: Congress recognized the potential wide-ranging benefits of Unmanned Aircraft Systems (UAS) operations within the United States in the Federal Aviation Administration (FAA) Modernization and Reform Act of 2012 (Pub. L. 112–95), which requires a plan to safely integrate civil UAS into the National Airspace System (NAS) by 2015. On February 15, 2015, President Obama issued the Presidential Memorandum ''Promoting Economic Competitiveness While Safeguarding Privacy, Civil Rights, and Civil Liberties in Domestic Use of Unmanned Aircraft Systems.'' [1] The Presidential Memorandum establishes a ''multi-stakeholder engagement process to develop and communicate best practices for privacy, accountability, and transparency issues regarding commercial and private UAS use in the NAS.'' [2] The process includes stakeholders from industry, civil society, and academia, and will be initiated by the Department of Commerce, through NTIA, and in consultation with other interested agencies. On August 3, 2015, NTIA convened the first meeting of the multistakeholder process, followed by additional meetings through February 2016.

Matters To Be Considered: The April 8, 2016 meeting is a continuation of a series of NTIA-convened multistakeholder discussions concerning privacy, transparency, and accountability issues regarding commercial and private use of UAS. Additional meetings may be scheduled as needed. Stakeholders will engage in an open, transparent, consensus-driven process to develop best practices for privacy, accountability, and transparency issues regarding commercial and private UAS use in the NAS. The April 8, 2016 meeting will build on stakeholders' previous work. More information about stakeholders' work is available at: *http://www.ntia.doc.gov/other-publication/2015/multistakeholder-process-unmanned-aircraft-systems.*

Time and Date: NTIA will convene a meeting of the multistakeholder process regarding unmanned aircraft systems on April 8, 2016 from 1 p.m. to 5 p.m., Eastern Time. The meeting date and time are subject to change. The meeting is subject to cancellation if stakeholders complete their work developing best practices. Please refer to NTIA's Web site, *http://www.ntia.doc.gov/other-publication/2016/multistakeholder-process-unmanned-aircraft-systems,* for the most current information.

Place: The meeting will be held in the Boardroom at the American Institute of Architects, 1735 New York Avenue NW., Washington, DC 20006. The location of the meeting is subject to change. Please refer to NTIA's Web site, *http://www.ntia.doc.gov/other-publication/2016/multistakeholder-process-unmanned-aircraft-systems,* for the most current information.

Other Information: The meeting is open to the public and the press. The meeting is physically accessible to people with disabilities. Requests for sign language interpretation or other auxiliary aids should be directed to John Verdi at (202) 482–8238 or *jverdi@ntia.doc.gov* at least seven (7) business days prior to the meeting. The meeting will also be webcast. Requests for real-time captioning of the webcast or other auxiliary aids should be directed to John Verdi at (202) 482–8238 or *jverdi@ntia.doc.gov* at least seven (7) business days prior to the meeting. There will be an opportunity for stakeholders viewing the webcast to participate remotely in the meeting through a moderated conference bridge, including polling functionality. Access details for the meeting are subject to change. Please refer to NTIA's Web site, *http://www.ntia.doc.gov/other-publication/2016/multistakeholder-process-unmanned-aircraft-systems,* for the most current information.

Dated: March 14, 2016.

Kathy D. Smith,

Chief Counsel, National Telecommunications and Information Administration.

[FR Doc. 2016–06029 Filed 3–16–16; 8:45 am]

BILLING CODE 3510–60–P

[1] Presidential Memorandum, *Promoting Economic Competitiveness While Safeguarding Privacy, Civil Rights, and Civil Liberties in Domestic Use of Unmanned Aircraft Systems,* (Feb. 15, 2015), *available at: http://www.whitehouse.gov/the-press-office/2015/02/15/presidential-memorandum-promoting-economic-competitiveness-while-safegua.*

[2] Presidential Memorandum at 4.

DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Requirements for Patent Applications Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures

ACTION: Notice and request for comment.

SUMMARY: The United States Patent and Trademark Office (USPTO), as part of its continuing effort to reduce paperwork and respondent burden, invites the general public and other Federal agencies to comment on proposed and/or continuing information collections, as required by the Paperwork Reduction Act of 1995, Public Law 104–13 (44 U.S.C. 3506(c)(2)(A)).

DATES: Written comments must be submitted on or before May 16, 2016.

ADDRESSES: Written comments may be submitted by any of the following methods:

- *Email: InformationCollection@uspto.gov.* Include ''0651–0024 inquiry'' in the subject line of the message.
- *Federal Rulemaking Portal: http://www.regulations.gov.*
- *Mail:* Marcie Lovett, Records Management Division Director, Office of the Chief Information Officer, United States Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313–1450.

FOR FURTHER INFORMATION CONTACT: Requests for additional information should be directed to Raul Tamayo, Senior Legal Advisor, Office of Patent Legal Administration, United States

Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313–1450; by telephone at 571–272–7728; or by email at *Raul.Tamayo@uspto.gov* with ''0651–0024 inquiry'' in the subject line. Additional information about this collection is also available at *http://www.reginfo.gov* under ''Information Collection Review.''

SUPPLEMENTARY INFORMATION:

I. Abstract

Patent applications that contain nucleotide and/or amino acid sequence disclosures must include a copy of the sequence listing in accordance with the requirements in 37 CFR 1.821–1.825. Applicants may submit sequence listings for both U.S. and international patent applications. Submissions of sequence listings in international applications are in accordance with Patent Cooperation Treaty (PCT) Rule 13ter.

This information collection contains the sequence listing information itself. Information pertaining to the filing of the initial U.S. application is collected under OMB Control Number 0651–0032, and information pertaining to the filing of the initial international application is collected under OMB Control Number 0651–0021.

In particular, this information collection accounts for sequence listings submitted on paper, compact disc (CD), or through EFS-Web, the USPTO's online filing system. For U.S. applications, 37 CFR 1.821(c) permits all three modes of submission: Paper, CD, or EFS-Web. Sequence listings for international applications may be submitted on paper or through EFS-Web only, though sequence listings that are too large to be filed electronically though EFS-Web may be submitted on a separate CD.

The USPTO uses the sequence listings during the examination process to determine the patentability of the associated patent application. Sequence listings are also disclosed as part of the published patent application or issued patent.

This information collection also contains requests for transfer of a computer readable form under 37 CFR 1.821(e). Under 37 CFR 1.821(e)–(f), applicants who submit their sequence listings on paper or CD must submit a copy of the sequence listing in ''computer readable form'' (CRF) with a statement indicating that the CRF copy of the sequence listing is identical to the paper or CD copy required by 1.821(c). Applicants may submit the CRF copy of the sequence listing to the USPTO on CD or other acceptable media as provided in 37 CFR 1.824. Sequence listings that are submitted online through EFS-Web in the proper text format do not require a separate CRF copy or the associated statement.

If the CRF sequence listing in a new application is identical to the CRF sequence listing of another application that the applicant already has on file at the USPTO, 37 CFR 1.821(e) permits the applicant to refer to the CRF listing in the other application, rather than having to submit a duplicate copy of the CRF listing for the new application. In such a case, the applicant may submit a letter identifying the application and CRF sequence listing that is already on file and stating that the sequence listing submitted in the new application is identical to the CRF copy already filed with the previous application. The USPTO provides a form, Request for Transfer of a Computer Readable Form Under 37 CFR 1.821(e) (PTO/SB/93), in order to assist customers in submitting this statement.

II. Method of Collection

By mail, hand delivery, or electronic submission to the USPTO.

III. Data

OMB Number: 0651–0024.

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

Affected Public: Individuals or households; business or other for-profit organizations; and not-for-profit organizations.

Estimated Number of Respondents: 27,200 responses per year. Of this total, the USPTO expects that 25% will be from small entities.

Estimated Time per Response: The USPTO estimates that it will take approximately 6 minutes (0.10 hours) to 6 hours to complete a single IC item in this collection, depending on the instrument. This includes the time to gather the necessary information, create the documents, and submit the completed request to the USPTO.

Estimated Total Annual Hour Burden: 152,285 hours.

Estimated Total Annual Cost Burden (Hourly): $26,260,375.00. The USPTO estimates that a sequence listing will take approximately five hours of paraprofessional time at an estimated rate of $125 per hour and one hour of attorney time at $410 per hour, for a weighted average rate of $172.50 per hour for preparing a sequence listing. The USPTO expects that the Request for Transfer of a CRF will be prepared by a paraprofessional at an estimated rate of $125 per hour. Using this hourly rate, the USPTO estimates $26,260,375.00 per year for the total hourly costs associated with respondents.

TABLE 1—BURDEN HOUR/BURDEN COST TO RESPONDENTS

IC No.	Item	Estimated response time (hours) (a)	Estimated annual responses (b)	Estimated annual burden hours (a) × (b) = (c)	Rate ($/hr) (d)	Total cost ($/yr) (c) × (d) = (e)
1	Sequence Listing in Application (paper).	6.00	6,000	36,000	$172.50	$6,210,000.00
1	Sequence Listing in Application (CD)	6.00	350	2,100	172.50	362,250.00
1	Sequence Listing in Application (electronic).	6.00	19,000	114,000	172.50	19,665,000.00
2	Request for Transfer of a Computer Readable Form Under 37 CFR 1.821(e) (PTO/SB/93).	0.10	1,850	185	125.00	23,125.00
Totals			27,200	152,285		26,260,375.00

Estimated Total Annual Cost Burden (Non-Hourly): $1,774,500.00. This collection has no capital startup, maintenance, or operating fees. This collection does have a non-hourly cost

burden in the form of filing fees and postage costs.

Filing Fees

In accordance with 35 U.S.C. 41(a)(1)(G), the USPTO only charges a fee for submitting a sequence listing as part of a U.S. application or as part of an international application entering the U.S. national stage if the sequence listing (i) is not filed via EFS-Web or not filed on an electronic medium in compliance with §§ 1.52(e) and 1.821(c) or (e), and (ii) causes the application to exceed 100 pages. (See 37 CFR 1.52(f).) Under 37 CFR 1.16(s) and 1.492(j) for U.S. applications and international applications entering the U.S. national stage, respectively, if the application, including the sequence listings filed on paper or on a non-compliant electronic medium, exceeds 100 pages, the application size fee is $400 (or $200 for small entities and $100 for micro entities) for each additional 50 pages or fraction thereof. The USPTO estimates the following with respect to the number of applications that will include long sequence listings filed on paper or on a non-compliant electronic medium and the average application size fee that such applications will incur: (i) Approximately 200 applications from large entities will incur an average application size fee of $1,200; (ii) approximately 100 applications from small entities will incur an average application size fee of $600; and (iii) approximately 40 applications from micro entities will incur an average application size fee of $300. The estimate corresponds to a total fee cost of $240,000, $60,000, and $12,000, respectively.

As a Receiving Office, the USPTO collects the international filing fee for each international application it receives. The basic international filing fee only covers the first 30 pages of the international application. As a result, a $15 fee per page is added to the international filing fee for each page over 30 pages of an international application including a sequence listing filed on paper or in PDF format. No page fees are triggered by sequence listings that are submitted via EFS-Web in the proper text format. The average length of a sequence listing filed on paper or in PDF format in an international application is 150 pages, which would carry an additional fee of $2,250 if the international application were already at least 30 pages long without the listing. The USPTO estimates that approximately 650 of the 6,000 sequence listings filed per year on paper or in PDF format will be for international applications, for a cost of $1,462,500.

Therefore, the USPTO estimates that the total fee costs for this collection will total $1,774,500.00.

Postage Costs

Mailed submissions may include the sequence listing on either paper or CD, the CRF copy of the listing on CD, and a transmittal letter containing the required identifying information. The USPTO estimates that the average postage cost for a paper or CD sequence listing submission will be $6.45 (USPS Priority Mail, flat rate envelope) and that 6,350 sequence listings will be mailed to the USPTO per year, for a total of $40,957.50 in postage costs.

With filing fee costs totaling $1,774,500.00 and postage costs totaling $40,957.50, the USPTO estimates that the total annual non-hourly cost burden for this collection will amount to $1,815,457.50.

IV. Request for Comments

Comments are invited on:

(a) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility;

(b) the accuracy of the agency's estimate of the burden (including hours and cost) of the proposed collection of information, including the validity of the methodology and assumptions used;

(c) ways to enhance the quality, utility, and clarity of the information to be collected; and

(d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology, *e.g.,* permitting electronic submission of responses.

Comments submitted in response to this notice will be summarized or included in the request for OMB approval of this information collection; they will also become a matter of public record.

Dated: March 11, 2016.

Marcie Lovett,

Records Management Division Director, OCIO, United States Patent and Trademark Office.

[FR Doc. 2016–06011 Filed 3–16–16; 8:45 am]

BILLING CODE 3510–16–P

DEPARTMENT OF DEFENSE

Office of the Secretary

[Docket ID: DOD–2016–OS–0021]

Privacy Act of 1974; System of Records

AGENCY: Office of the Inspector General, DoD.

ACTION: Notice to alter a System of Records.

SUMMARY: The Office of Inspector General proposes to alter a system of records, CIG–16, Defense Case Activity Tracking System (D–CATS) to carry out its responsibilities pursuant to the Inspector General Act of 1978, as amended. The OIG is statutorily directed to conduct and supervise investigations relating to the programs and operations of the Department of Defense, to promote economy, efficiency, and effectiveness in the administration of such programs and operations, and to prevent and detect fraud, waste, and abuse in such programs and operations. Accordingly, the records in this system are used in the course of investigating individuals suspected of administrative or criminal misconduct.

This system is also used for case management, case tracking, information storage, to respond to requests for information, and to fulfill mandatory reporting requirements. It fulfills these purposes by enabling users to record complaints, allegations of wrongdoing, and requests for assistance; to document inquiries; to store investigative case records; to compile statistical information; to provide prompt, responsive and accurate information regarding the status of ongoing cases; to provide a record of complaint disposition; and to record actions taken and notifications of interested parties and agencies.

DATES: Comments will be accepted on or before April 18, 2016. This proposed action will be effective the date following the end of the comment period unless comments are received which result in a contrary determination.

ADDRESSES: You may submit comments, identified by docket number and title, by any of the following methods:

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

* *Mail:* Department of Defense, Office of the Deputy Chief Management Officer, Directorate of Oversight and Compliance, Regulatory and Audit Matters Office, 9010 Defense Pentagon, Washington, DC 20301–9010.

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

FOR FURTHER INFORMATION CONTACT: Mark Dorgan, DoD IG FOIA/Privacy Office, Department of Defense, Office of Inspector General, 4800 Mark Center Drive, Alexandria, VA 22350–1500 or telephone: (703) 699–5680.

SUPPLEMENTARY INFORMATION: The Office of Inspector General notices for systems of records subject to the Privacy Act of 1974 (5 U.S.C. 552a), as amended, have been published in the **Federal Register** and are available from the address in **FOR FURTHER INFORMATION CONTACT** or from the Defense Privacy and Civil Liberties Web site at *http://dpcld.defense.gov/.*

The proposed systems reports, as required by 5 U.S.C. 552a(r) of the Privacy Act, as amended, were submitted on March 7, 2016, to the House Committee on Oversight and Government Reform, the Senate Committee on Homeland Security and Governmental Affairs, and the Office of Management and Budget (OMB) pursuant to paragraph 4c of Appendix I to OMB Circular No. A–130, ''Federal Agency Responsibilities for Maintaining Records About Individuals,'' dated February 8, 1996 (February 20, 1996, 61 FR 6427).

Dated: March 14, 2016.

Aaron Siegel,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

CIG–16

SYSTEM NAME:

Defense Case Activity Tracking System (D–CATS) (July 26, 2013, 78 FR 45185)

CHANGES:

* * * * *

SYSTEM LOCATION:

Delete entry and replace with ''Office of the Deputy Inspector General for Administrative Investigations, Office of Inspector General Department of Defense (DoD), 4800 Mark Center Drive, Alexandria, VA 22350–1500.''

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Delete entry and replace with ''DoD employees, military personnel, members of the general public, and contractors who file hotline complaints; individuals alleged to have been involved in administrative or criminal misconduct including but not limited to fraud, waste, mismanagement, or whistleblower reprisal; individuals involved in matters investigated by the Office of Inspector General; and individuals identified as having been adversely affected by matters being investigated by the Office of Inspector General.''

CATEGORIES OF RECORDS IN THE SYSTEM:

Delete entry and replace with ''Records resulting from the referral of, and inquiry into, hotline complaints, whistleblower reprisal investigations, improper mental health evaluations, and senior official investigations, including the allegations submitted to the DoD Inspector General, referral documents to DoD components, investigative reports, information received from witnesses, information gathered by investigators, records of action taken, disposition of the case, and supporting documentation. Data points include names, case numbers, home and work addresses, email addresses, duty positions, phone numbers (work, mobile).''

* * * * *

PURPOSE(S):

Delete entry and replace with ''The OIG maintains this system of records in order to carry out its responsibilities pursuant to the Inspector General Act of 1978, as amended. The OIG is statutorily directed to conduct and supervise investigations relating to the programs and operations of the Department of Defense, to promote economy, efficiency, and effectiveness in the administration of such programs and operations, and to prevent and detect fraud, waste, and abuse in such programs and operations. Accordingly, the records in this system are used in the course of investigating individuals suspected of administrative or criminal misconduct.

This system is also used for case management, case tracking, information storage, to respond to requests for information, and to fulfill mandatory reporting requirements. It fulfills these purposes by enabling users to record complaints, allegations of wrongdoing, and requests for assistance; to document inquiries; to store investigative case records; to compile statistical information; to provide prompt, responsive and accurate information regarding the status of ongoing cases; to provide a record of complaint disposition; and to record actions taken and notifications of interested parties and agencies.

Complaints appearing to involve criminal wrongdoing are referred to the Defense Criminal Investigative Service or other criminal investigative units of DoD components.''

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Delete entry and replace with ''In addition to those disclosures generally permitted under 5 U.S.C. 552a(b) of the Privacy Act of 1974, as amended, the records contained therein may specifically be disclosed outside the DoD as a routine use pursuant to 5 U.S.C. 552a(b)(3) as follows:

To appropriate officials and employees of a federal agency or entity to which information may be relevant to a decision concerning the hiring, appointment, or retention of an individual; the issuance, renewal, suspension, or revocation of a security clearance; the execution of a security or suitability investigation; the letting of a contract; or the issuance or revocation of a grant or benefit.

To the news media and the public, unless it is determined that release of the specific information in the context of a particular case would constitute an unwarranted invasion of personal privacy.

To complainants, to the extent necessary to provide such persons with information and explanations concerning the progress and/or results of the investigation or case arising from the matters of which they complained.

The DoD Blanket Routine Uses set forth at the beginning of the Office of the Inspector General compilation of systems of records notices may apply to this system. The complete list of DoD Blanket Routine Uses can be found online at: *http://dpcld.defense.gov/Privacy/SORNsIndex/BlanketRoutineUses.aspx.*''

* * * * *

RETRIEVABILITY:

Delete entry and replace with ''By complainant's name, subject's name, or case number.''

SAFEGUARDS:

Delete entry and replace with ''Full access is limited to Administrative Investigations staff. Read only access is provided to authorized DoD IG personnel consistent with their official duties. Paper and electronic records are

stored in rooms protected by cipher lock, common access card RFID, and PIN. Necessary government and contractor IT staff also have full access to the electronic system, but not paper records. Regular back-ups of the electronic data are performed and stored at the Mark Center and at an off-site location, for the purpose of providing continuity of operations.''

* * * * *

SYSTEM MANAGER(S) AND ADDRESS:

Delete entry and replace with ''Deputy Inspector General for Administrative Investigations, Office of Inspector General, Department of Defense, 4800 Mark Center Drive, Alexandria, VA 22350–1500.''

NOTIFICATION PROCEDURE:

Delete entry and replace with ''Individuals seeking to determine whether information about themselves is contained in this system should address written inquiries to the Chief, Freedom of Information Act Requester Service Center/Privacy Act Office, Office of General Counsel, Office of Inspector General, DoD, 4800 Mark Center Drive, Alexandria, VA 22350–1500.

For verification purposes, individuals shall provide their full name, address, any details which may assist in locating records of the individual, and their signature.

In addition, the requester must provide a notarized statement or a signed declaration made in accordance with 28 U.S.C. 1746, in the following format:

If executed outside the United States: 'I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. Executed on (date).' (Signature).

If executed within the United States, its territories, possessions, or commonwealths: 'I declare under penalty of perjury that the foregoing is true and correct. Executed on (date).' (Signature).''

RECORD ACCESS PROCEDURES:

Delete entry and replace with ''Individuals seeking access to information about themselves contained in this system, should address written inquiries to the Chief, Freedom of Information Act Requester Service Center/Privacy Act Office, Office of General Counsel, Office of Inspector General, DoD, 4800 Mark Center Drive, Alexandria, VA 22350–1500.

For verification purposes, individuals shall provide their full name, address, any details which may assist in locating records of the individual, and their signature.

In addition, the requester must provide a notarized statement or a signed declaration made in accordance with 28 U.S.C. 1746, in the following format:

If executed outside the United States: 'I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. Executed on (date).' (Signature).

If executed within the United States, its territories, possessions, or commonwealths: 'I declare under penalty of perjury that the foregoing is true and correct. Executed on (date).' (Signature).''

* * * * *

RECORD SOURCE CATEGORIES:

Delete entry and replace with: ''Complainants, sources, subjects, witnesses, all levels of government, private businesses, and nonprofit organizations, internet Web sites, DoD Global Directory Service, DoD white-pages.''

EXEMPTIONS CLAIMED FOR THE SYSTEM:

Delete entry and replace with ''Parts of this system may be exempt pursuant to 5 U.S.C. 552a(j)(2), if the information is compiled and maintained by a component of the agency which performs as it principal function any activity pertaining to the enforcement of criminal laws.

Investigatory material compiled for law enforcement purposes, other than material within the scope of subsection 5 U.S.C. 552a(j)(2), may be exempt pursuant to 5 U.S.C. 552a(k)(2). However, if an individual is denied any right, privilege, or benefit for which he would otherwise be entitled by Federal law or for which he would otherwise be eligible, as a result of the maintenance of the information, the individual will be provided access to the information exempt to the extent that disclosure would reveal the identity of a confidential source.

Investigatory material compiled solely for the purpose of determining suitability, eligibility, or qualifications for federal civilian employment, military service, federal contracts, or access to classified information may be exempt pursuant to 5 U.S.C. 552a(k)(5), but only to the extent that such material would reveal the identity of a confidential source.

An exemption rule for this record system has been promulgated in accordance with the requirements of 5 U.S.C. 553(b)(1), (2), and (3), (c) and (e) and published in 32 CFR part 312.''

[FR Doc. 2016–06056 Filed 3–16–16; 8:45 am]

BILLING CODE 5001–06–P

DEPARTMENT OF DEFENSE

Office of the Secretary

Charter Renewal of Department of Defense Federal Advisory Committees

AGENCY: Department of Defense.

ACTION: Renewal of Federal Advisory Committee.

SUMMARY: The Department of Defense (DoD) is publishing this notice to announce that it is renewing the charter for the Department of Defense Advisory Committee on Military Personnel Testing (''the Committee'').

FOR FURTHER INFORMATION CONTACT: Jim Freeman, Advisory Committee Management Officer for the Department of Defense, 703–692–5952.

SUPPLEMENTARY INFORMATION: The Committee's charter is being renewed in accordance with the Federal Advisory Committee Act (FACA) of 1972 (5 U.S.C., Appendix, as amended) and 41 CFR 102–3.50(d). The Committee's charter and contact information for the Committee's Designated Federal Officer (DFO) can be found at *http://www.facadatabase.gov/*. The Committee provides the Secretary of Defense and the Deputy Secretary of Defense, through the Under Secretary of Defense for Personnel and Readiness, independent advice and recommendations on matters pertaining to military personnel testing for enlisted selection and classification.

The Committee is composed of no more than seven members who are eminent authorities in the fields of educational and psychological testing. All members of the Committee are appointed to provide advice on behalf of the Government on the basis of their best judgment without representing any particular point of view and in a manner that is free from conflict of interest. Except for reimbursement of official Committee-related travel and per diem, Committee members serve without compensation.

The public or interested organizations may submit written statements to the Committee membership about the Committee's mission and functions. Written statements may be submitted at any time or in response to the stated agenda of planned meeting of the Committee. All written statements shall be submitted to the DFO for the Committee, and this individual will ensure that the written statements are provided to the membership for their consideration.

Dated: March 14, 2016.

Aaron Siegel,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 2016–06004 Filed 3–16–16; 8:45 am]

BILLING CODE 5001–06–P

DEPARTMENT OF DEFENSE

Office of the Secretary

[Transmittal No. 15–75]

36(b)(1) Arms Sales Notification

AGENCY: Defense Security Cooperation Agency, Department of Defense.

ACTION: Notice.

SUMMARY: The Department of Defense is publishing the unclassified text of a section 36(b)(1) arms sales notification. This is published to fulfill the requirements of section 155 of Public Law 104–164 dated July 21, 1996.

FOR FURTHER INFORMATION CONTACT: Heather N. Harwell, DSCA/LMO, (703) 697–9217.

The following is a copy of a letter to the Speaker of the House of Representatives, Transmittal 15–75 with attached Policy Justification.

Dated: March 14, 2016.

Aaron Siegel,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

BILLING CODE 5001–06–P

DEFENSE SECURITY COOPERATION AGENCY
201 12TH STREET SOUTH, STE 203
ARLINGTON, VA 22202-5408

The Honorable Paul D. Ryan
Speaker of the House
U.S. House of Representatives
Washington, DC 20515

FEB 25 2016

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. 15-75, concerning the Department of the Air Force's proposed Letter(s) of Offer and Acceptance to the Government of Jordan for defense articles and services estimated to cost $115.1 million. After this letter is delivered to your office, we plan to issue a news release to notify the public of this proposed sale.

Sincerely,

J. W. Rixey
Vice Admiral, USN
Director

Enclosures:
1. Transmittal
2. Policy Justification
3. Regional Balance (Classified Document Provided Under Separate Cover)

BILLING CODE 5001–06–C

Transmittal No. 15–75

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:* Jordan

(ii)

Major Defense Equipment* ...	$ 0 million
Other	$115.1 million
Total	$115.1 million

(iii) *Description and Quantity or Quantities of Articles or Services under Consideration for Purchase:*

Scheduled and unscheduled depot module maintenance, in addition to Augmenter Module support, for fifty-two (52) F100–PW–220E F–16 A/B (Block 15) Engines.

(iv) *Military Department:* USAF (QCC)

(v) *Prior Related Cases, if any:* FMS Case: JO–D–QAW–17 APR 12–$14M

(vi) *Sales Commission, Fee, etc., Paid, Offered, or Agreed to be Paid:* None

(vii) *Sensitivity of Technology Contained in the Defense Article or Defense Services Proposed to be Sold:* None

(viii) *Date Report Delivered to Congress:* 25 February 2016

* as defined in Section 47(6) of the Arms Export Control Act.

POLICY JUSTIFICATION

Jordan—Repair and Return of F–16 Engines, Sustainment and Support

The Government of Jordan has requested approval to amend its F–16 engine program for repair and return of its F100–PW–220E engine modules. This effort is in support of the Royal Jordanian Air Force's ongoing scheduled maintenance activities for its 52 F100–PW–220E engines. Services requested under this proposed sale include contract support for parts, components, accessories, and labor to remanufacture the current propulsion fleet at scheduled maintenance intervals. There is no Major Defense Equipment associated with this case. The overall total estimated value is $115.1 million.

The proposed sale will contribute to the foreign policy and national security of the United States by helping to improve the security of a friendly country which has been, and continues to be, an important force for political stability and economic progress in the Middle East. Jordan is a key partner in the coalition working together to defeat Islamic State in Iraq and Levant (ISIL) forces. This engine and sustainment program will maintain Jordan's fighter aircraft capabilities and support its national defense. Jordan will have no difficulty absorbing this support.

The proposed sale of this equipment, services, and support will not alter the basic military balance in the region.

Jordan has accounted for the cost of engine sustainment in its budget over the course of multiple years.

The prime contractor will be Pratt and Whitney, East Hartford, Connecticut. There are no known offset agreements proposed in connection with this potential sale.

Implementation of this proposed sale will entail periodic Program Management Reviews in the United States or Jordan. There are no additional U.S. Government or contractor representatives anticipated to be stationed in Jordan as a result of this potential sale.

There will be no adverse impact on U.S. defense readiness as a result of this proposed sale.

[FR Doc. 2016–06010 Filed 3–16–16; 8:45 am]

BILLING CODE 5001–06–P

DEPARTMENT OF EDUCATION

[Docket No.: ED–2016–ICCD–0029]

Agency Information Collection Activities; Comment Request; Foreign Graduate Medical School Consumer Information Reporting Form

AGENCY: Federal Student Aid (FSA), Department of Education (ED).

ACTION: Notice.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. chapter 3501 *et seq.*), ED is proposing an extension of an existing information collection.

DATES: Interested persons are invited to submit comments on or before May 16, 2016.

ADDRESSES: To access and review all the documents related to the information collection listed in this notice, please use *http://www.regulations.gov* by searching the Docket ID number ED–2016–ICCD–0029. Comments submitted in response to this notice should be submitted electronically through the Federal eRulemaking Portal at *http://www.regulations.gov* by selecting the Docket ID number or via postal mail, commercial delivery, or hand delivery. *Please note that comments submitted by fax or email and those submitted after the comment period will not be accepted.* Written requests for information or comments submitted by postal mail or delivery should be addressed to the Director of the Information Collection Clearance Division, U.S. Department of Education, 400 Maryland Avenue SW., LBJ, Room 2E–103, Washington, DC 20202–4537.

FOR FURTHER INFORMATION CONTACT: For specific questions related to collection activities, please contact Beth Grebeldinger, 202–377–4018.

SUPPLEMENTARY INFORMATION: The Department of Education (ED), in accordance with the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3506(c)(2)(A)), provides the general public and Federal agencies with an opportunity to comment on proposed, revised, and continuing collections of information. This helps the Department assess the impact of its information collection requirements and minimize the public's reporting burden. It also helps the public understand the Department's information collection requirements and provide the requested data in the desired format. ED is soliciting comments on the proposed information collection request (ICR) that is described below. The Department of Education is especially interested in public comment addressing the following issues: (1) Is this collection necessary to the proper functions of the Department; (2) will this information be processed and used in a timely manner; (3) is the estimate of burden accurate; (4) how might the Department enhance the quality, utility, and clarity of the information to be collected; and (5) how might the Department minimize the burden of this collection on the respondents, including through the use of information technology. Please note that written comments received in response to this notice will be considered public records.

Title of Collection: Foreign Graduate Medical School Consumer Information Reporting Form.

OMB Control Number: 1845–0117.

Type of Review: An extension of an existing information collection.

Respondents/Affected Public: State, Local, and Tribal Governments; Private Sector.

Total Estimated Number of Annual Responses: 28.

Total Estimated Number of Annual Burden Hours: 448.

Abstract: This is a request for a renewal of the information collection to obtain consumer information from foreign graduate medical institutions that participate in the Federal Direct Loan Program. The form is used for reporting specific graduation information to the Department of Education in accordance with 34 CFR 668.14(b)(7). This is done to improve consumer information available to prospective U.S. medical student interested in foreign medical institutions.

Dated: March 14, 2016.

Kate Mullan,

Acting Director, Information Collection Clearance Division, Office of the Chief Privacy Officer, Office of Management.

[FR Doc. 2016–06005 Filed 3–16–16; 8:45 am]

BILLING CODE 4000–01–P

DEPARTMENT OF EDUCATION

McKinney-Vento Education for Homeless Children and Youths Program

AGENCY: Office of Elementary and Secondary Education, Department of Education.

ACTION: Notice.

SUMMARY: The Secretary issues guidelines for States related to requirements under the McKinney-Vento Homeless Assistance Act (McKinney-Vento Act), as amended by the Every Student Succeeds Act (ESSA). These guidelines address ways in which

a State may (1) assist local educational agencies (LEAs) to implement the provisions related to homeless children and youths amended by the ESSA and (2) review and revise policies and procedures that may present barriers to the identification, enrollment, attendance, and success of homeless children and youths in school.

FOR FURTHER INFORMATION CONTACT: John McLaughlin, Office of Elementary and Secondary Education, U.S. Department of Education, 400 Maryland Avenue SW., Washington, DC 20202–6132. Telephone: (202) 401–0962 or by email: *john.mclaughlin@ed.gov.*

If you use a telecommunications device for the deaf or a text telephone, call the Federal Relay Service, toll free, at 1–800–877–8339.

SUPPLEMENTARY INFORMATION:

I. Background

Section 724(g) of the McKinney-Vento Act, as amended by the ESSA (Pub. L. 114–95), requires the Secretary to develop, issue, and publish in the **Federal Register** guidelines concerning ways in which a State: (1) May assist LEAs to implement the provisions related to homeless children and youths amended by the ESSA and (2) may review and revise policies and procedures that may present barriers to the identification, enrollment, attendance, and success of homeless children and youths in school.

Under the McKinney-Vento Education for Homeless Children and Youth (EHCY) program, which is administered by the U.S. Department of Education's (the Department) Office of Elementary and Secondary Education, State educational agencies (SEAs) must ensure that homeless children and youths have equal access to the same free, appropriate public education, including a public preschool education, as is provided to other children and youths. The SEA and LEAs in the State must review and revise any laws, regulations, practices, or policies that may act as barriers to the identification, enrollment, attendance, or success in school of homeless children and youths. LEAs and schools may not separate homeless students from the mainstream school environment on the basis of their homelessness. Homeless students must also have access to the education and other services that they need to meet the same challenging State academic standards to which all students are held. (Section 721 of the McKinney-Vento Act, as amended by the ESSA).

Following reauthorization of the McKinney-Vento Act by the No Child Left Behind Act of 2001 (NCLB) (Pub. L. 107–110), the Secretary published a notice in the **Federal Register** on March 8, 2002 (67 FR 10697), that provided detailed guidelines to help States expedite the school enrollment of homeless children and youths. These guidelines included a review of statutory enrollment provisions related to both SEA and LEA responsibilities and concluded with a discussion of ways in which States have assisted, or may assist, LEAs in immediately enrolling students experiencing homelessness in schools.

Since the McKinney-Vento Act was last reauthorized under NCLB, SEAs and LEAs have made great strides in revising policies that posed barriers to the enrollment and success of homeless children and youths. The ESSA provides a new opportunity for States to review these policies and procedures to address continued barriers to homeless student success, as well as to review and refine policies related to new or changed provisions in the law.

II. Definitions

Section 725 of the McKinney-Vento Act, as amended by the ESSA, defines the following terms:

(a) *Homeless children and youths* means individuals who lack a fixed, regular, and adequate nighttime residence. The term includes—

(1) Children and youths who are sharing the housing of other persons due to loss of housing, economic hardship, or a similar reason; are living in motels, hotels, trailer parks, or camping grounds due to the lack of alternative adequate accommodations; are living in emergency or transitional shelters; or are abandoned in hospitals.

(2) Children and youths who have a primary nighttime residence that is a public or private place not designed for or ordinarily used as a regular sleeping accommodation for human beings.

(3) Children and youths who are living in cars, parks, public spaces, abandoned buildings, substandard housing, bus or train stations, or similar settings; and

(4) Migratory children (as defined in section 1309 of the Elementary and Secondary Education Act of 1965, as amended), who qualify as homeless because they are living in circumstances described in this definition.

(b) *Enroll and enrollment* include attending classes and participating fully in school activities.

(c) *Unaccompanied youth* includes a homeless child or youth not in the physical custody of a parent or guardian.

III. Changes to the EHCY Program Under the ESSA

The ESSA amended a number of key provisions under the EHCY program. Significant changes affect the following areas of the EHCY program:

(1) State Plans

State plan requirements have been modified and must include:

(a) A description of procedures to ensure (i) that homeless children and youths separated from public schools are identified and accorded equal access to appropriate secondary education and support services, including by identifying and removing barriers that prevent youths described in this clause from receiving appropriate credit for full or partial coursework satisfactorily completed while attending a prior school, in accordance with State, local, and school policies and (ii) that homeless children and youths who meet the relevant eligibility criteria do not face barriers to accessing academic and extracurricular activities, including magnet school, summer school, career and technical education, advanced placement, online learning, and charter school programs, if such programs are available at the State and local levels. (Section 722(g)(1)(F)(ii–iii)).

(b) A demonstration that SEAs and LEAs have developed polices to remove barriers to the identification, enrollment, and retention of homeless children and youths, including barriers to enrollment and retention due to outstanding fees or fines, or absences. (Section 722(g)(1)(I)).

(c) An assurance that SEAs and LEAs will adopt policies and practices to ensure that LEA liaisons participate in professional development and other technical assistance activities provided by the State Office of the Coordinator for Education of Homeless Children and Youths (Office of the Coordinator). (Section 722(g)(1)(J)(iv)).

(d) A description of how homeless children and youths will receive assistance from counselors to advise such youths, and prepare and improve the readiness of such youths for college. (Section 722(g)(1)(K)).

(2) Functions of the Office of the Coordinator

The statute now requires the State Coordinator for Education of Homeless Children and Youths (State Coordinator) to:

(a) Make publicly available reliable, valid, and comprehensive information on (i) the number of homeless children and youths identified in the State, which must be posted annually on the

State's Web site, and (ii) the difficulties in identifying the special needs of and barriers to the participation and achievement of homeless children and youths. (Section 722(f)(1)(A) & (C)).

(b) Conduct monitoring of LEAs. (Section 722(f)(5)).

(c) Provide professional development opportunities for LEA personnel, including the LEA liaison for homeless children and youths (LEA liaison), to assist these personnel in identifying and meeting the needs of homeless children and youths and provide training on the Federal definitions of terms related to homelessness. (Section 722(f)(6)).

(d) Respond to inquiries from parents and guardians of homeless children and youths, as well as unaccompanied homeless youths, to ensure that they receive the protections and services required by the McKinney-Vento Act. (Section 722(f)(7)).

(e) In conjunction with LEA liaisons, inform parents and guardians of homeless children and youths, as well as unaccompanied homeless youths, of the duties of LEA liaisons and publish an annually updated list of LEA liaisons on the SEA's Web site. (Section 722(g)(6)(B)).

(3) Duties of LEA Liaisons

The statute now requires LEA liaisons for homeless children and youths to:

(a) Ensure that school personnel providing services under the McKinney-Vento Act receive professional development and other support. (Section 722(g)(6)(A)(ix)).

(b) Ensure that unaccompanied homeless youths (i) are enrolled in school, (ii) have opportunities to meet the same challenging State academic standards as other children and youths, and (iii) are informed of their status as independent students under the Higher Education Act of 1965 and that they may obtain assistance from the LEA liaison to receive verification of such status for purposes of the Free Application for Federal Student Aid. (Section 722(g)(6)(A)(x)).

(c) Ensure that public notice of the educational rights of the homeless children and youths is disseminated in locations frequented by parents or guardians of such youth, and unaccompanied homeless youths, including schools, shelters, public libraries, and soup kitchens, in a manner and form that is understandable. (Section 722(g)(6)(A)(vi)).

In addition, LEA liaisons who receive appropriate training may now affirm that a child or youth who is eligible for and participating in a program provided by the LEA, or the immediate family of such a child or youth, is eligible for homeless assistance programs administered under Title IV of the McKinney-Vento Act. (Section 722(g)(6)(D)).

(4) School Stability

The statute has modified the requirements governing ''best interest'' determinations to include the following:

(a) The LEA must presume that keeping a homeless child or youth in the school of origin is in the child's or youth's best interest unless doing so is contrary to the request of the child's or youth's parent or guardian, or (in the case of an unaccompanied youth) the youth. (Section 722(g)(3)(B)(i)).

(b) The LEA must consider student-centered factors related to a child's or youth's best interest, giving priority to the request of the child's or youth's parent or guardian, or (in the case of an unaccompanied youth) the youth. (Section 722(g)(3)(B)(ii)).

(c) If the LEA determines that it is not in a child's or youth's best interest to attend the school of origin, or the school requested by the parent, guardian, or unaccompanied youth, it must provide a written explanation of the reasons for its determination, in a manner and form that is understandable. (Section 722(g)(3)(B)(iii)).

(5) Immediate Enrollment

The ESSA now requires that a school selected based on a homeless child's or youth's best interest must immediately enroll such child or youth even if he or she has missed application or enrollment deadlines during any period of homelessness. (Section 722(g)(3)(C)(i)(II)).

(6) Enrollment Disputes

The enrollment dispute procedures now encompass eligibility and the protections in those procedures have been clarified. For example, the Office of the State Coordinator now has an explicit duty to respond to inquiries from the parents and guardians of homeless children and youths, which may include eligibility disputes. (Section 722(f)(7)). In addition, if a dispute arises over eligibility, the child or youth shall be immediately enrolled in the school in which enrollment is sought, pending final resolution of the dispute, including all available appeals. (Section 722(g)(3)(E)).

(7) School of Origin

The definition of ''school of origin'' now specifically includes preschools and, when a child or youth completes the final grade level served by the school of origin, it also includes the designated receiving school at the next grade level for all feeder schools. (Section 722(g)(3)(I)).

(8) Privacy

The law now specifies that information about a homeless child's or youth's living situation shall be treated as a student education record, and shall not be deemed to be directory information. (Section 722(g)(3)(G)).

(9) Definition of Homeless Children and Youth

The definition no longer includes ''awaiting foster care placement.'' The deletion of ''awaiting foster care placement'' goes into effect on December 10, 2016, in every State except Delaware and Nevada, where the deletion is effective on December 10, 2017. (Section 725(2)(B)(i)).

IV. Guidelines for States on Assisting LEAs With the Implementation of EHCY Provisions Amended by the ESSA

A. State Responsibilities in Assisting LEAs

In its State plan, an SEA must assure that every LEA in the State designates an appropriate staff person to serve as a LEA liaison. (Section 722(g)(1)(J)(ii)). The LEA liaison will help ensure that homeless children and youths enroll in, and have a full and equal opportunity to succeed in, the schools of that LEA. (Section 722(g)(6)(A)(ii)).

The State Coordinator in each State must, among other things, provide technical assistance to, and conduct monitoring of, LEAs in coordination with LEA liaisons, to ensure that LEAs comply with EHCY program requirements. (Section 722(f)(5)). As described more fully above, State Coordinators also are responsible for providing professional development opportunities for LEA liaisons and other personnel to assist them in carrying out EHCY program requirements. (Section 722(f)(6)). Because the protections afforded to homeless children and youths apply regardless of whether an LEA receives a McKinney-Vento Act subgrant, the State Coordinator must ensure that technical assistance and professional development opportunities are provided to all LEAs.

Through strong leadership, collaboration, and communication with LEA liaisons, the State Coordinator can help ensure that LEAs are aware of, understand, and can successfully implement the changes to the EHCY program under the ESSA. Establishing clear-cut policies and procedures at the State level, and making sure LEAs understand them, will facilitate a

smooth transition to and implementation of new and revised EHCY program requirements.

B. State Activities That Can Be Effective for Assisting LEAs in Implementing the Provisions in the McKinney-Vento Act, as Amended by the ESSA

States have many options for ensuring that all LEA liaisons and LEAs receive training and information on changes to the EHCY program resulting from enactment of the ESSA. As previously shared in past guidance and technical assistance, we encourage SEAs to prepare and disseminate to their LEAs and schools memoranda, guidance documents, notices, or letters summarizing the new and existing EHCY program requirements and to share with them guidance provided by the Department. In doing so, we encourage States to use all available technology, such as email notices, listservs, the SEA Web site, Statewide hotlines, and teleconferencing. Additional State activities that may assist LEAs in implementing the law include:

(1) Hosting Statewide Trainings and Orientations, Especially for New LEA Liaisons

States can implement a system to ensure that every LEA liaison receives annual professional development on the provisions in the McKinney-Vento Act and good practices for implementation. States should require LEAs to notify the State Coordinator whenever a new LEA liaison is appointed so that the State Coordinator can provide or arrange small group or individually customized orientations with resources and support to equip new liaisons to fulfill their role effectively. Furthermore, the State Coordinator should ensure that all LEA liaisons receive ongoing information and professional development on challenging areas of implementation, including determining eligibility, determining best interest for school selection, and facilitating the dispute resolution process. States should investigate ways to assess LEA liaison competency and knowledge of LEA requirements and obligations under the McKinney-Vento Act. States may want to include other education personnel, as appropriate, in such training.

(2) Disseminating Templates, Forms, and Policies

States can provide sample forms, checklists, and other information on effective practices and procedures that may be implemented related to new and continuing statutory provisions under the EHCY program. SEAs can also provide samples of local Memoranda of Agreement that LEAs may utilize for coordination with local housing and social service agencies.

(3) Hosting and Encouraging Meetings and Convenings

States should provide networking opportunities for LEA liaisons through venues such as State or regional meetings, including homeless education strands of statewide Federal education or vulnerable student programs, as well as periodic conference calls or online meetings such as Webinars. These opportunities can provide LEA liaisons with direct access to and collaboration with the State Coordinator, colleagues in other LEAs, and useful resources. These may also provide opportunities to connect to and coordinate with contacts at other homeless-serving agencies and local programs.

V. Guidelines for Reviewing and Revising State Policies and Procedures

Section 722(g)(1)(I) requires, in the State Plan, a demonstration that the State educational agency and local educational agencies in the State have developed, and shall review and revise, policies to remove barriers to the identification of homeless children and youths, and the enrollment and retention of homeless children and youths in schools in the State, including barriers to enrollment and retention due to outstanding fees or fines, or absences. The following are examples of effective ways in which a State may review and revise State policies and procedures that may present barriers to the identification, enrollment, attendance, and success in school of homeless children and youths:

(1) Convening a Statewide Advisory Committee To Review State Policies and Procedures

An SEA may form a broad-based committee of experts and stakeholders to review relevant State policies and procedures affecting homeless children and youths and provide input on changes that may be needed. Such a committee could include representatives of the State coordinator's office; other SEA officials, including transportation officials; representatives from other State agencies, including public health and social services agencies; LEA officials, including LEA liaisons; legislative staff; homeless families and youths; and advocacy groups. The committee should review State laws, rules, regulations, letters, memoranda, and guidance documents to ensure that the State's policies comply with the requirements of the McKinney-Vento Act. The committee should pay particular attention to issues concerning transportation policies; student records and record-transfer requirements; enrollment of unaccompanied youths, including guardianship requirements; procedures for resolving enrollment disputes; and barriers resulting from school-related fees or school uniform policies.

(2) Soliciting Public Comment

A State may use a public comment process to solicit input on policies and procedures that should be revised to remove barriers to homeless children and youths' identification, enrollment, attendance, and school success. This process can include public hearings and meetings as well as the online submission of comments. This process could include sharing and analyzing existing EHCY data and conducting a survey of LEA liaisons and homeless youth and families. The SEA should engage specific stakeholder groups, including homeless children and youths and their families, to encourage them to provide comment. This process can be reopened biennially or annually as a request for information.

(3) Consulting With the Federal EHCY Program Office's Technical Assistance Contractor, the National Center for Homeless Education (NCHE), and Participating in Facilitated Peer Workgroups

The Federal EHCY program office and NCHE will work with State coordinators to disseminate information on innovative policies and approaches to implementation from across the country so that State Coordinators can learn from each other to improve statewide policy and practice. States may convene and/or join ad-hoc topical workgroups or a regular community of practice, as well as access more general Webinars and written advice, for crafting comprehensive State plans. NCHE will also facilitate the peer review of State plans and create ways to disseminate exemplary policies and practices after plans have been approved by the Department.

(4) Ensuring Sufficient Capacity in its Office of the Coordinator

Ensuring the Office of the Coordinator has sufficient capacity is critical to facilitating an effective review of policies and procedures. This review is essential for (1) developing State plans, (2) providing for the professional development of LEA liaisons, and (3) providing for technical assistance to LEA liaisons. Beyond the development

of the State plan, the Office of the Coordinator should be able to analyze LEA data on enrollment or other demographic information for patterns of possible under-identification of homeless children and youths or subgroups across the State. Such under-identification may necessitate the revision of policies and procedures.

As previously communicated by the Department in 2014 and 2015, for FY 2016 and FY 2017, the Office of the Coordinator should have the capacity to create annual work plans with measurable goals to improve identification, enrollment, attendance, achievement, and graduation for homeless students. Creating such annual work plans and setting measureable goals are elements included in the Federal EHCY program logic model. These elements are also part of the program leading indicators developed in 2014, with baseline implementation beginning in FY 2015 and further technical assistance coming from NCHE. Engagement in these activities affords the Office of the Coordinator an opportunity to revisit and revise, as appropriate, policies and procedures.

VI. Future Guidance

In light of the amendments to the McKinney-Vento Act under the ESSA, the Department is in the process of reviewing current guidance on the EHCY program and anticipates issuing updated guidance at a future date. General guidance, an email address to submit questions, and other information on ESSA is available online at: *www.ed.gov/ESSA.*

Accessible Format: Individuals with disabilities may obtain this notice in an accessible format (*e.g.,* braille, large print, audiotape, or compact disc) on request to the contact person listed under **FOR FURTHER INFORMATION CONTACT**.

Electronic Access to this Document: The official version of this document is the document published in the **Federal Register**. Free Internet access to the official edition of the **Federal Register** and the Code of Federal Regulations is available via the Federal Digital System at: *www.gpo.gov/fdsys.* At this site you can view this document, as well as all other documents of this Department published in the **Federal Register**, in text or Portable Document Format (PDF). To use PDF you must have Adobe Acrobat Reader, which is available free at the site.

You may also access documents of the Department published in the **Federal Register** by using the article search feature at: *www.federalregister.gov.* Specifically, through the advanced search feature at this site, you can limit your search to documents published by the Department.

Program Authority: Subtitle B of title VII of the McKinney-Vento Homeless Assistance Act, as amended by the Every Student Succeeds Act (Pub. L. 114–95).

Dated: March 14, 2016.

Ann Whalen,

Senior Advisor to the Secretary Delegated the Duties of Assistant Secretary for Elementary and Secondary Education.

[FR Doc. 2016–06073 Filed 3–16–16; 8:45 am]

BILLING CODE 4000–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket Nos. EL16–43–000; QF16–259–001]

Bright Light Capital, LLC; Notice of Petition for Declaratory Order

Take notice that on March 3, 2016, pursuant to Rule 207(a)(2) of the Federal Energy Regulatory Commission's (Commission) Rules of Practice and Procedure, 18 CFR 385.207(a)(2) (2015), Bright Light Capital, LLC (Bright Light or Petitioner), filed a petition for declaratory order (petition) requesting the Commission grant Bright Light a limited waiver of the qualifying facility certification requirement set forth in 18 CFR 292.203(a)(3) (2015) for the period of April 15, 2006 through December 21, 2015. As part of that waiver, Bright Light requests that the Commission find that a time value refund is not required under the specific facts-and-circumstances of this case, as more fully explained in the petition.

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, 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 Petitioner.

The Commission encourages electronic submission of protests and interventions in lieu of paper using the ''eFiling'' link at *http://www.ferc.gov.* Persons unable to file electronically should submit an original and 5 copies of the protest or intervention to the Federal Energy Regulatory Commission, 888 First Street NE., Washington, DC 20426

This filing is accessible on-line at *http://www.ferc.gov,* using the ''eLibrary'' link and is available for review in the Commission's Public Reference Room in Washington, DC. There is an ''eSubscription'' link on the Web site that enables subscribers to receive email notification when a document is added to a subscribed docket(s). For assistance with any FERC Online service, please email *FERCOnlineSupport@ferc.gov,* or call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Comment Date: 5:00 p.m. Eastern time on April 11, 2016.

Dated: March 11, 2016.

Nathaniel J. Davis, Sr.,

Deputy Secretary.

[FR Doc. 2016–06023 Filed 3–16–16; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Tennessee Gas Pipeline, L.L.C.; Notice of Availability of the Environmental Assessment for the Proposed Broad Run Expansion Project

The staff of the Federal Energy Regulatory Commission (FERC or Commission) has prepared an environmental assessment (EA) for the Broad Run Expansion Project (Project), proposed by Tennessee Gas Pipeline, L.L.C. (Tennessee) in the above-referenced docket. Tennessee requests authorization and a Certificate of Public Convenience and Necessity pursuant to sections 7(b) and 7(c) of the Natural Gas Act to construct new compressor stations and replace compression facilities in West Virginia, Kentucky, and Tennessee. The purpose of the Project is to provide an additional 200,000 dekatherms per day of firm incremental transportation service and to replace older, less efficient compression facilities with new, more efficient compression facilities.

The EA assesses the potential environmental effects of the construction and operation of the Broad Run Expansion Project in accordance with the requirements of the National Environmental Policy Act (NEPA). The FERC staff concludes that approval of the proposed Project, with appropriate mitigating measures, would not constitute a major federal action

significantly affecting the quality of the human environment.

The West Virginia Department of Environmental Protection participated as a cooperating agency in the preparation of the EA. Cooperating agencies have jurisdiction by law or special expertise with respect to resources potentially affected by the proposal and participate in the NEPA analysis.

The EA addresses the potential environmental effects of the construction, modification, and operation of the following facilities associated with the Project:

- Four new compressor stations (CS): Two in Kanawha County, West Virginia (CS 118A and CS 119A); one in Madison County, Kentucky (CS 875); and one in Davidson County, Tennessee (CS 563); and
- modifications (including abandonment and replacement of certain compression units, system components, and associated facilities) at the existing Clay City Compressor Station in Powell County, Kentucky (CS 106), and the existing Catlettsburg Compressor Station in Boyd County, Kentucky (CS 114).

The FERC staff mailed copies of the EA to federal, state, and local government representatives and agencies; elected officials; environmental and public interest groups; Native American tribes; potentially affected landowners and other interested individuals and groups; and newspapers and libraries in the project area. Paper copy versions of the EA were mailed to those specifically requesting them; all others received a CD version. In addition, the EA is available for public viewing on the FERC's Web site (*www.ferc.gov*) using the eLibrary link. A limited number of copies of the EA are available for distribution and public inspection at: Federal Energy Regulatory Commission, Public Reference Room, 888 First Street NE., Room 2A, Washington, DC 20426, (202) 502–8371.

Any person wishing to comment on the EA may do so. Your comments should focus on the potential environmental effects, reasonable alternatives, and measures to avoid or lessen environmental impacts. The more specific your comments, the more useful they will be. To ensure that your comments are properly recorded and considered prior to a Commission decision on the proposal, it is important that the FERC receives your comments on or before April 11, 2016.

For your convenience, there are three methods you can use to submit your comments to the Commission. In all instances, please reference the project docket number (CP15–77–000) with your submission. The Commission encourages electronic filing of comments and has expert staff available to assist you at (202) 502–8258 or *efiling@ferc.gov.*

(1) You can file your comments electronically using the eComment feature on the Commission's Web site (*www.ferc.gov*) under the link to Documents and Filings. This is an easy method for submitting brief, text-only comments on a project;

(2) You can also file your comments electronically using the eFiling feature on the Commission's Web site (*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 must select the type of filing you are making. If you are filing a comment on a particular project, please select ''Comment on a Filing''; or

(3) You can file a paper copy of your comments by mailing them to the following address: Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission, 888 First Street NE., Room 1A, Washington, DC 20426.

Any person seeking to become a party to the proceeding must file a motion to intervene pursuant to Rule 214 of the Commission's Rules of Practice and Procedures (Title 18 Code of Federal Regulations Part 385.214).[1] Only intervenors have the right to seek rehearing of the Commission's decision. The Commission grants affected landowners and others with environmental concerns intervenor status upon showing good cause by stating that they have a clear and direct interest in this proceeding that no other party can adequately represent. Simply filing environmental comments will not give you intervenor status, but you do not need intervenor status to have your comments considered.

Additional information about the project is available from the Commission's Office of External Affairs, at (866) 208–FERC, or on the FERC Web site (*www.ferc.gov*) using the eLibrary link. Click on the eLibrary link, click on ''General Search,'' and enter the docket number excluding the last three digits in the Docket Number field (*i.e.,* CP15–77). Be sure you have selected an appropriate date range. For assistance, please contact FERC Online Support at *FercOnlineSupport@ferc.gov* or toll free at (866) 208–3676, or for TTY, contact (202) 502–8659. The eLibrary link also provides access to the texts of 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. Go to *www.ferc.gov/docs-filing/esubscription.asp.*

Dated: March 11, 2016.

Nathaniel J. Davis, Sr.,

Deputy Secretary.

[FR Doc. 2016–06022 Filed 3–16–16; 8:45 am]

BILLING CODE 6717–01–P

[1] See the previous discussion on the methods for filing comments.

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Project No. 2814–023]

Paterson Municipal Utilities Authority, Great Falls Hydroelectric Company, City of Paterson, New Jersey; Notice of Application for Transfer of License, and Soliciting Comments and Motions To Intervene

On February 26 2016, Paterson Municipal Utilities Authority (PMUA) and Great Falls Hydroelectric Company (Great Falls) (transferors/co-licensees) and the City of Paterson, New Jersey (transferee/City of Paterson) (Successor in Interest to PMUA) filed an application for the transfer of license for the Great Falls Project No. 2814, located on the Passaic River in Passaic County, New Jersey.

Applicants seek Commission approval to transfer the license for the Great Falls Project from PMUA and Great Falls who are currently co-licensees to Great Falls and the City of Paterson who will become co-licensees.

Applicants' Contact: For transferors: Mr. Robert Gates, Executive Vice President of Operations, Eagle Creek Renewable Energy, LLC, 65 Madison Avenue, Suite 500, Morristown, NJ 07960, Phone: 973–998–8400, Email: *Bob.gates@eaglecreekre.com* and Mr. Joshua E. Adrian, Duncan, Weinberg, Genzer & Pembroke, P.C., 1615 M Street, NW., Suite 800, Washington, DC 20036, Phone: 202–467–6370, Email: *jea@dwgp.com.* For transferee: Mr. Ben-David Seligman, Esq., 2nd Asst. Corp. Counsel, City of Paterson, New Jersey,

155 Market Street, Paterson, NJ 07505, Phone 973–321–1366, Email: *bseligman@patersonnj.gov* and Ms. Julia S. Wood, Van Ness Feldman, LLP, 1050 Thomas Jefferson St. NW., Suite 700, Washington, DC 20007, Phone: 202–298–1800, Email: *jsw@vnf.com.*

FERC Contact: Patricia W. Gillis (202) 502–8735, *patricia.gillis@ferc.gov.*

Deadline for filing comments, motions to intervene, and protests: 15 days from the date that the Commission issues this notice. The Commission strongly encourages electronic filing. Please file comments, motions to intervene, and protests using the Commission's eFiling system at *http://www.ferc.gov/docs-filing/efiling.asp.* Commenters can submit brief comments up to 6,000 characters, without prior registration, using the eComment system at *http://www.ferc.gov/docs-filing/ecomment.asp.* You must include your name and contact information at the end of your comments. For assistance, please contact FERC Online Support at *FERCOnlineSupport@ferc.gov,* (866) 208–3676 (toll free), or (202) 502–8659 (TTY). In lieu of electronic filing, please send a paper copy to: Secretary, Federal Energy Regulatory Commission, 888 First Street NE., Washington, DC 20426. The first page of any filing should include docket number P–2814–023.

Dated: March 11, 2016.

Nathaniel J. Davis, Sr.,

Deputy Secretary.

[FR Doc. 2016–06024 Filed 3–16–16; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Combined Notice of Filings #1

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

Docket Numbers: EC11–35–000.
Applicants: NSTAR, Northeast Utilities.
Description: Informational Filing of Eversource Energy Service Company.
Filed Date: 2/29/16.
Accession Number: 20160229–5193.
Comments Due: 5 p.m. ET 3/22/16.

Docket Numbers: EC16–83–000.
Applicants: High Lonesome Mesa Wind Holdings, LLC, High Lonesome Holdings, LLC.
Description: Amendment to February 29, 2016 Application for Authorization under Section 203 of the Federal Power Act of High Lonesome Holdings, LLC, et al.
Filed Date: 3/10/16.
Accession Number: 20160310–5212.
Comments Due: 5 p.m. ET 3/21/16.

Take notice that the Commission received the following exempt wholesale generator filings:

Docket Numbers: EG16–69–000.
Applicants: Roswell Solar, LLC.
Description: Notice of Self-Certification of Exempt Wholesale Generator Status of Roswell Solar, LLC.
Filed Date: 3/11/16.
Accession Number: 20160311–5047.
Comments Due: 5 p.m. ET 4/1/16.

Docket Numbers: EG16–70–000.
Applicants: Chaves County Solar, LLC.
Description: Notice of Self-Certification of Exempt Wholesale Generator Status of Chaves County Solar, LLC.
Filed Date: 3/11/16.
Accession Number: 20160311–5050.
Comments Due: 5 p.m. ET 4/1/16.

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

Docket Numbers: ER13–96–008.
Applicants: Black Hills Power, Inc.
Description: Compliance filing: Compliance Filing to Correct eTariff Record to be effective 10/1/2015.
Filed Date: 3/10/16.
Accession Number: 20160310–5184.
Comments Due: 5 p.m. ET 3/31/16.

Docket Numbers: ER13–97–008.
Applicants: Black Hills/Colorado Electric Utility Co.
Description: Compliance filing: Compliance Filing to Correct eTariff Record to be effective 10/1/2015.
Filed Date: 3/10/16.
Accession Number: 20160310–5185.
Comments Due: 5 p.m. ET 3/31/16.

Docket Numbers: ER13–120–008.
Applicants: Cheyenne Light, Fuel and Power Company.
Description: Compliance filing: Compliance Filing to Correct eTariff Record to be effective 10/1/2015.
Filed Date: 3/10/16.
Accession Number: 20160310–5186.
Comments Due: 5 p.m. ET 3/31/16.

Docket Numbers: ER15–1218–002; ER15–2224–001.
Applicants: Solar Star California XIII, LLC, Solar Star Colorado III, LLC.
Description: Notice of Non-Material Change in Status of Solar Star California XIII, LLC and Solar Star Colorado III, LLC.
Filed Date: 3/10/16.
Accession Number: 20160310–5206.
Comments Due: 5 p.m. ET 3/31/16.

Docket Numbers: ER16–168–002.
Applicants: New York Independent System Operator, Inc.
Description: Compliance filing: NYISO compliance re: unauthorized natural gas use to be effective 2/18/2016.
Filed Date: 3/11/16.
Accession Number: 20160311–5051.
Comments Due: 5 p.m. ET 4/1/16.

Docket Numbers: ER16–532–001.
Applicants: PJM Interconnection, L.L.C.
Description: Compliance filing: Compliance Filing per 2/12/16 Order in Docket No. ER16–532 to be effective 2/15/2016.
Filed Date: 3/11/16.
Accession Number: 20160311–5197.
Comments Due: 5 p.m. ET 4/1/16.

Docket Numbers: ER16–917–001; ER14–2458–001; ER11–3013–005; ER10–2872–005; ER10–2870–006; ER10–2868–005; ER10–2865–006; ER10–2860–007.
Applicants: TC Ironwood LLC, TransCanada Power Marketing Ltd, TransCanada Energy Sales Ltd., TC Ravenswood, LLC, TransCanada Maine Wind Development Inc., TransCanada Hydro Northeast Inc., Ocean State Power LLC, Coolidge Power LLC.
Description: Amendment to March 2, 2016 Notice of Non-Material Change in Status of TransCanada MBR Sellers.
Filed Date: 3/8/16.
Accession Number: 20160308–5148.
Comments Due: 5 p.m. ET 3/18/16.

Docket Numbers: ER16–1135–000.
Applicants: Healthy Planet Partners Energy Company, LLC.
Description: Tariff Cancellation: MBRA Amendment Cancellation to be effective 3/31/2016.
Filed Date: 3/11/16.
Accession Number: 20160311–5007.
Comments Due: 5 p.m. ET 4/1/16.

Docket Numbers: ER16–1136–000.
Applicants: Southwest Power Pool, Inc.
Description: § 205(d) Rate Filing: 1154R12 Associated Electric Cooperative NITSA and NOA to be effective 3/1/2016.
Filed Date: 3/11/16.
Accession Number: 20160311–5049.
Comments Due: 5 p.m. ET 4/1/16.

Docket Numbers: ER16–1138–000.
Applicants: PJM Interconnection, L.L.C.
Description: Request of PJM Interconnection, L.L.C. for Limited Tariff Waiver and Expedited Treatment.
Filed Date: 3/11/16.
Accession Number: 20160311–5083.
Comments Due: 5 p.m. ET 03/21/16.

Docket Numbers: ER16–1142–000.
Applicants: Innovative Solar 43, LLC.
Description: Tariff Cancellation: Innovative Solar 43, LLC Notice of Cancellation to be effective 3/12/2016.
Filed Date: 3/11/16.

Accession Number: 20160311–5148.
Comments Due: 5 p.m. ET 4/1/16.

Docket Numbers: ER16–1143–000.
Applicants: PJM Interconnection, L.L.C.
Description: Tariff Cancellation: Notice of Cancellation of Beech Ridge II ISA No. 3087, Queue No. M24 to be effective 5/2/2016.
Filed Date: 3/11/16.
Accession Number: 20160311–5157.
Comments Due: 5 p.m. ET 4/1/16.

Docket Numbers: ER16–1144–000.
Applicants: PacifiCorp.
Description: Tariff Cancellation: Termination of PAC Energy Construction Agmt—Paisley to be effective 5/11/2016.
Filed Date: 3/11/16.
Accession Number: 20160311–5165.
Comments Due: 5 p.m. ET 4/1/16.

Docket Numbers: ER16–1145–000.
Applicants: PJM Interconnection, L.L.C.
Description: § 205(d) Rate Filing: First Revised Service Agreement No. 4173; Queue Position Z1–066 to be effective 2/10/2016.
Filed Date: 3/11/16.
Accession Number: 20160311–5182.
Comments Due: 5 p.m. ET 4/1/16.

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

Docket Numbers: ES16–24–000.
Applicants: MidAmerican Energy Company.
Description: Application of MidAmerican Energy Company pursuant to Section 204 of the Federal Power Act.
Filed Date: 3/11/16.
Accession Number: 20160311–5039.
Comments Due: 5 p.m. ET 4/1/16.

Docket Numbers: ER16–1146–000.
Applicants: Union Power Partners, L.P.
Description: Tariff Cancellation: Notice of Termination for Rate Schedule FERC No. 2 to be effective 3/3/2016.
Filed Date: 3/11/16.
Accession Number: 20160311–5207.
Comments Due: 5 p.m. ET 4/1/16.

The filings are accessible in the Commission's eLibrary system by clicking on the links or querying the docket number.

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

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

Dated: March 11, 2016.

Nathaniel J. Davis, Sr.,

Deputy Secretary.

[FR Doc. 2016–06021 Filed 3–16–16; 8:45 am]

BILLING CODE 6717–01–P

ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–OPPT–2015–0841; FRL–9941–93]

Request for Applications; Third-Party Chemical/Product Profilers for the Safer Choice Program

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: The Safer Choice Program reduces pollution and potential risk at its source by setting criteria that product manufacturers must meet to qualify to use the Safer Choice label. The Safer Choice label helps consumers, businesses, and purchasers find products with ingredients that perform well and are safer for human health and the environment. To earn the Safer Choice label, products and their ingredients must meet the established Safer Choice Standard and safer chemical criteria. Third-party profilers (TPP) review the candidate's products against Safer Choice standards and criteria, collect performance information, and develop chemical profiles. EPA is seeking additional third-party profilers to help the Safer Choice Program meet the growing consumer demand for safer products carrying the Safer Choice label. Entities that are interested in serving as Safer Choice third-party profilers should submit an application for EPA consideration. Qualified applicants will be asked to sign a memorandum of understanding (MOU), formalizing their commitment to support the Safer Choice Program's human and environmental health protection mission.

DATES: Applications may be submitted at any time; however, to be considered for qualification as a third-party profiler in 2016, applications must be received by May 16, 2016.

ADDRESSES: Submit your application identified by docket identification (ID) number EPA–HQ–OPPT–2015–0841, by one of following methods:

- *Mail:* Safer Choice TPP Application, c/o Abt Associates, Inc., Attn: Klara Zimmerman, 4550 Montgomery Avenue, Suite 800 North, Bethesda, MD 20814–5341.
- *Phone:* (301) 634–1722.
- *Docket:* Submit to the docket ID number EPA–HQ–OPPT–2015–0841.
- *Hand Delivery:* To make special arrangements for hand delivery or delivery of boxed information, please contact Tony Thompson (**FOR FURTHER INFORMATION CONTACT**). Additional instructions on commenting or visiting the docket, along with more information about dockets generally is available at *http://www.epa.gov/dockets.*

FOR FURTHER INFORMATION CONTACT: *For technical information contact:* Tony Thompson, Chemistry, Economics and Sustainable Strategies Division, Office of Pollution Prevention and Toxics, Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460–0001; telephone number: (202) 564–2296; email address: *thompson.tony@epa.gov.*

SUPPLEMENTARY INFORMATION:

I. General Information

To help the Safer Choice program meet the growing consumer demand for safer products carrying the Safer Choice label, EPA is actively soliciting applications for additional Safer Choice third-party profilers. Entities that are interested in serving as a Safer Choice third-party profiler should review the Safer Choice standards and criteria and other program materials available at *http://www.epa.gov/saferchoice* to determine whether they should apply.

For a candidate to qualify and fully participate in the Safer Choice Program, Safer Choice expects and TPPs should address how they would approach or undertake each of the following activities:

1. *Supporting the Safer Choice Program.* Safeguard and uphold the integrity, quality, and trustworthiness of the Safer Choice product and chemical-evaluation processes, program, and label, including development of strong and effective working relationships with the Safer Choice staff.

2. *Meeting and Maintaining the TPP Provisions in the Safer Choice Standard.* Satisfy the provisions of the Safer Choice Standard, section 7—''Profiler Requirements,'' which include technical competence in chemical hazard and fate reviews; staffing with experts in the various profiling disciplines; facility with toxicological models and estimation tools; program managerial skills; credibility and good standing; and success at a pilot review that

simulates an actual product evaluation. (See the Safer Choice Standard at *http://www2.epa.gov/saferchoice/safer-choice-standard.*)

3. *Following the Procedures in the Safer Choice TPP Handbook.* Use the Third-Party Profiler Handbook/Guidance Manual to inform its profiling activities, including, for example, searching the approved set of data sources; digesting the key, distinguishing hazard data; and preparing a dossier on each chemical ingredient in a candidate product.

Beyond regular oversight, the TPP will conduct annual partner surveillance, including triennial on-site audits, to ensure compliance with program requirements. (See the Third-Party Profiler Handbook; contact Tony Thompson at *thompson.tony@epa.gov* or (202) 564–2296 for details.)

4. *Submitting to Performance Review.* In addition to regular feedback and recommendations from Safer Choice staff, engage in annual performance reviews, and once every 5 years, a full performance evaluation, which will culminate in a Safer Choice decision on whether the TPP retains its status as a qualified TPP.

5. *Adopting and Using the Safer Choice Data System.* Use the Safer Choice data system (known as the Safer Choice Community) to manage all Safer Choice product review and partnership activities, including purchase and maintenance of the necessary computer hardware and system licenses. (For more information, see the TPP Handbook.)

6. *Performing Supplemental Duties.* Fulfill other requests and functions related to its TPP duties that may arise from time to time, as needed.

7. *Adhering to Good Business Practices.* Demonstrate and follow good business practices in dealing with companies working with Safer Choice. Good business practices include: Offering open access to your services to legitimate potential clients; adopting and implementing customer service standards; and avoiding potential conflicts of interest.

8. *Signing a Memorandum of Understanding.* Qualified applicants will be asked to sign a MOU, formalizing their commitment to serve as a TPP and support the Safer Choice Program's human and environmental health protection mission. (See the boilerplate MOU in the docket ID number EPA–HQ–OPPT–2015–0841.)

II. Instructions for Applicants

A. How to Submit an Application

Applicants for Safer Choice Third Party Profiler must complete an application form, available in the docket ID number EPA–HQ–OPPT–2015–0841. To be considered in the 2016 selection cycle, completed applications must be submitted to Safer Choice via one of the means listed under **ADDRESSES** and by the deadline listed under **DATES** indicated in this notice.

B. Requirements for Submitting Business Proprietary Information

Clearly mark the part or all of the information that you claim to be business proprietary. In addition to one complete version of the application that includes information claimed as proprietary, a copy of the application that does not contain the proprietary information must be submitted. Information marked as business proprietary will not be disclosed except in accordance with the procedures set forth in 40 CFR part 2.

III. Selection of Safer Choice Third-Party Profilers

Safer Choice will review and evaluate all applications based on the TPP qualifications enumerated in this notice. From the applications submitted for the 2016 TPP cycle, the program will select up to two best-qualified candidates to participate in trial product reviews. After successful completion of these reviews—during which the program will assist the candidate in orienting to the process and gaining competency—the candidate will be a qualified Safer Choice TPP. The new TPP will be asked to sign the Safer Choice-TPP memorandum of understanding and, following signature, may accept clients and begin its service to the program.

The quality and integrity of the Safer Choice label rests on active program engagement with and oversight of our profilers. Safer Choice plans to add up to two new TPPs this year, doubling its pool of profilers, based on the program's ability to assimilate, train, and oversee the new TPPs while maintaining its other program functions. Safer Choice will continually evaluate its ability to bring on additional TPPs.

All qualified TPPs will be listed in and accessible via the Safer Choice Community, the data system product manufacturers use to apply for the Safer Choice label.

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

Dated: March 9, 2016.

Wendy C. Hamnett,

Director, Office of Pollution Prevention and Toxics.

[FR Doc. 2016–06052 Filed 3–16–16; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–OPPT–2013–0677; FRL–9943–57]

Receipt of Test Data Under the Toxic Substances Control Act

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: EPA is announcing its receipt of test data submitted pursuant to a test rule issued by EPA under the Toxic Substances Control Act (TSCA). As required by TSCA, this document identifies each chemical substance and/or mixture for which test data have been received; the uses or intended uses of such chemical substance and/or mixture; and describes the nature of the test data received. Each chemical substance and/or mixture related to this announcement is identified in Unit I. under **SUPPLEMENTARY INFORMATION**.

FOR FURTHER INFORMATION CONTACT:

For technical information contact: Kathy Calvo, Chemical Control Division (7405M), Office of Pollution Prevention and Toxics, Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460–0001; telephone number: (202) 564–8089; email address: *calvo.kathy@epa.gov.*

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

SUPPLEMENTARY INFORMATION:

I. Chemical Substances and/or Mixtures

Information about the following chemical substance and/or mixture is provided in Unit IV.:

D-erythro-hex-2-enonic acid, gamma-lactone, monosodium salt (*CAS RN 6381–77–7*).

II. Federal Register Publication Requirement

Section 4(d) of TSCA (15 U.S.C. 2603(d)) requires EPA to publish a notice in the **Federal Register** reporting the receipt of test data submitted pursuant to test rules promulgated under TSCA section 4 (15 U.S.C. 2603).

III. Docket Information

A docket, identified by the docket identification (ID) number EPA–HQ–OPPT–2013–0677, has been established for this **Federal Register** document that announces the receipt of data. Upon EPA's completion of its quality assurance review, the test data received will be added to the docket for the

TSCA section 4 test rule that required the test data. Use the docket ID number provided in Unit IV. to access the test data in the docket for the related TSCA section 4 test rule.

The docket for this **Federal Register** document and the docket for each related TSCA section 4 test rule is available electronically at *http://www.regulations.gov* or in person at the Office of Pollution Prevention and Toxics Docket (OPPT Docket), Environmental Protection Agency Docket Center (EPA/DC), West William Jefferson Clinton Bldg., Rm. 3334, 1301 Constitution Ave. NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the OPPT Docket is (202) 566–0280. Please review the visitor instructions and additional information about the docket available at *http://www.epa.gov/dockets.*

IV. Test Data Received

This unit contains the information required by TSCA section 4(d) for the test data received by EPA.

D-erythro-hex-2-enonic acid, gamma-lactone, monosodium salt (*CAS RN 6381–77–7*).

1. *Chemical Uses:* Antioxidant in food applications for which the vitamin activity of ascorbic acid (Vitamin C) is not required. Specifically, the compound is most frequently used to develop and retain the coloring and taste in meat products. It is also used for seafood products, fruit, and vegetable preservation, in beverages, and as a developing agent in photographic applications.

2. *Applicable Test Rule:* Chemical testing requirements for second group of high production volume chemicals (HPV2), 40 CFR 799–5087.

3. *Test Data Received:* The following listing describes the nature of the test data received. The test data will be added to the docket for the applicable TSCA section 4 test rule and can be found by referencing the docket ID number provided. EPA reviews of test data will be added to the same docket upon completion.

Aquatic Toxicity Study (Algae) (C1). The docket ID number assigned to this data is EPA–HQ–OPPT–2007–0531.

V. Correction

In the previous **Federal Register** notice published February 8, 2016 (81 FR 6511) (FRL–9942–65) in the heading, the Docket Number was listed incorrectly. The correct Docket Number is: EPA–HQ–OPPT–2013–0677.

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

Dated: March 10, 2016.

Maria J. Doa,

Director, Chemical Control Division, Office of Pollution Prevention and Toxics.

[FR Doc. 2016–06053 Filed 3–16–16; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–OECA–2012–0502; FRL—9943–84–OEI]

Information Collection Request Submitted to OMB for Review and Approval; Comment Request; NSPS for Hospital/Medical/Infectious Waste Incinerators (Renewal)

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: The Environmental Protection Agency has submitted an information collection request (ICR), ''NSPS for Hospital/Medical/Infectious Waste Incinerators (40 CFR part 60, subpart Ec) (Renewal)'' (EPA ICR No. 1730.10, OMB Control No. 2060–0363) to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*). This is a proposed extension of the ICR, which is currently approved through March 31, 2016. Public comments were previously requested via the **Federal Register** (80 FR 32116) on June 5, 2015, during a 60-day comment period. This notice allows for an additional 30 days for public comments. A fuller description of the ICR is given below, including its estimated burden and cost to the public. An Agency may not conduct or sponsor and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number.

DATES: Additional comments may be submitted on or before April 18, 2016.

ADDRESSES: Submit your comments, referencing Docket ID Number EPA–HQ–OECA–2012–0502, to (1) EPA online using *www.regulations.gov* (our preferred method), by email to *docket.oeca@epa.gov,* or by mail to: EPA Docket Center, Environmental Protection Agency, Mail Code 28221T, 1200 Pennsylvania Ave. NW., Washington, DC 20460, and (2) OMB via email to *oira_submission@omb.eop.gov.* Address comments to OMB Desk Officer for EPA.

EPA's policy is that all comments received will be included in the public docket without change including any personal information provided, unless the comment includes profanity, threats, information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute.

FOR FURTHER INFORMATION CONTACT: Patrick Yellin, Monitoring, Assistance, and Media Programs Division, Office of Compliance, Mail Code 2227A, Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460; telephone number: (202) 564–2970; fax number: (202) 564–0050; email address: *yellin.patrick@epa.gov.*

SUPPLEMENTARY INFORMATION: Supporting documents which explain in detail the information that the EPA will be collecting are available in the public docket for this ICR. The docket can be viewed online at *www.regulations.gov* or in person at the EPA Docket Center, EPA 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: The affected entities are subject to the General Provisions of the NSPS at 40 CFR part 60, subpart A and any changes, or additions to the Provisions specified at 40 CFR part 60, subpart Ec. Owners or operators of the affected facilities must make an initial notification, performance tests, periodic reports, and maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility, or any period during which the monitoring system is inoperative. Reports are also required semiannually.

Form Numbers: None.

Respondents/affected entities: Hospital/medical/infectious waste incinerators.

Respondent's obligation to respond: Mandatory (40 CFR part 60, subpart Ec).

Estimated number of respondents: 8 (total).

Frequency of response: Initially, occasionally, semiannually and annually.

Total estimated burden: 5,670 hours (per year). Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: $972,000 (per year), includes $402,000 annualized capital or operation & maintenance costs.

Changes in the estimates: There is an overall increase in burden in this ICR from the most recently approved ICR. This is due to an increase in the estimated number of sources subject to the regulation, and is not caused by

program changes. We estimate the industry will continue to grow at the rate of one new source per year. This results in increases in the respondent labor hours, number of responses, and capital/O&M costs.

Courtney Kerwin,

Acting Director, Collection Strategies Division.

[FR Doc. 2016–06046 Filed 3–16–16; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[FRL–9943–81–OEI]

Agency Information Collection Activities OMB Responses

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: This document announces the Office of Management and Budget (OMB) responses to Agency clearance requests, in compliance with the Paperwork Reduction Act (44 U.S.C. 3501 et. seq.). An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA regulations are listed in 40 CFR part 9 and 48 CFR chapter 15.

FOR FURTHER INFORMATION CONTACT: Courtney Kerwin (202) 566–1669, or email at *kerwin.courtney@epa.gov* and please refer to the appropriate EPA Information Collection Request (ICR) Number.

SUPPLEMENTARY INFORMATION:

OMB Responses to Agency Clearance Requests

OMB Approvals

EPA ICR Number 2311.02; Pesticide Program Public Sector Collections (FIFRA Sections 18 & 24 (c)) (Renewal); 40 CFR parts 162 and 166; was approved without change on 10/06/2015; OMB Number 2070–0182; expires on 10/31/2018.

EPA ICR Number 2326.03; Effluent Guidelines and Standards for the Airport Deicing Category (Renewal); 40 CFR part 449; was approved without change on 10/06/2015; OMB Number 2040–0285; expires on 10/31/2018.

EPA ICR Number 1850.07; NESHAP for Primary Copper Smelters (Renewal); 40 CFR part 63, subparts QQQ and A; was approved with change on 10/07/2015; OMB Number 2060–0476; expires on 10/31/2018.

EPA ICR Number 2289.03; National Volatile Organic Compound (VOC) Emission Standards for Aerosol Coatings (Renewal); 40 CFR part 59, subpart E; was approved without change on 10/7/2015; OMB Number 2060–0617; expires on 10/31/2018.

EPA ICR Number 2458.02; Fuel Use Requirements for Great Lakes Steamships (Renewal); 40 CFR part 1043; was approved without change on 10/7/2015; OMB Number 2060–0679; expires on 10/31/2018.

EPA ICR Number 1805.07; NESHAP for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills (Renewal); 40 CFR part 63, subparts MM and A; was approved without change on 10/7/2015; OMB Number 2060–0377; expires on 10/31/2018.

EPA ICR Number 1432.31; Recordkeeping and Periodic Reporting of the Production, Import, Export, Recycling, Destruction, Transhipment, and Feedstock Use of Ozone-Depleting Substances (Renewal); 40 CFR part 82; was approved without change on 10/9/2015; OMB Number 2060–0170; expires on 10/31/2018.

EPA ICR Number 1773.11; NESHAP for Hazardous Waste Combustors (Renewal); 40 CFR part 63, subpart EEE; 40 CFR parts 63.5, 63.6, 63.7, 63.8, 63.9, 63.1204, 63.1205, 63.1206, 63.1207, 63.1209; was approved without change on 10/13/2015; OMB Number 2050–0171; expires on 10/31/2018.

EPA ICR Number 0959.15; Facility Ground-Water Monitoring Requirements (Renewal); 40 CFR parts 264, 264.98, 264.99, 264.1, 265; was approved without change on 10/13/2015; OMB Number 2050–0033; expires on 10/31/2018.

EPA ICR Number 1710.07; Residential Lead-Based Paint Hazard Disclosure Requirements (Renewal); 40 CFR part 745, 40 CFR part 75, subpart F, and 24 CFR part 35; was approved without change on 10/14/2015; OMB Number 2070–0151; expires on 10/31/2018.

EPA ICR Number 1884.08; Partial Update of the TSCA Sec. 8(b) Inventory Database, Production and Site Reports (Chemical Data Reporting) (Revision); 40 CFR part 711; was approved without change on 10/14/2015; OMB Number 2070–0162; expires on 10/31/2018.

EPA ICR Number 1360.13; Underground Storage Tanks: Technical and Financial Requirements, and State Program Approval Procedures (Renewal); 40 CFR parts 280 and 281; was approved with change on 10/14/2015; OMB Number 2050–0068; expires on 10/31/2018.

EPA ICR Number 1597.11; Requirements and Exemptions for Specific RCRA Wastes (Renewal); 40 CFR part 266, subpart N; 40 CFR parts 273.14–15, 273.8, 260.23, 273.18, 273.34–35, 273.61–62, 273.38–39, 279.10–11, 273.32, 279.42–44, 279.52–55, 279.57, 279.63, and 279.82; was approved without change on 10/19/2015; OMB Number 2050–0145; expires on 10/31/2018.

EPA ICR Number 0820.13; Hazardous Waste Generator Standards (Renewal); 40 CFR parts 265.192, 265.193, 265.196, 265.191, 262.34, 262.40(c), 262.43, 262.44(c), 262.53–57, 262.60, 265.190, 264, 262, and 265; was approved with change on 10/19/2015; OMB Number 2050–0035; expires on 10/31/2018.

EPA ICR Number 2391.03; Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone (Renewal); 40 CFR parts 51, 75, 96 and 97; was approved without change on 10/26/2015; OMB Number 2060–0667; expires on 10/31/2018.

EPA ICR Number 1613.05; Data Reporting Requirements for State and Local Vehicle Emission Inspection and Maintenance (I/M) Programs (Renewal); 40 CFR part 51, subpart S; was approved without change on 10/27/2015; OMB Number 2060–0252; expires on 10/31/2018.

Comment Filed

EPA ICR Number 2515.01; Revised Interpretation of Clean Water Act Tribal Provision (Proposed Rule); 40 CFR parts 131.4(c), 131.8, 123.31–34 and 223.60–62; OMB filed comment on 10/06/2015.

Courtney Kerwin,

Acting Director, Collections Strategies Division.

[FR Doc. 2016–06045 Filed 3–16–16; 8:45 am]

BILLING CODE 6560–50–P

FEDERAL COMMUNICATIONS COMMISSION

[OMB 3060–0248]

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

AGENCY: Federal Communications Commission.

ACTION: Notice and request for comments.

SUMMARY: As part of its continuing effort to reduce paperwork burdens, and as required by the Paperwork Reduction Act (PRA) of 1995 (44 U.S.C. 3501–3520), the Federal Communications Commission (FCC or the Commission) invites the general public and other

federal agencies to take this opportunity to comment on the following information collection. Comments are requested concerning: Whether the collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; the accuracy of the Commission's burden estimate; ways to enhance the quality, utility, and clarity of the information collected; ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology; and ways to further reduce the information collection burden on small business concerns with fewer than 25 employees.

The FCC may not conduct or sponsor a collection of information unless it displays a currently valid control number. No person shall be subject to any penalty for failing to comply with a collection of information subject to the PRA that does not display a valid Office of Management and Budget (OMB) control number.

DATES: Written PRA comments should be submitted on or before May 16, 2016. If you anticipate that you will be submitting comments, but find it difficult to do so within the period of time allowed by this notice, you should advise the contact listed below as soon as possible.

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

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

SUPPLEMENTARY INFORMATION:

OMB Control Number: 3060–0248.

Title: Section 74.751, Modification of Transmission Systems.

Form Number: Not applicable.

Type of Review: Extension of a currently approved collection.

Respondents: Business or other for-profit entities; Not-for-profit institutions; State, Local or Tribal Government.

Number of Respondents and Responses: 400 respondents; 400 responses.

Estimated Time per Response: 0.50 hours.

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

Total Annual Burden: 200 hours.

Total Annual Cost: None.

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

Nature and Confidentiality: There is no need for confidentiality with this collection of information.

Privacy Impact Assessment: No impact(s).

Needs and Uses: 47 CFR 74.751(a) and (c) require licensees of low power TV or TV translator stations to send written notification to the FCC of equipment changes which may be made at licensee's discretion without the use of a formal application. Section 74.751(d) requires that licensees of low power TV or TV translator stations place in the station records a certification that the installation of new or replacement transmitting equipment complies in all respects with the technical requirements of this section and the station authorization. The notifications and certifications of equipment changes are used by FCC staff to ensure that the equipment changes made are in full compliance with the technical requirements of this section and the station authorizations and will not cause interference to other authorized stations.

Federal Communications Commission.

Marlene H. Dortch,

Secretary, Office of the Secretary.

[FR Doc. 2016–05991 Filed 3–16–16; 8:45 am]

BILLING CODE 6712–01–P

FEDERAL DEPOSIT INSURANCE CORPORATION

Sunshine Act Meeting

Pursuant to the provisions of the ''Government in the Sunshine Act'' (5 U.S.C. 552b), notice is hereby given that at 10:24 a.m. on Tuesday, March 15, 2016, the Board of Directors of the Federal Deposit Insurance Corporation met in closed session to consider matters related to the Corporation's supervision, corporate, and resolution activities.

In calling the meeting, the Board determined, on motion of Vice Chairman Thomas M. Hoenig, seconded by Director Richard Cordray (Director, Consumer Financial Protection Bureau), concurred in by Director Thomas J. Curry (Comptroller of the Currency), and Chairman Martin J. Gruenberg, that Corporation business required its consideration of the matters which were to be the subject of this meeting on less than seven days' notice to the public; that no earlier notice of the meeting was practicable; that the public interest did not require consideration of the matters in a meeting open to public observation; and that the matters could be considered in a closed meeting by authority of subsections (c)(2), (c)(4), (c)(6), (c)(8), (c)(9)(A)(ii), (c)(9)(B), and (c)(10) of the ''Government in the Sunshine Act'' (5 U.S.C. 552b(c)(2), (c)(4), (c)(6), (c)(8), (c)(9)(A)(ii), (c)(9)(B), and (c)(10).

Dated: March 15, 2016.

Robert E. Feldman,

Executive Secretary.

[FR Doc. 2016–06141 Filed 3–15–16; 4:15 pm]

BILLING CODE 6714–01–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 (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 notices are set forth in paragraph 7 of the Act (12 U.S.C. 1817(j)(7)).

The notices are available for immediate inspection at the Federal Reserve Bank indicated. The notices also will be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing to the Reserve Bank indicated for that notice or to the offices of the Board of Governors. Comments must be received not later than April 1, 2016.

A. Federal Reserve Bank of Chicago (Colette A. Fried, Assistant Vice President) 230 South LaSalle Street, Chicago, Illinois 60690–1414:

1. *Venkateswararao Alla, Rock Island, Illinois, individually and as trustee of the Revocable Trust Agreements known as: Atlantic Financial Holdings I Trust, the Atlantic Financial Holdings II Trust, the Atlantic Financial Holdings III Trust, and the Atlantic Financial Holdings IV Trust, all of Rock Island, Illinois; and acting in concert with Rajesh Alla, Rakesh Alla, both of Rock Island, Illinois, and Suresh Alla,* Moline, Illinois; to acquire additional voting shares of Ambank Holdings, Inc., and thereby indirectly acquire additional voting shares of American Bank and Trust Company, N.A., both in Davenport, Iowa.

B. Federal Reserve Bank of Kansas City (Dennis Denney, Assistant Vice President) 1 Memorial Drive, Kansas City, Missouri 64198–0001:

1. *Larry Mulcahy,* Olathe, Kansas; to acquire voting shares of Roxbury

Bancshares, Inc., and thereby indirectly acquire voting shares of Roxbury Bank, both in Roxbury, Kansas.

Board of Governors of the Federal Reserve System, March 14, 2016.

Michael J. Lewandowski,

Associate Secretary of the Board.

[FR Doc. 2016–06031 Filed 3–16–16; 8:45 am]

BILLING CODE 6210–01–P

FEDERAL RESERVE SYSTEM

Proposed Agency Information Collection Activities; Comment Request

AGENCY: Board of Governors of the Federal Reserve System.

SUMMARY: On June 15, 1984, the Office of Management and Budget (OMB) delegated to the Board of Governors of the Federal Reserve System (Board) its approval authority under the Paperwork Reduction Act (PRA), to approve of and assign OMB numbers to collection of information requests and requirements conducted or sponsored by the Board. Board-approved collections of information are incorporated into the official OMB inventory of currently approved collections of information. Copies of the PRA Submission, supporting statements and approved collection of information instruments are placed into OMB's public docket files. The Federal Reserve may not conduct or sponsor, and the respondent is not required to respond to, an information collection that has been extended, revised, or implemented on or after October 1, 1995, unless it displays a currently valid OMB number.

DATES: Comments must be submitted on or before May 16, 2016.

ADDRESSES: You may submit comments, identified by *Reg NN* by any of the following methods:

- *Agency Web site: http://www.federalreserve.gov.* Follow the instructions for submitting comments at *http://www.federalreserve.gov/apps/foia/proposedregs.aspx.*
- *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments.
- *Email: regs.comments@federalreserve.gov.* Include OMB number in the subject line of the message.
- *FAX:* (202) 452–3819 or (202) 452–3102.
- *Mail:* Robert deV. Frierson, Secretary, Board of Governors of the Federal Reserve System, 20th Street and Constitution Avenue NW., Washington, DC 20551.

All public comments are available from the Board's Web site at *http://www.federalreserve.gov/apps/foia/proposedregs.aspx* as submitted, unless modified for technical reasons. Accordingly, your comments will not be edited to remove any identifying or contact information. Public comments may also be viewed electronically or in paper form in Room 3515, 1801 K Street (between 18th and 19th Streets NW.) Washington, DC 20006 between 9:00 a.m. and 5:00 p.m. on weekdays.

Additionally, commenters may send a copy of their comments to the OMB Desk Officer—Shagufta Ahmed—Office of Information and Regulatory Affairs, Office of Management and Budget, New Executive Office Building, Room 10235 725 17th Street NW., Washington, DC 20503 or by fax to (202) 395–6974.

FOR FURTHER INFORMATION CONTACT: A copy of the PRA OMB submission, including the proposed reporting form and instructions, supporting statement, and other documentation will be placed into OMB's public docket files, once approved. These documents will also be made available on the Federal Reserve Board's public Web site at: *http://www.federalreserve.gov/apps/reportforms/review.aspx* or may be requested from the agency clearance officer, whose name appears below.

Federal Reserve Board Clearance Officer—Nuha Elmaghrabi—Office of the Chief Data Officer, Board of Governors of the Federal Reserve System, Washington, DC 20551 (202) 452–3829. Telecommunications Device for the Deaf (TDD) users may contact (202) 263–4869, Board of Governors of the Federal Reserve System, Washington, DC 20551.

SUPPLEMENTARY INFORMATION:

Request for Comment on Information Collection Proposal

The following information collection, which is being handled under this delegated authority, has received initial Board approval and is hereby published for comment. At the end of the comment period, the proposed information collection, along with an analysis of comments and recommendations received, will be submitted to the Board for final approval under OMB delegated authority. Comments are invited on the following:

a. Whether the proposed collection of information is necessary for the proper performance of the Federal Reserve's functions, including whether the information has practical utility;

b. The accuracy of the Federal Reserve's estimate of the burden of the proposed information collection, including the validity of the methodology and assumptions used;

c. Ways to enhance the quality, utility, and clarity of the information to be collected;

d. Ways to minimize the burden of information collection on respondents, including through the use of automated collection techniques or other forms of information technology; and

e. Estimates of capital or start up costs and costs of operation, maintenance, and purchase of services to provide information.

Proposal to approve under OMB delegated authority the extension for three years, without revision, of the following report:

1. Collection title: Reporting, Recordkeeping, and Disclosure Requirements Associated with Regulation NN.

Agency form number: Reg NN.

OMB control number: 7100–0353.

Frequency: On occasion.

Reporters: Banking organizations seeking to engage in off-exchange transactions in foreign currency with retail customers.

Estimated annual burden hours: 1,972 hours.

Estimated average hours per response: Reporting, 16 hours; Recordkeeping, 183 hours; Disclosure, 787 hours.

Number of respondents: 2.

General description of report: This information collection is required by the Commodity Exchange Act (7 U.S.C. Section 2(c)(2)(E)), the Federal Reserve Act (12 U.S.C. Sections 248 and 321–338), the Federal Deposit Insurance Act (12 U.S.C. Section 1818), the International Banking Act (12 U.S.C. Section 3108), and Regulation NN (12 CFR part 240). The information collection is mandatory. The reported data are regarded as confidential under the Freedom of Information Act (5 U.S.C. Section 552(b)(4)).

Abstract: The reporting requirements associated with Regulation NN are found in section 240.4; the recordkeeping requirements are found in sections 240.7, 240.9, and 240.13(a); and the disclosure requirements are found in sections 240.5, 240.6, 240.10, 240.13b–d, 240.15, and 240.16. These requirements permit banking organizations under the Federal Reserve's supervision to engage in off-exchange transactions in foreign currency with retail customers and to describe various requirements with which banking organizations must comply to conduct such transactions.

Current Actions: The Federal Reserve proposes to extend, without revision, the clearance for Reg NN.

Board of Governors of the Federal Reserve System, March 14, 2016.

Robert deV. Frierson,

Secretary of the Board.

[FR Doc. 2016–06040 Filed 3–16–16; 8:45 am]

BILLING CODE 6210–01–P

FEDERAL RESERVE SYSTEM

Formations of, Acquisitions by, and Mergers of Bank Holding Companies

The companies listed in this notice have applied to the Board for approval, pursuant to the Bank Holding Company Act of 1956 (12 U.S.C. 1841 *et seq.*) (BHC Act), Regulation Y (12 CFR part 225), and all other applicable statutes and regulations to become a bank holding company and/or to acquire the assets or the ownership of, control of, or the power to vote shares of a bank or bank holding company and all of the banks and nonbanking companies owned by the bank holding company, including the companies listed below.

The applications listed below, as well as other related filings required by the Board, are available for immediate inspection at the Federal Reserve Bank indicated. The applications will also be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing on the standards enumerated in the BHC Act (12 U.S.C. 1842(c)). If the proposal also involves the acquisition of a nonbanking company, the review also includes whether the acquisition of the nonbanking company complies with the standards in section 4 of the BHC Act (12 U.S.C. 1843). Unless otherwise noted, nonbanking activities will be conducted throughout the United States.

Unless otherwise noted, comments regarding each of these applications must be received at the Reserve Bank indicated or the offices of the Board of Governors not later than April 15, 2016.

A. Federal Reserve Bank of Philadelphia (William Spaniel, Senior Vice President) 100 North 6th Street, Philadelphia, Pennsylvania 19105–1521. Comments can also be sent electronically to *Comments.applications@phil.frb.org:*

1. *FSB Community Bancshares, MHC, and FSB Community Bancshares,* both in Fairport, New York; to convert to stock form and form a *de novo* bank holding company, FSB Bancorp, Inc., Fairport, New York, in connection with the acquisition of 100 percent of the voting shares of Fairport Savings Bank, Fairport, New York.

B. Federal Reserve Bank of Cleveland (Nadine Wallman, Vice President) 1455 East Sixth Street, Cleveland, Ohio 44101–2566. Comments can also be sent electronically to *Comments.applications@clev.frb.org:*

1. *Huntington Bancshares, Inc.,* Columbus, Ohio; to acquire FirstMerit Corporation, Akron, Ohio, and thereby indirectly acquire FirstMerit Bank, NA, Akron, Ohio. Huntingtown West Subsidiary Corporation, a *de novo* subsidiary of Huntington, will merge with FirstMerit, which will then merge into Huntington.

C. Federal Reserve Bank of Kansas City (Dennis Denney, Assistant Vice President) 1 Memorial Drive, Kansas City, Missouri 64198–0001:

1. *Stockgrowers State Bank Employee Stock Ownership Plan,* Ashland, Kansas; to acquire at least an additional 3 percent, for a total of 38 percent of the voting shares of Stockgrowers State Bank, Ashland, Kansas, and Peoples Bank, Coldwater, Kansas.

Board of Governors of the Federal Reserve System, March 14, 2016.

Michael J. Lewandowski,

Associate Secretary of the Board.

[FR Doc. 2016–06033 Filed 3–16–16; 8:45 am]

BILLING CODE 6210–01–P

FEDERAL RESERVE SYSTEM

Formations of, Acquisitions by, and Mergers of Savings and Loan Holding Companies

The companies listed in this notice have applied to the Board for approval, pursuant to the Home Owners' Loan Act (12 U.S.C. 1461 *et seq.*) (HOLA), Regulation LL (12 CFR part 238), and Regulation MM (12 CFR part 239), and all other applicable statutes and regulations to become a savings and loan holding company and/or to acquire the assets or the ownership of, control of, or the power to vote shares of a savings association and nonbanking companies owned by the savings and loan holding company, including the companies listed below.

The applications listed below, as well as other related filings required by the Board, are available for immediate inspection at the Federal Reserve Bank indicated. The application also will be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing on the standards enumerated in the HOLA (12 U.S.C. 1467a(e)). If the proposal also involves the acquisition of a nonbanking company, the review also includes whether the acquisition of the nonbanking company complies with the standards in section 10(c)(4)(B) of the HOLA (12 U.S.C. 1467a(c)(4)(B)). Unless otherwise noted, nonbanking activities will be conducted throughout the United States.

Unless otherwise noted, comments regarding each of these applications must be received at the Reserve Bank indicated or the offices of the Board of Governors not later than April 15, 2016.

A. Federal Reserve Bank of St. Louis (David L. Hubbard, Senior Manager) P.O. Box 442, St. Louis, Missouri 63166–2034. Comments can also be sent electronically to *Comments.applications@stls.frb.org:*

1. *Best Hometown Bancorp, Inc.,* Collinsville, Illinois; to become a savings and loan holding company by acquiring 100 percent of the voting shares of Home Federal Savings and Loan Association of Collinsville, Collinsville, Illinois.

Board of Governors of the Federal Reserve System, March 14, 2016.

Michael J. Lewandowski,

Associate Secretary of the Board.

[FR Doc. 2016–06032 Filed 3–16–16; 8:45 am]

BILLING CODE 6210–01–P

GOVERNMENT ACCOUNTABILITY OFFICE

Comptroller General's Advisory Council on Government Auditing Standards; Notice of Meeting

The Advisory Council on Government Auditing Standards will meet Tuesday, April 19, 2016, from 9:00 a.m. to 3:15 p.m., in the Staats Briefing Room (7C13) of the U.S. Government Accountability Office building, 441 G Street NW., Washington, DC.

The Advisory Council on Government Auditing Standards will hold a meeting to discuss updates and revisions of the 2011 Revision of Government Auditing Standards. The meeting is open to the public. Members of the public will be provided an opportunity to address the Council with a brief (five-minute) presentation in the afternoon on matters directly related to the proposed update and revision.

Any interested person who plans to attend the meeting as an observer must contact Cecil Davis, Engagement Operations Assistant, 202–512–9362. A form of picture identification must be presented to the GAO Security Desk on the day of the meeting to obtain access to the GAO building. You must enter the building at the G Street entrance. For further information, please contact Ms. Davis. The meeting agenda will be available upon request one week before the meeting.

[Pub. L. 67–13, 42 Stat. 20 (June 10, 1921).]

James R. Dalkin,

Director, Financial Management and Assurance.

[FR Doc. 2016–06051 Filed 3–16–16; 8:45 am]

BILLING CODE 1610–02–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

Request for Nominations of Candidates To Serve on the Advisory Committee on Breast Cancer in Young Women (ACBCYW)

The Centers for Disease Control and Prevention (CDC) is soliciting nominations for possible membership on the Advisory Committee on Breast Cancer in Young Women (ACBCYW).

The Committee provides advice and guidance to the Secretary, Department of Human Services (HHS); the Assistant Secretary for Health; and the Director, CDC, regarding the formative research, development, implementation and evaluation of evidence-based activities designed to prevent breast cancer (particularly among those at heightened risk) and promote the early detection and support of young women who develop the disease. The advice provided by the Committee will assist in ensuring scientific quality, timeliness, utility, and dissemination of credible appropriate messages and resource materials.

Nominations are being sought for individuals who have expertise and qualifications necessary to contribute to the accomplishments of the committee's objectives.

The Secretary, HHS, acting through the Director, CDC, shall appoint to the advisory committee nominees with expertise in breast cancer, disease prevention, early detection, diagnosis, public health, social marketing, genetic screening and counseling, treatment, rehabilitation, palliative care, and survivorship in young women, or in related disciplines with a specific focus on young women. Members may be invited to serve for up to four years. The next cycle of selection of candidates will begin in the Spring of 2016, for selection of potential nominees to replace members whose terms will end on November 30, 2016

Selection of members is based on candidates' qualifications to contribute to the accomplishment of ACBCYW objectives *http://www.cdc.gov/maso/FACM/facmACBCYW.htm.* The U.S. Department of Health and Human Services will give close attention to equitable geographic distribution and to minority and female representation so long as the effectiveness of the Committee is not impaired. Appointments shall be made without discrimination on the basis of age, race, ethnicity, gender, sexual orientation, HIV status, disability, and cultural, religious, or socioeconomic status. Consideration is given to a broad representation of geographic areas within the U.S., with diverse representation of both genders, ethnic and racial minorities, and persons with disabilities. Nominees must be U.S. citizens, and cannot be full-time employees of the U.S. Government. Candidates should submit the following items:

Current curriculum vitae or resume, including complete contact information (name, affiliation, mailing address, telephone numbers, fax number, email address); A 150 word biography for the nominee; At least one letter of recommendation from a person(s) not employed by the U.S. Department of Health and Human Services. Candidates may submit letter(s) from current HHS employees if they wish, but at least one letter must be submitted by a person not employed by HHS.

Nominations should be submitted (postmarked or received) by April 25, 2016.

Electronic submission: You may submit nominations, including attachments, electronically to *acbcyw@cdc.gov.*

Regular, Express or Overnight Mail: Written nominations may be submitted to the following addressee only: Temeika L. Fairley, Ph.D., c/o ACBCYW Designated Federal Officer, CDC, 4770 Buford Highway NE., Mailstop F–76, Atlanta, Georgia 30341.

Telephone and facsimile submissions cannot be accepted. Nominations may be submitted by the candidate or by the person/organization recommending the candidate.

The Director, Management Analysis and Services Office, has been delegated the authority to sign Federal Register notices pertaining to announcements of meetings and other committee management activities for both the Centers for Disease Control and Prevention and the Agency for Toxic Substances and Disease Registry.

Elaine Baker,

Director, Management Analysis and Services Office, Centers for Disease Control and Prevention.

[FR Doc. 2016–06025 Filed 3–16–16; 8:45 am]

BILLING CODE 4163–18–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

Healthcare Infection Control Practices Advisory Committee (HICPAC)

Correction: This notice was published in the **Federal Register** on February 25, 2016, Volume 81, Number 37, Page 9477. The meeting time and date should read as follows:

9:00 a.m.–6:00 p.m., EDT, March 31, 2016

Contact Person for More Information: Erin Stone, M.S., Division of Healthcare Quality Promotion, National Center for Emerging and Zoonotic Infectious Diseases, CDC, 1600 Clifton Road NE., Mailstop A–07, Atlanta, Georgia 30333; Telephone (404) 639–4045, Email: *hicpac@cdc.gov*

The Director, Management Analysis and Services Office, has been delegated the authority to sign **Federal Register** notices pertaining to announcements of meetings and other committee management activities, for both the Centers for Disease Control and Prevention and the Agency for Toxic Substances and Disease Registry.

Elaine L. Baker,

Director, Management Analysis and Services Office, Centers for Disease Control and Prevention.

[FR Doc. 2016–06027 Filed 3–16–16; 8:45 am]

BILLING CODE 4163–18–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

[60Day–16–0010; Docket No. CDC–2016–0030]

Proposed Data Collection Submitted for Public Comment and Recommendations

AGENCY: Centers for Disease Control and Prevention (CDC), Department of Health and Human Services (HHS).

ACTION: Notice with comment period.

SUMMARY: The Centers for Disease Control and Prevention (CDC), as part of its continuing efforts to reduce public burden and maximize the utility of government information, invites the general public and other Federal agencies to take this opportunity to comment on proposed and/or continuing information collections, as required by the Paperwork Reduction Act of 1995. This notice invites

comment on the ''Birth Defects Study To Evaluate Pregnancy exposureS (BD–STEPS)''. The purpose of BD–STEPS is to identify modifiable maternal exposures in pregnancy that may increase the risk for having a pregnancy affected by certain major, structural birth defects.

DATES: Written comments must be received on or before May 16, 2016.

ADDRESSES: You may submit comments, identified by Docket No. CDC–2016–0030 by any of the following methods:

- *Federal eRulemaking Portal:* Regulation.gov. Follow the instructions for submitting comments.
- *Mail:* Leroy A. Richardson, Information Collection Review Office, Centers for Disease Control and Prevention, 1600 Clifton Road NE., MS–D74, Atlanta, Georgia 30329.

Instructions: All submissions received must include the agency name and Docket Number. All relevant comments received will be posted without change to Regulations.gov, including any personal information provided. For access to the docket to read background documents or comments received, go to Regulations.gov.

FOR FURTHER INFORMATION CONTACT: Leroy A. Richardson, Information Collection Review Office, Centers for Disease Control and Prevention, 1600 Clifton Road NE., MS–D74, Atlanta, Georgia 30329; phone: 404–639–7570.

SUPPLEMENTARY INFORMATION: Under the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3501–3520), Federal agencies must obtain approval from the Office of Management and Budget (OMB) for each collection of information they conduct or sponsor. In addition, the PRA also requires Federal agencies to provide a 60-day notice in the **Federal Register** concerning each proposed collection of information, including each new proposed collection, each proposed extension of existing collection of information, and each reinstatement of previously approved information collection before submitting the collection to OMB for approval. To comply with this requirement, we are publishing this notice of a proposed data collection as described below.

Comments are invited on: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information 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; (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; and (e) estimates of capital or start-up costs and costs of operation, maintenance, and purchase of services to provide information. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; to develop, acquire, install and utilize technology and systems for the purpose of collecting, validating and verifying information, processing and maintaining information, and disclosing and providing information; to train personnel and to be able to respond to a collection of information, to search data sources, to complete and review the collection of information; and to transmit or otherwise disclose the information.

Proposed Project

Birth Defects Study To Evaluate Pregnancy exposureS (BD–STEPS)(formerly titled The National Birth Defects Prevention Study (NBDPS)), (OMB Control No. 0920–0010, Expiration 01/31/2017)—Revision—National Center on Birth Defects and Developmental Disabilities (NCBDDD), Centers for Disease Control and Prevention (CDC)

Background and Brief Description

CDC has been monitoring the occurrence of serious birth defects and genetic diseases in Atlanta since 1967 through the Metropolitan Atlanta Congenital Defects Program (MACDP). The MACDP is a population-based surveillance system for birth defects currently covering three counties in Metropolitan Atlanta.

Since 1997, CDC has funded case-control studies of major birth defects that utilize existing birth defect surveillance registries (including MACDP) to identify cases and study birth defects causes in participating states/municipalities across the United States.

The current study, BD–STEPS, is a case-control study that is similar to the previous CDC-funded birth defects case-control study, NBDPS, which stopped interviewing participants in 2013. As with NBDPS, BD–STEPS' control group infants are randomly selected from birth certificates or birth hospital records; mothers of case and control group infants are interviewed using a computer-assisted telephone interview.

The results from NBDPS have improved understanding of the causes of birth defects. Over 200 articles have been written in professional journals using the data from NBDPS, and BD–STEPS data will soon be added to NBDPS data for analysis. The current BD–STEPS revision is an addition to the study population for two BD–STEPS Centers. Specifically, in these two Centers mothers of stillbirths without major birth defects will be added to the study population for BD–STEPS and mothers of all stillbirths (with and without birth defects) and all controls in these two Centers will be asked to participate in a supplemental telephone interview.

The BD–STEPS interview takes approximately forty-five minutes to complete (the burden estimate includes both the introductory telephone script/consent and questionnaire). For five Centers, a maximum of 275 interviews are planned per year per center, 200 cases and 75 controls; for the two Centers participating in additional stillbirth interviews, 495 interviews are planned per center, 200 cases with birth defects, 75 controls, and 220 stillbirths without birth defects. With seven centers planned, the maximum interview burden for all centers combined would be approximately 1,774 hours. Mothers in five of the seven BD–STEPS Centers will also be asked to provide consent for the study to access previously collected infant bloodspots. It takes approximately 15 minutes to read, sign and return the informed consent for retrieval of bloodspots. For approximately one fifth of participants, some medical records review will be conducted. The medical records release form takes participants approximately 15 minutes to read, sign and return. In addition, it takes approximately 30 minutes for each medical record reviewer to conduct the review and send the medical record. The online questionnaire will be offered to approximately one third of participants who report certain occupations during the telephone interview; these participants will be asked to complete additional occupational questions via a Web site which will take approximately 20 minutes to answer. In addition, in two Centers, mothers of stillbirths with and without birth defects and controls will be asked to participate in a supplemental telephone interview that will take approximately 25 minutes to complete.

Information gathered from both the interviews and the Deoxyribonucleic acid specimens has been and will continue to be used to study independent genetic and environmental factors as well as gene-environment

interactions for a broad range of carefully classified birth defects.

This request is submitted to revise the previously estimated burden details and to request OMB clearance for three additional years. The total estimated annual burden hours are 3,034.

There are no costs to the respondents other than their time.

ESTIMATES OF ANNUALIZED BURDEN HOURS

Respondents	Activity	Number of respondents	Number of responses per respondent	Average burden per response (in hours)	Total burden hours
Mothers (interview)	Telephone consent and BD–STEPS questionnaire.	2,365	1	45/60	1,774
Mothers (consent for bloodspot retrieval).	Written consent for bloodspot retrieval.	1,375	1	15/60	344
Mothers (online occupational questionnaire).	Online Occupational Questionnaire	790	1	20/60	263
Mothers (consent for medical records review).	Written release for medical records review.	475	1	15/60	119
Records reviewers (medical records review).	Pulling and sending records	475	1	30/60	238
Mothers of all AR/MA stillbirths and controls (supplemental telephone interview).	Telephone consent and supplemental questionnaire.	710	1	25/60	296
Total					3,034

Leroy A. Richardson,

Chief, Information Collection Review Office, Office of Scientific Integrity, Office of the Associate Director for Science, Office of the Director, Centers for Disease Control and Prevention.

[FR Doc. 2016–05949 Filed 3–16–16; 8:45 am]

BILLING CODE 4163–18–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

Advisory Committee to the Director (ACD), Centers for Disease Control and Prevention (CDC)

In accordance with section 10(a)(2) of the Federal Advisory Committee Act (Pub. L. 92–463), the Centers for Disease Control and Prevention (CDC) announces the following meeting of the aforementioned committee:

Time and Date: 8:30 a.m.–3:00 p.m., EDT, April 21, 2016.

Place: CDC, Building 19, Global Communications Center, Auditorium B3, 1600 Clifton Road NE., Atlanta, Georgia 30329.

Status: Open to the public, limited only by the space and phone lines available. The meeting room accommodates approximately 50 people. Advance registration for in-person participation is required by April 7, 2016. The public is welcome to participate during the public comment period, which is tentatively scheduled from 2:40 p.m. to 2:45 p.m. This meeting will also be available by teleconference. Please dial (877) 930–8819 and enter code 1579739.

Web links:

Windows Media: *http://wm.onlinevideoservice.com/CDC1.*

Flash: *http://www.onlinevideoservice.com/clients/CDC/?mount=CDC3.*

Smart Phone and Mobile Devices: *http://wowza01.sea.onlinevideoservice.com/live/CDC3/playlist.m3u8.*

If you are unable to connect using the link, copy and paste the link into your web browser. For technical support please call: (404) 639–3737.

Purpose: The Advisory Committee to the Director, CDC, shall advise the Secretary, HHS, and the Director, CDC, on policy and broad strategies that will enable CDC to fulfill its mission of protecting health through health promotion, prevention, and preparedness. The committee recommends ways to prioritize CDC's activities, improve results, and address health disparities. It also provides guidance to help CDC work more effectively with its various private and public sector constituents to make health protection a practical reality.

Matters for Discussion: The Advisory Committee to the Director will receive updates from the State, Tribal, Local and Territorial Subcommittee; the Health Disparities Subcommittee, the Ethical Considerations for Public Private Partnerships Workgroup, the Global Workgroup, the Internal and External Laboratory Safety Workgroups, and the Public Health—Health Care Collaboration Workgroup, as well as an update from the CDC Director.

Agenda items are subject to change as priorities dictate.

Contact Person for More Information: Carmen Villar, MSW, Designated Federal Officer, ACD, CDC, 1600 Clifton Road NE., M/S D–14, Atlanta, Georgia 30329. Telephone (404) 639–7037, Email: *xjj4@cdc.gov.* The deadline to register for in-person attendance at this meeting is April 7, 2016. To register, please send an email to *xjj4@cdc.gov.*

The Director, Management Analysis and Services Office, has been delegated the authority to sign **Federal Register** notices pertaining to announcements of meetings and other committee management activities, for both the Centers for Disease Control and Prevention and the Agency for Toxic Substances and Disease Registry.

Elaine L. Baker,

Director, Management Analysis and Services Office, Centers for Disease Control and Prevention.

[FR Doc. 2016–06026 Filed 3–16–16; 8:45 am]

BILLING CODE 4163–18–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. FDA–2016–N–0001]

Endocrinologic and Metabolic Drugs Advisory Committee; Notice of Meeting

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

This notice announces a forthcoming meeting of a public advisory committee of the Food and Drug Administration (FDA). The meeting will be open to the public.

Name of Committee: Endocrinologic and Metabolic Drugs Advisory Committee.

General Function of the Committee: To provide advice and recommendations to the Agency on FDA's regulatory issues.

Date and Time: The meeting will be held on May 25, 2016, from 8 a.m. to 5 p.m.

Location: FDA White Oak Campus, Building 31 Conference Center, the Great Room (Rm. 1503), 10903 New Hampshire Ave., Silver Spring, MD 20993–0002. Answers to commonly asked questions including information regarding special accommodations due to a disability, visitor parking, and transportation may be accessed at: *http://www.fda.gov/AdvisoryCommittees/AboutAdvisoryCommittees/ucm408555.htm.*

Contact Person: LaToya Bonner, Center for Drug Evaluation and Research, Food and Drug Administration, 10903 New Hampshire Ave., Bldg. 31, Rm. 2417, Silver Spring, MD 20993–0002, 301–796–9001, FAX: 301–847–8533, *EMDAC@fda.hhs.gov,* or FDA Advisory Committee Information Line, 1–800–741–8138 (301–443–0572 in the Washington, DC area). A notice in the **Federal Register** about last minute modifications that impact a previously announced advisory committee meeting cannot always be published quickly enough to provide timely notice. Therefore, you should always check the Agency's Web site at *http://www.fda.gov/AdvisoryCommittees/default.htm* and scroll down to the appropriate advisory committee meeting link, or call the advisory committee information line to learn about possible modifications before coming to the meeting.

Agenda: The committee will discuss the safety and efficacy of new drug application (NDA) 208583 for insulin degludec and liraglutide injection, submitted by Novo Nordisk Inc., for the proposed indication: Adjunct to diet and exercise to improve glycemic control in the treatment of adults with type 2 diabetes mellitus.

FDA intends to make background material available to the public no later than 2 business days before the meeting. If FDA is unable to post the background material on its Web site prior to the meeting, the background material will be made publicly available at the location of the advisory committee meeting, and the background material will be posted on FDA's Web site after the meeting. Background material is available at *http://www.fda.gov/AdvisoryCommittees/Calendar/default.htm.* Scroll down to the appropriate advisory committee meeting link.

Procedure: Interested persons may present data, information, or views, orally or in writing, on issues pending before the committee. Written submissions may be made to the contact person on or before May 10, 2016. Oral presentations from the public will be scheduled between approximately 1 p.m. and 2 p.m. Those individuals interested in making formal oral presentations should notify the contact person and submit a brief statement of the general nature of the evidence or arguments they wish to present, the names and addresses of proposed participants, and an indication of the approximate time requested to make their presentation on or before May 2, 2016. Time allotted for each presentation may be limited. If the number of registrants requesting to speak is greater than can be reasonably accommodated during the scheduled open public hearing session, FDA may conduct a lottery to determine the speakers for the scheduled open public hearing session. The contact person will notify interested persons regarding their request to speak by May 3, 2016.

Persons attending FDA's advisory committee meetings are advised that the Agency is not responsible for providing access to electrical outlets.

FDA welcomes the attendance of the public at its advisory committee meetings and will make every effort to accommodate persons with physical disabilities or special needs. If you require special accommodations due to a disability, please contact LaToya Bonner at least 7 days in advance of the meeting.

FDA is committed to the orderly conduct of its advisory committee meetings. Please visit our Web site at *http://www.fda.gov/AdvisoryCommittees/AboutAdvisoryCommittees/ucm111462.htm* for procedures on public conduct during advisory committee meetings.

Notice of this meeting is given under the Federal Advisory Committee Act (5 U.S.C. app. 2).

Dated: March 11, 2016.

Jill Hartzler Warner,

Associate Commissioner for Special Medical Programs.

[FR Doc. 2016–05959 Filed 3–16–16; 8:45 am]

BILLING CODE 4164–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. FDA–2016–N–0001]

Anesthetic and Analgesic Drug Products Advisory Committee and the Drug Safety and Risk Management Advisory Committee; Notice of Meeting

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

This notice announces a forthcoming meeting of a public advisory committee of the Food and Drug Administration (FDA). At least one portion of the meeting will be closed to the public.

Name of Committees: Anesthetic and Analgesic Drug Products Advisory Committee and the Drug Safety and Risk Management Advisory Committee.

General Function of the Committees: To provide advice and recommendations to the Agency on FDA's regulatory issues.

Date and Time: The meeting will be held on June 7, 2016, from 8 a.m. to 4 p.m.

Location: FDA White Oak Campus, 10903 New Hampshire Ave., Bldg. 31 Conference Center, the Great Room (Rm. 1503), Silver Spring, MD 20993–0002. Answers to commonly asked questions including information regarding special accommodations due to a disability, visitor parking, and transportation may be accessed at: *http://www.fda.gov/AdvisoryCommittees/AboutAdvisoryCommittees/ucm408555.htm.*

Contact Person: Stephanie L. Begansky, Center for Drug Evaluation and Research, Food and Drug Administration, 10903 New Hampshire Ave., Bldg. 31, rm. 2417, Silver Spring, MD 20993–0002, 301–796–9001, Fax: 301–847–8533, email: *AADPAC@fda.hhs.gov,* or FDA Advisory Committee Information Line, 1–800–741–8138 (301–443–0572 in the Washington, DC area). A notice in the **Federal Register** about last-minute modifications that impact a previously announced advisory committee meeting cannot always be published quickly enough to provide timely notice. Therefore, you should always check the Agency's Web site at *http://*

www.fda.gov/AdvisoryCommittees/default.htm and scroll down to the appropriate advisory committee meeting link, or call the advisory committee information line to learn about possible modifications before coming to the meeting.

Agenda: The committees will be asked to discuss new drug application (NDA) 207975, hydrocodone bitartrate extended-release tablets, submitted by Teva Branded Pharmaceutical Products R&D, Inc., with the proposed indication of management of pain severe enough to require daily, around-the-clock, long-term opioid treatment and for which alternative treatment options are inadequate. The product is an extended-release formulation intended to have abuse-deterrent properties based on its physicochemical properties. The committees will be asked to discuss whether the data submitted by the Applicant are sufficient to support labeling of the product with the properties expected to deter abuse.

FDA intends to make background material available to the public no later than 2 business days before the meeting. If FDA is unable to post the background material on its Web site prior to the meeting, the background material will be made publicly available at the location of the advisory committee meeting, and the background material will be posted on FDA's Web site after the meeting. Background material is available at *http://www.fda.gov/AdvisoryCommittees/Calendar/default.htm.* Scroll down to the appropriate advisory committee meeting link.

Procedure: On June 7, 2016, from 9:30 a.m. to 4 p.m., the meeting is open to the public. Interested persons may present data, information, or views, orally or in writing, on issues pending before the committees. Written submissions may be made to the contact person on or before May 23, 2016. Oral presentations from the public will be scheduled between approximately 1 p.m. and 2 p.m. Those individuals interested in making formal oral presentations should notify the contact person and submit a brief statement of the general nature of the evidence or arguments they wish to present, the names and addresses of proposed participants, and an indication of the approximate time requested to make their presentation on or before May 13, 2016. Time allotted for each presentation may be limited. If the number of registrants requesting to speak is greater than can be reasonably accommodated during the scheduled open public hearing session, FDA may conduct a lottery to determine the speakers for the scheduled open public hearing session. The contact person will notify interested persons regarding their request to speak by May 16, 2016.

Closed Committee Deliberations: On June 7, 2016, from 8 a.m. to 9:30 a.m., the meeting will be closed to permit discussion and review of trade secret and/or confidential commercial information (5 U.S.C. 552b(c)(4)). During this session, the committees will discuss the drug development program of an investigational abuse-deterrent opioid product.

Persons attending FDA's advisory committee meetings are advised that the Agency is not responsible for providing access to electrical outlets.

FDA welcomes the attendance of the public at its advisory committee meetings and will make every effort to accommodate persons with disabilities. If you require accommodations due to a disability, please contact Stephanie L. Begansky at least 7 days in advance of the meeting.

FDA is committed to the orderly conduct of its advisory committee meetings. Please visit our Web site at *http://www.fda.gov/AdvisoryCommittees/AboutAdvisoryCommittees/ucm111462.htm* for procedures on public conduct during advisory committee meetings.

Notice of this meeting is given under the Federal Advisory Committee Act (5 U.S.C. app. 2).

Dated: March 14, 2016.

Jill Hartzler Warner,

Associate Commissioner for Special Medical Programs.

[FR Doc. 2016–06017 Filed 3–16–16; 8:45 am]

BILLING CODE 4164–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. FDA–2014–N–1840]

Electronic Study Data Submission; Data Standards; Support End Date for Case Report Tabulation Data Definition Specification Version 1.0

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

SUMMARY: The Food and Drug Administration's (FDA or Agency) Center for Biologics Evaluation and Research (CBER) and Center for Drug Evaluation and Research (CDER) are announcing the end of support for Version 1.0 of Clinical Data Interchange Standards Consortium Case Report Tabulation Data Definition Specification (Define.xml) and an update to the FDA Data Standards Catalog. Use of Define.xml Version 2.0, which has been available since March 2013, is the newer standard supported by FDA. FDA support for Define.xml Version 1.0 will end for studies that start 12 months after March 15, 2017.

DATES: Submit either electronic or written comments at any time.

ADDRESSES: You may submit comments as follows:

Electronic Submissions

Submit electronic comments in the following way:

- *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments. Comments submitted electronically, including attachments, to *http://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 *http://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):* Division of Dockets Management (HFA–305), Food and Drug Administration, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852.
- For written/paper comments submitted to the Division of Dockets Management, 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–2014–N–1840 for ''Electronic Study Data Submission; Data Standards; Support End Date for Case Report Tabulation Data Definition Specification

Version 1.0.'' Received comments will be placed in the docket and, except for those submitted as ''Confidential Submissions,'' publicly viewable at *http://www.regulations.gov* or at the Division of Dockets Management between 9 a.m. and 4 p.m., Monday through Friday.

• Confidential Submissions—To submit a comment with confidential information that you do not wish to be made publicly available, submit your comments only as a written/paper submission. You should submit two copies total. One copy will include the information you claim to be confidential with a heading or cover note that states ''THIS DOCUMENT CONTAINS CONFIDENTIAL INFORMATION.'' The Agency will review this copy, including the claimed confidential information, in its consideration of comments. The second copy, which will have the claimed confidential information redacted/blacked out, will be available for public viewing and posted on *http://www.regulations.gov.* Submit both copies to the Division of Dockets Management. 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: *http://www.fda.gov/regulatoryinformation/dockets/default.htm.*

Docket: For access to the docket to read background documents or the electronic and written/paper comments received, go to *http://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 Division of Dockets Management, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852.

FOR FURTHER INFORMATION CONTACT: Fatima Frye, Center for Drug Evaluation and Research, Food and Drug Administration, 10903 New Hampshire Ave., Bldg. 51, Rm. 1192, Silver Spring, MD 20993–0002, 301–796–5333, *fatima.frye@fda.hhs.gov;* or Jack Zhang, Center for Biologics Evaluation and Research, Food and Drug Administration, 10903 New Hampshire Ave., Bldg. 71, Rm. 7318, Silver Spring, MD 20993–0002, 240–402–8187, *jack.zhang@fda.hhs.gov.*

SUPPLEMENTARY INFORMATION:

I. Background

On December 17, 2014, FDA published final guidance for industry ''Providing Regulatory Submissions in Electronic Format—Standardized Study Data'' (eStudy Data) posted on FDA's Study Data Standards Resources Web page at *http://www.fda.gov/forindustry/datastandards/studydatastandards/default.htm.* The eStudy Data guidance implements the electronic submission requirements of section 745A(a) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 379k–1(a)) for study data contained in new drug applications, abbreviated new drug applications, biologics license applications, and investigational new drug applications submitted to CDER or CBER by specifying the format for electronic submissions. The eStudy Data guidance states that a **Federal Register** notice will specify the transition date for updates to standards (with the month and day for the transition date corresponding to March 15).

The transition date for the end of FDA support for Define.xml Version 1.0 is March 15, 2017. Therefore, FDA support for Define.xml Version 1.0 will end for studies that start after March 15, 2018. The FDA Data Standards Catalog (see *http://www.fda.gov/forindustry/datastandards/studydatastandards/default.htm*) will be updated to list March 15, 2018, as the ''date support ends.''

II. Electronic Access

Persons with access to the Internet may obtain the referenced material at *http://www.fda.gov/forindustry/datastandards/studydatastandards/default.htm.*

Dated: March 10, 2016.

Leslie Kux,

Associate Commissioner for Policy.

[FR Doc. 2016–05958 Filed 3–16–16; 8:45 am]

BILLING CODE 4164–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. FDA–2016–N–0001]

Anesthetic and Analgesic Drug Products Advisory Committee and the Drug Safety and Risk Management Advisory Committee; Notice of Meeting

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

This notice announces a forthcoming meeting of a public advisory committee of the Food and Drug Administration (FDA). At least one portion of the meeting will be closed to the public.

Name of Committees: Anesthetic and Analgesic Drug Products Advisory Committee and the Drug Safety and Risk Management Advisory Committee.

General Function of the Committees: To provide advice and recommendations to the Agency on FDA's regulatory issues.

Date and Time: The meeting will be held on June 8, 2016, from 8 a.m. to 4 p.m.

Location: FDA White Oak Campus, 10903 New Hampshire Ave., Bldg. 31 Conference Center, the Great Room (Rm. 1503), Silver Spring, MD 20993–0002. Answers to commonly asked questions including information regarding special accommodations due to a disability, visitor parking, and transportation may be accessed at: *http://www.fda.gov/AdvisoryCommittees/AboutAdvisoryCommittees/ucm408555.htm.*

Contact Person: Stephanie L. Begansky, Center for Drug Evaluation and Research, Food and Drug Administration, 10903 New Hampshire Ave., Bldg. 31, Rm. 2417, Silver Spring, MD 20993–0002, 301–796–9001, FAX: 301–847–8533, email: *AADPAC@fda.hhs.gov,* or FDA Advisory Committee Information Line, 1–800–741–8138 (301–443–0572 in the Washington, DC area). A notice in the **Federal Register** about last minute modifications that impact a previously announced advisory committee meeting cannot always be published quickly enough to provide timely notice. Therefore, you should always check the Agency's Web site at *http://www.fda.gov/AdvisoryCommittees/default.htm* and scroll down to the appropriate advisory committee meeting link, or call the advisory committee information line to learn about possible modifications before coming to the meeting.

Agenda: The committees will be asked to discuss new drug application (NDA) 207621, oxycodone hydrochloride and naltrexone hydrochloride extended-release capsules, submitted by Pfizer, Inc., with the proposed indication of management of pain severe enough to require daily, around-the-clock, long-term opioid treatment and for which alternative treatment options are inadequate. The product is an extended-release formulation intended to have abuse-deterrent properties based on the

presence of naltrexone, an opioid antagonist, in the formulation. The committees will be asked to discuss whether the data submitted by the Applicant are sufficient to support labeling of the product with the properties expected to deter abuse.

FDA intends to make background material available to the public no later than 2 business days before the meeting. If FDA is unable to post the background material on its Web site prior to the meeting, the background material will be made publicly available at the location of the advisory committee meeting, and the background material will be posted on FDA's Web site after the meeting. Background material is available at *http://www.fda.gov/AdvisoryCommittees/Calendar/default.htm*. Scroll down to the appropriate advisory committee meeting link.

Procedure: On June 8, 2016, from 9:30 a.m. to 4 p.m., the meeting is open to the public. Interested persons may present data, information, or views, orally or in writing, on issues pending before the committees. Written submissions may be made to the contact person on or before May 24, 2016. Oral presentations from the public will be scheduled between approximately 1 p.m. and 2 p.m. Those individuals interested in making formal oral presentations should notify the contact person and submit a brief statement of the general nature of the evidence or arguments they wish to present, the names and addresses of proposed participants, and an indication of the approximate time requested to make their presentation on or before May 16, 2016. Time allotted for each presentation may be limited. If the number of registrants requesting to speak is greater than can be reasonably accommodated during the scheduled open public hearing session, FDA may conduct a lottery to determine the speakers for the scheduled open public hearing session. The contact person will notify interested persons regarding their request to speak by May 17, 2016.

Closed Committee Deliberations: On June 8, 2016, from 8 a.m. to 9:30 a.m., the meeting will be closed to permit discussion and review of trade secret and/or confidential commercial information (5 U.S.C. 552b(c)(4)). During this session, the committees will discuss the drug development program of an investigational abuse-deterrent opioid product.

Persons attending FDA's advisory committee meetings are advised that the Agency is not responsible for providing access to electrical outlets.

FDA welcomes the attendance of the public at its advisory committee meetings and will make every effort to accommodate persons with disabilities. If you require accommodations due to a disability, please contact Stephanie L. Begansky at least 7 days in advance of the meeting.

FDA is committed to the orderly conduct of its advisory committee meetings. Please visit our Web site at *http://www.fda.gov/AdvisoryCommittees/AboutAdvisoryCommittees/ucm111462.htm* for procedures on public conduct during advisory committee meetings.

Notice of this meeting is given under the Federal Advisory Committee Act (5 U.S.C. app. 2).

Dated: March 11, 2016.

Jill Hartzler Warner,

Associate Commissioner for Special Medical Programs.

[FR Doc. 2016–05999 Filed 3–16–16; 8:45 am]

BILLING CODE 4164–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Health Resources and Services Administration

National Advisory Committee on Rural Health and Human Services; Notice of Meeting

In accordance with section 10(a)(2) of the Federal Advisory Committee Act (Pub. L. 92–463), notice is hereby given of the following meeting:

Name: National Advisory Committee on Rural Health and Human Services.

Date And Time: April 18, 2016, 8:30 a.m.–5:00 p.m., April 19, 2016, 8:30 a.m.–5:15 p.m., April 20, 2016, 8:30 a.m.–11:00 a.m.

Place: Keyserling Cancer Center, 1680b Ribaut Road, Port Royal, SC 29935, (843) 522–7800.

Status: The meeting will be open to the public.

Purpose: The National Advisory Committee on Rural Health and Human Services provides counsel and recommendations to the Secretary with respect to the delivery, research, development, and administration of health and human services in rural areas.

Agenda: The meeting on Monday, April 18, will be called to order at 8:30 a.m. by the Chairperson of the Committee, the Honorable Ronnie Musgrove. The Committee will examine the issue of Opioid Abuse Disorder in rural areas and alternatives for emergency care in rural communities at risk of losing their hospital. The day will conclude with a period of public comment at approximately 5:00 p.m.

The Committee will break into Subcommittees and depart for site visits Tuesday morning, April 19, at approximately 8:30 a.m. Subcommittees will visit the Beaufort County Department of Social Services and the Keyserling Cancer Center. The day will conclude at the Keyserling Cancer Center with a period of public comment at approximately 5:00 p.m.

The Committee will meet to summarize key findings and develop a work plan for the next quarter and the following meeting on Wednesday morning, April 20, at 8:30 a.m. at the Keyserling Cancer Center.

FOR FURTHER INFORMATION CONTACT: Steve Hirsch, MSLS, Administrative Coordinator, National Advisory Committee on Rural Health and Human Services, Health Resources and Services Administration, Parklawn Building, 17W61, 5600 Fishers Lane, Rockville, MD 20857, Telephone (301) 443–0835, Fax (301) 443–2803.

Persons interested in attending any portion of the meeting should contact Pierre Joseph at the Federal Office of Rural Health Policy (FORHP) via telephone at (301) 945–0897 or by email at *PJoseph@hrsa.gov.* Individuals who plan to attend and need special assistance, such as sign language interpretation or other reasonable accommodations, should notify the contact person listed above at least 10 days prior to the meeting. The Committee meeting agenda will be posted on the Committee's Web site at *http://www.hrsa.gov/advisorycommittees/rural/.*

Jackie Painter,

Director, Division of the Executive Secretariat.

[FR Doc. 2016–05998 Filed 3–16–16; 8:45 am]

BILLING CODE 4165–15–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Request for Comments on National Bioethics Advisory Bodies

AGENCY: Presidential Commission for the Study of Bioethical Issues, Office of the Secretary, Department of Health and Human Services.

ACTION: Notice.

SUMMARY: The Presidential Commission for the Study of Bioethical Issues is requesting public comment on the role of past, present, and future national bioethics bodies, such as this one, in the United States and elsewhere.

DATES: To ensure consideration, comments must be received by July 1, 2016. Comments received after this date will be considered as time permits.

ADDRESSES: Individuals, groups, and organizations interested in commenting on this topic may submit comments by email to *info@bioethics.gov* or by mail to the following address: Public Commentary, Presidential Commission for the Study of Bioethical Issues, 1425 New York Ave. NW., Suite C–100, Washington, DC 20005.

FOR FURTHER INFORMATION CONTACT: Lisa M. Lee, Executive Director, Presidential Commission for the Study of Bioethical Issues. Telephone: 202–233–3960. Email: *Lisa.Lee@bioethics.gov.* Additional information may be obtained at *http://www.bioethics.gov.*

SUPPLEMENTARY INFORMATION: On November 24, 2009, the President established the Presidential Commission for the Study of Bioethical Issues (the Commission) to advise him on bioethical issues generated by novel and emerging research in biomedicine and related areas of science and technology. The Commission is charged with identifying and promoting policies and practices that ensure ethically responsible conduct of scientific research and health care delivery. Undertaking these duties, the Commission seeks to identify and examine specific bioethical, legal, and social issues related to potential scientific and technological advances; examine diverse perspectives and possibilities for international collaboration on these issues; and recommend legal, regulatory, or policy actions as appropriate.

The Commission will conclude at the end of the Presidential administration, and in its two final meetings will reflect on the past, present, and future of national bioethics advisory bodies. These meetings will include discussion of the role of national advisory bodies in the developing public policy in the United States and elsewhere, and consideration of the future of U.S. national bioethics advisory bodies that might follow.

The Commission is interested in receiving comments from individuals, groups, and professional communities who wish to join the Commission in reflecting on the past, present, and future of national bioethics advisory bodies in the United States and elsewhere. The Commission is particularly interested in receiving public commentary regarding:

- The advantages and disadvantages of different models for national bioethics advisory bodies, *e.g.,* standing or temporary, narrowly or broadly focused (examining one topic or issue or a variety of issues);
- The lessons we can learn from national bodies in other countries to inform how U.S. bodies might work;
- The influence of national bioethics bodies on bioethics as a field; other academic fields, such as science, medicine, and technology; and public policy;
- The future of national bioethics advisory groups in the United States.

To this end, the Commission is inviting interested parties to provide input and advice through written comments. Comments will be publicly available, including any personally identifiable or confidential business information that they contain. Trade secrets should not be submitted.

Dated: March 1, 2016.

Lisa M. Lee,

Executive Director, Presidential Commission for the Study of Bioethical Issues.

[FR Doc. 2016–06015 Filed 3–16–16; 8:45 am]

BILLING CODE 4150–06–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Office of the Secretary

[Document Identifier: HHS–OS–0945–0003–60D]

Agency Information Collection Activities; Proposed Collection; Public Comment Request

AGENCY: Office of the Secretary, HHS.

ACTION: Notice.

SUMMARY: In compliance with section 3506(c)(2)(A) of the Paperwork Reduction Act of 1995, the Office of the Secretary (OS), Department of Health and Human Services, announces plans to submit an Information Collection Request (ICR), described below, to the Office of Management and Budget (OMB). The ICR is for revision of the approved information collection assigned OMB control number #0945–0003, which expires on January 1, 2017. Prior to submitting that ICR to OMB, OS seeks comments from the public regarding the burden estimate, below, or any other aspect of the ICR.

DATES: Comments on the ICR must be received on or before May 16, 2016.

ADDRESSES: Submit your comments to *Information.CollectionClearance@hhs.gov* or by calling (202) 690–6162.

FOR FURTHER INFORMATION CONTACT: Information Collection Clearance staff, *Information.CollectionClearance@hhs.gov* or (202) 690–6162.

SUPPLEMENTARY INFORMATION: When submitting comments or requesting information, please include the document identifier HHS–OS–0945–0003–60D for reference.

Information Collection Request Title: HIPAA Privacy, Security, and Breach Notification Rules, and Supporting Regulations Contained in 45 CFR parts 160 and 164.

Abstract: This revision does not change any requirements of the HIPAA Privacy, Security, and Breach Notification Rules. Among other updates summarized below, the ICR requests to rename the information collection and incorporate into it the substance of two other information collections (#0945–0004, set to expire on May 31, 2016; and #0945–0001, expiring on September 30, 2016), which then would be discontinued. The ICR addresses the burden on regulated entities for compliance with the information collection requirements of the HIPAA Privacy, Security, and Breach Notification Rules; the voluntary burden on members of the public for obtaining information from covered entities regarding breaches of their protected health information; and the information collection burden on the Office for Civil Rights (OCR) associated with administering aspects of the HIPAA Breach Notification program. Combining the three existing information collections identified above will allow the regulated community, the public, and OCR to more easily view and track the estimated burdens associated with the HIPAA Rules that are administered and enforced by OCR. In addition to combining the ICRs, the proposed updates take into account our experience administering the Rules to more accurately reflect the burdens of compliance with the applicable regulatory requirements; remove the estimated burden of initial compliance with the Omnibus HIPAA Final Rule, because we are well past the compliance dates; and incorporate increases in wages for the job categories that we expect to be involved in compliance activities.

Need and Proposed Use of the Information: The HIPAA Rules require covered entities, and in many respects their business associates, to protect the privacy and security of individually identifiable health information (called ''protected health information'' or ''PHI''); fulfill individuals' rights under HIPAA with respect to their health information; and provide notification in case of a breach of unsecured protected health information. The information collections associated with these regulatory requirements include

documenting and updating policies and procedures for ensuring the privacy and security of individuals' health information, recording compliance activities, providing individuals with a notice of privacy practices and with access to their information upon request, and notifying affected individuals, the Secretary, and in some cases the media of a breach of protected health information.

Likely Respondents: HIPAA covered entities and business associates (required burden), and individual members of the public affected by breaches of their protected health information (voluntary burden).

Burden Statement: Burden in this context means the time expended by persons to generate, maintain, retain, disclose or provide the information requested. This includes the time needed to review instructions, to develop, acquire, install and utilize technology and systems for the purpose of collecting, validating and verifying information, processing and maintaining information, and disclosing and providing information, to train personnel and to be able to respond to a collection of information, to search data sources, to complete and review the collection of information, and to transmit or otherwise disclose the information. The total annual burden hours estimated for this ICR are summarized in the table below.

TOTAL ESTIMATED ANNUALIZED BURDEN—HOURS

Section	Type of respondent	Number of respondents	Number of responses per respondent	Average burden hours per response [1]	Total burden hours
160.204	Process for Requesting Exception Determinations (states or persons).	1	1	16	16
164.308	Risk Analysis—Documentation	1,700,000 [2]	1	10	17,000,000
164.308	Information System Activity Review—Documentation.	1,700,000	12	.75	15,300,000
164.308	Security Reminders—Periodic Updates	1,700,000	12	1	20,400,000
164.308	Security Incidents (other than breaches)—Documentation.	1,700,000	52	5	442,000,000
164.308	Contingency Plan—Testing and Revision	1,700,000	1	8	13,600,000
164.308	Contingency Plan—Criticality Analysis	1,700,000	1	4	6,800,000
164.310	Maintenance Records	1,700,000	12	6	122,400,000
164.314	Security Incidents—Business Associate reporting of incidents (other than breach) to Covered Entities.	1,000,000	12	20	240,000,000
164.316	Documentation—Review and Update [3]	1,700,000	1	6	10,200,000
164.404	Individual Notice—Written and E-mail Notice (drafting).	58,481 [4]	1	.5	29,240
164.404	Individual Notice—Written and E-mail Notice (preparing and documenting notification).	58,481	1	.5	29,240
164.404	Individual Notice—Written and E-mail Notice (processing and sending).	58,481	[5] 353	.008	165,150
164.404	Individual Notice—Substitute Notice (posting or publishing).	2,746 [6]	1	1	2,746
164.404	Individual Notice—Substitute Notice (staffing toll-free number).	2,746	1	5.75 [7]	15,789
164.404	Individual Notice—Substitute Notice (individuals' voluntary burden to call toll-free number for information).	11,326,440 [8]	1	.125 [9]	1,415,805
164.406	Media Notice	267 [10]	1	1.25	333
164.408	Notice to Secretary (notice for breaches affecting 500 or more individuals).	267	1	1.25	333
164.408	Notice to Secretary (notice for breaches affecting fewer than 500 individuals).	58,215 [11]	1	1	58,215
164.414	500 or More Affected Individuals (investigating and documenting breach).	267	1	50	13,350
164.414	Less than 500 Affected Individuals (investigating and documenting breach).	2,479 (breaches affecting 10–499 individuals).	1	8	19,832
		55,736 (breaches affecting <10 individuals).	1	4	222,944
164.504	Uses and Disclosures—Organizational Requirements.	700,000	1	5/60	58,333
164.508	Uses and Disclosures for Which Individual authorization is required.	700,000	1	1	700,000
164.512	Uses and Disclosures for Research Purposes.	113,524 [12]	1	5/60	9,460
164.520	Notice of Privacy Practices for Protected Health Information (health plans—periodic distribution of NPPs by paper mail).	100,000,000 [13]	1	0.25 minutes [1 hour per 240 notices].	416,667
164.520	Notice of Privacy Practices for Protected Health Information (health plans—periodic distribution of NPPs by electronic mail).	100,000,000	1	0.167 minutes [1 hour per 360 notices].	278,333

TOTAL ESTIMATED ANNUALIZED BURDEN—HOURS—Continued

Section	Type of respondent	Number of respondents	Number of responses per respondent	Average burden hours per response [1]	Total burden hours
164.520	Notice of Privacy Practices for Protected Health Information (health care providers—dissemination and acknowledgement).	613,000,000 [14]	1	3/60	30,650,000
164.522	Rights to Request Privacy Protection for Protected Health Information.	20,000 [15]	1	3/60	1,000
164.524	Access of Individuals to Protected Health Information (disclosures).	200,000 [16]	1	3/60	10,000
164.526	Amendment of Protected Health Information (requests).	150,000	1	5/60	12,500
164.526	Amendment of Protected Health Information (denials).	50,000	1	5/60	4,166
164.528	Accounting for Disclosures of Protected Health Information.	5,000 [17]	1	3/60	250
Total					921,813,702

[1] The figures in this column are averages based on a range. Small entities may require fewer hours to conduct certain compliance activities, particularly with respect to Security Rule requirements, while large entities may spend more hours than those provided here.

[2] This estimate includes 700,000 estimated covered entities and 1 million estimated business associates. The Omnibus HIPAA Final Rule burden analysis estimated that there were 1–2 million business associates. However, because many business associates have business associate relationships with multiple covered entities, we believe the lower end of this range is more accurate.

[3] This element includes the burden of updating documentation in accordance with the evaluation required by 45 CFR 164.306. Therefore, we do not separately address the burden associated with the evaluation.

[4] Total number of breach incidents in 2015.

[5] Average number of individuals affected per breach incident in 2015.

[6] This number includes all 267 large breaches and all 2,479 breaches affecting 10–499 individuals. As we stated in the preamble to the Omnibus HIPAA Final Rule, although some breaches involving fewer than 10 individuals may require substitute notice, we believe the costs of providing such notice through alternative written means or by telephone is negligible.

[7] We again assume that call center staff will spend 5 minutes per call, but now with an average of 4,124 individuals affected by breaches requiring substitute notice. Multiplying these figures results in 5.75 hours per breach. This estimate is much lower than the 46.26 hours per breach requiring substitute notice in our previous estimate, which we believe was the result of an arithmetic error. The estimate of 4,124 individuals being affected by breaches requiring substitute notice results from the assumption that the number of callers to the toll-free number will equal 10% of the sum of all individuals affected by large breaches (113,250,136) and 5% of individuals affected by small breaches (.05 × 285,413 = 14,270). We calculate .10 * (113,250,136 + 14,270) = 11,326,440.

[8] As noted in the previous footnote, this number equals 10% of the sum of all individuals affected by large breaches and 5% of individuals affected by small breaches.

[9] This number includes 7.5 minutes for each individual who calls: an average of 2.5 minutes to wait on the line/decide to call back and 5 minutes for the call itself.

[10] The total number of breaches affecting 500 or more individuals in 2015.

[11] The total number of breaches affecting fewer than 500 individuals in 2015.

[12] The number of entities who use and disclose protected health information for research purposes.

[13] As in our previous submission, we assume that half of the approximately 200,000,000 individuals insured by covered health plans will receive the plan's NPP by paper mail, and half will receive the NPP by electronic mail.

[14] We estimate that each year covered health care providers will have first-time visits with 613 million individuals, to whom the providers must give a NPP.

[15] We assume covered entities address 20,000 requests for confidential communications or restrictions on disclosures per year.

[16] We estimate that covered entities annually fulfill 200,000 requests from individuals for access to their protected health information.

[17] We estimate that covered entities annually fulfill 5,000 requests from individuals for an accounting of disclosures of their protected health information.

OS specifically requests comments on (1) the necessity and utility of the proposed information collection for the proper performance of the agency's functions, (2) the accuracy of the estimated burden, (3) ways to enhance the quality, utility, and clarity of the information to be collected, and (4) the use of automated collection techniques or other forms of information technology to minimize the information collection burden.

Terry S. Clark,

Assistant Information Collection Clearance Officer.

[FR Doc. 2016–05961 Filed 3–16–16; 8:45 am]

BILLING CODE 4153–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Announcement of Establishment of the Secretary's Advisory Committee on National Health Promotion and Disease Prevention Objectives for 2030 and Solicitation of Nominations for Membership

AGENCY: Office of Disease Prevention and Health Promotion, Office of the Assistant Secretary for Health, Office of the Secretary, U.S. Department of Health and Human Services.

ACTION: Notice.

Authority: 42 U.S.C. 217a. The Secretary's Advisory Committee on National Health Promotion and Disease Prevention Objectives for 2030 is governed by provisions of the Federal Advisory Committee Act (FACA), Public Law 92–463, as amended (5 U.S.C., App.), which sets forth standards for the formation and use of federal advisory committees.

SUMMARY: The U.S. Department of Health and Human Services (HHS) announces the establishment of the Secretary's Advisory Committee on National Health Promotion and Disease Prevention Objectives for 2030 (Committee) and invites nominations for membership.

DATES: Nominations for membership to the Committee must be submitted by 6:00 p.m. ET on April 18, 2016.

ADDRESSES: Nominations should be submitted by email to *HP2030@hhs.gov.*

Alternatively, nominations may also be sent to the following address: Emmeline Ochiai; U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion; 1101 Wootton Parkway, Suite LL–100; Rockville, MD 20852; Email: *HP2030@hhs.gov.*

FOR FURTHER INFORMATION CONTACT: Designated Program Official, Emmeline Ochiai; U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion;1101 Wootton Parkway, Suite LL–100; Rockville, MD 20852; Email: *HP2030@hhs.gov.* Additional information is available at *www.healthypeople.gov.*

SUPPLEMENTARY INFORMATION: Each decade since 1979, HHS has published a comprehensive set of national public health objectives. Known as Healthy People, this initiative has been grounded in the notion that setting science-based, measurable objectives and monitoring progress can motivate action. As HHS prepares to produce objectives for the next decade, it seeks the assistance of a federal advisory committee to help ensure that those objectives are salient and science-based. The Committee will provide relevant and objective advice through an open process that fosters the cooperation and commitment from both the public and private sectors.

The Committee will be established to provide independent advice based on current scientific evidence for use by the HHS Secretary (the Secretary) or her designee in the development of Healthy People 2030. The Committee will advise the Secretary on HHS' approach for Healthy People 2030. Framed around health determinants and risk factors, this approach will generate a focused set of objectives that address high-impact public health challenges. The Committee will perform the single, time-limited task of providing advice regarding creating Healthy People 2030. The Committee will advise the Secretary on the Healthy People 2030 mission statement, vision statement, framework, and organizational structure. The Committee will provide advice on HHS' selection criteria for identifying a focused set of measurable, nationally representative objectives. The selection criteria will assist the Secretary in defining the objectives that represent the most critical public health issues that are high-impact priorities supported by current, national data sets.

The Committee will meet, at a minimum, one time per year. It is expected to begin meeting in fall of 2016 and to meet approximately four times per year during the course of its operation. Pursuant to FACA, meetings will be open to the public except as determined otherwise by the Secretary or her designee in keeping with all applicable laws.

Individuals selected for appointment to the Committee will be invited to serve as members until the charter expires or the Committee accomplishes its mission. Unless renewed, the charter will expire two years from the date it is established. The Committee will operate until its report is delivered to the Secretary or the charter expires, whichever comes first.

Prospective members of the Committee should be nationally known experts in the fields of disease prevention and health promotion. The membership may include former Assistant Secretaries for Health. Expertise is sought in specific specialty areas such as biostatistics, business, epidemiology, health communications, health economics, health information technology, health policy, health sciences, health systems, international health, outcomes research, public health law, social determinants of health, special populations, and state and local public health and from a variety of public, private, philanthropic, and academic settings. Individuals will be selected to serve as Committee members based upon their qualifications, level of expertise and knowledge, and ability to contribute to the work to be performed by the Committee. Individuals will not be appointed to serve as members of the Committee to represent the viewpoints of any specific group. Rather members will be selected to represent balanced viewpoints of the current scientific evidence sought by the Secretary to meet the Committee's charge.

Nominations: HHS will consider nominations, including self-nominations, for Committee membership of individuals qualified to carry out the above-mentioned duties. The following information should be included in the package of materials submitted for each individual being nominated for consideration: (1) The name, address, daytime telephone number, and email address of the nominator (if applicable), and the individual being nominated; (2) a letter of nomination that clearly states the name and affiliation of the nominee, the basis for the nomination (*i.e.,* specific attributes which qualify the nominee for service in this capacity), and a statement from the nominee that the nominee is willing to serve as a member of the Committee; and (3) a current copy of the nominee's curriculum vitae (CV) no more than 10 pages in length. Inclusion of the following is requested in the CV: (1) Current and/or past grant awards; (2) publications showing both breadth and experience in areas of specialization; (3) paid and non-paid board and advisory appointments; (4) education and occupational history; and (5) an attestation that the submitted information is accurate and complete. All nominations must include the required information. Incomplete nominations will not be processed for consideration. Federal employees should not be nominated for appointment to this Committee.

Equal opportunity practices regarding membership appointments to the Committee will be aligned with HHS policies. When possible, every effort will be made to ensure that the Committee is a diverse group of individuals with representation from various academic institutions, disability status, ethnic identities, genders, geographic areas, and racial groups.

All appointed members of the Committee will serve as special government employees. As such, they are subject to the ethical standards of conduct for federal employees. Upon entering the position and annually throughout the term of appointment, members of the Committee will be required to complete and submit a report of their financial holdings, consultancies, and research grants and/or contracts. The purpose of this report is to determine if the individual has any interests and/or activities that may conflict with performance of his or her official duties as a member of the Committee. Committee members are entitled to receive reimbursement for travel and per diem expenses incurred for conducting official business in accordance with federal standard travel regulations. Committee members are not entitled to receive any other compensation for the services they perform.

Dated: March 9, 2016.

Don Wright,

Deputy Assistant Secretary for Health, (Disease Prevention and Health Promotion).

[FR Doc. 2016–06016 Filed 3–16–16; 8:45 am]

BILLING CODE 4150–28–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) 276–1243.

Project: Survey of Current and Alumni SAMHSA Fellows of the Minority Fellowship Program (MFP) (OMB No. 0930–0304)—REVISION

SAMHSA is requesting approval from the Office of Management and Budget (OMB) to revise the collection of surveys of current and alumni MFP fellows to include current and alumni fellows from the Now Is The Time-MFP-Youth (NITT–MFP–Y) and NITT–MFP-Addiction Counselors (NITT–MFP–AC) grant programs. These surveys would gather information about current and alumni fellows in all three programs that will help SAMHSA meet its responsibilities under the Government Performance and Results Modernization Act for gathering, analyzing, and interpreting information about government-funded programs such as the MFP, the NITT–MFP–Y, and the NITT–MFP–AC.

In 1973, in response to a substantial lack of ethnic and racial minorities in the mental health professions, the Center for Minority Health at the National Institute of Mental Health established the MFP. Since its move to SAMHSA in 1992, the MFP has continued to facilitate the entry of graduate students and psychiatric residents into mental health careers and has increased the number of psychology, psychiatry, nursing, and social work professionals trained to provide mental health and substance abuse services to minority groups. In 2014, funds were appropriated to expand the traditional MFP to include two programs to support the President's NITT initiative: NITT–MFP–Y and NITT–MFP–AC. These programs provide stipends and tuition support to students pursuing master's level training in behavioral health fields like psychology, social work, professional counseling, marriage and family therapy, nursing, and addiction/substance abuse counseling, thus directly supporting the NITT goal of increasing behavioral health services for youth and contributing to making schools safer. The traditional MFP offers sustained grants to six national behavioral health professional associations: the American Association of Marriage and Family Therapy (AAMFT), the American Nurses Association (ANA), the American Psychiatric Association (ApA), the American Psychological Association (APA), the Council on Social Work Education (CSWE), and the National Board for Certified Counselors and Affiliates (NBCC). The grantees for the NITT–MFP–Y program are the AAFMT, ANA, APA, CSWE, and NBCC, and the grantees for the NITT–MFP–AC program are the NAADAC—Association for Addiction Professionals and NBCC.

This package includes two survey instruments, the Current SAMHSA MFP Fellows survey and the MFP Alumni survey, which have previously been administered to current and alumni fellows of the traditional MFP grant program. SAMHSA is requesting approval from OMB to include respondents (*i.e.,* fellows) from the NITT–MFP–Y and NITT–MFP–AC programs and to add 13 and 10 questions to the Current SAMHSA MFP Fellows and MFP Alumni surveys, respectively. Although the aims of the traditional MFP and the NITT–MFPs are similar, some aspects of the NITT–MFPs are unique. For example, the focus on master's-level students (versus doctoral) and on providing culturally competent behavioral health services specifically to youth and transition-aged young adults. Thus, approval is requested to add questions to the surveys to ensure that the information needed to evaluate the NITT–MFPs is captured. The surveys will include appropriate skip patterns so that traditional MFP fellows are not asked questions that do not apply to them.

The two online surveys (with the option for a hard copy mailed through the U.S. Postal Service) will be used with the following stakeholders in the MFP grant programs:

1. Current SAMHSA MFP Fellows (n=428)

a. *Current traditional MFP Fellows* currently receiving support during their doctoral-level training or psychiatric residency will be asked about their experiences in the MFP (from recruitment into the program through their participation in the various activities provided by the grantees).

b. *Current NITT–MFP–Y and NITT–MFP–AC Fellows* currently receiving support during the final year of their master's programs in behavioral health or related field will be asked about their experiences in the MFP (from recruitment into the program through their participation in the various activities provided by the grantees).

2. MFP Alumni (n=1,440)

a. *Traditional MFP Alumni* who participated in the MFP during the time the program was administered by SAMHSA will be asked about their previous experiences as fellows in the MFP and also about their subsequent involvement and leadership in their professions.

b. *NITT–MFP–Y and NITT–MFP–AC Alumni* who participated in the MFP during their master's program will be asked about their previous experiences as fellows in the MFP and also about their subsequent involvement and leadership in their professions.

The information gathered by these two surveys will be used to gain insights into, and to document, impacts that the MFP has had and is having on current and former MFP fellows, and contributions and impacts that the current and former fellows are making in their work. The surveys include questions to assess the following measures: completion of the fellowship program (*e.g.,* completion of MFP goals, number of mentors, total mentored hours); post-fellowship employment (*e.g.,* employment types and fields, targeted service populations); increase in skills/knowledge (*e.g.,* number of certifications obtained, number of continuing education hours); and contributions to the field (*e.g.,* number of professional publications).

The survey data will also be utilized in an evaluation of the NITT–MFP programs. The requested additional questions will allow the evaluation to assess the overall success of the SAMHSA NITT initiative in enhancing the behavioral health workforce in terms of the number of master's level behavioral health specialists trained with MFP support, their competencies and characteristics, and their capacity to meet behavioral health workforce needs. The evaluation will also explore whether the program results in increased knowledge, skills, and aptitude among NITT–MFP fellows to provide culturally competent behavioral health services to underserved, at risk children, adolescents, and transition-age youth (ages 16–25); and how these new behavioral health professionals are sustained in the workforce.

The total annual burden estimate for conducting the surveys is shown below:

Survey name	Number of respondents	Responses per respondent	Total number of responses	Hours per response	Total burden hours
SAMHSA MFP Current Fellows Survey	428	1	428	0.42	180
SAMHSA MFP Alumni Survey	1,440	1	1,440	0.75	1,080
Totals	[a] 1,868		1,868		1,260

[a] This is an unduplicated count of total respondents.

Written comments and recommendations concerning the proposed information collection should be sent by April 18, 2016 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.

Summer King,

Statistician.

[FR Doc. 2016–06009 Filed 3–16–16; 8:45 am]

BILLING CODE 4162–20–P

DEPARTMENT OF HOMELAND SECURITY

U.S. Customs and Border Protection

Accreditation and Approval of Altol Chemical and Environmental Laboratory, Inc., as a Commercial Laboratory

AGENCY: U.S. Customs and Border Protection, Department of Homeland Security.

ACTION: Notice of accreditation of Altol Chemical and Environmental Laboratory, Inc., as a commercial laboratory.

SUMMARY: Notice is hereby given, pursuant to CBP regulations, that Altol Chemical and Environmental Laboratory, Inc., has been approved to gauge and accredited to test petroleum and petroleum products for customs purposes for the next three years as of July 23, 2014.

DATES: The accreditation and approval of Altol Chemical and Environmental Laboratory, Inc., as commercial gauger and laboratory became effective on July 23, 2014. The next triennial inspection date will be scheduled for July 2017.

FOR FURTHER INFORMATION CONTACT: Approved Gauger and Accredited Laboratories Manager, Laboratories and Scientific Services Directorate, U.S. Customs and Border Protection, 1300 Pennsylvania Avenue NW., Suite 1500N, Washington, DC 20229, tel. 202–344–1060.

SUPPLEMENTARY INFORMATION: Notice is hereby given pursuant to 19 CFR 151.12, that Altol Chemical and Environmental Laboratory, Inc., Sabanetas Industrial Park, Building M–1380, Ponce, PR 00715, has been accredited to test petroleum and petroleum products for customs purposes, in accordance with the provisions of 19 CFR 151.12. Altol Chemical and Environmental Laboratory, Inc., is accredited for the following laboratory analysis procedures and methods for petroleum and certain petroleum products set forth by the U.S. Customs and Border Protection Laboratory Methods (CBPL) and American Society for Testing and Materials (ASTM):

CBPL No.	ASTM	Title
27–01	ASTM D–287	Standard test method for API Gravity of crude petroleum products and petroleum products (Hydrometer Method).
27–02	ASTM D 1298	Standard Test Method for Density, Relative Density (Specific Gravity), or API Gravity of Crude Petroleum and Liquid Petroleum Products by Hydrometer Method.
27–08	ASTM D–86	Standard Test Method for Distillation of Petroleum Products.
27–11	ASTM D 445	Standard Test Method for Kinematic Viscosity of Transparent and Opaque Liquids (the Calculation of Dynamic Velocity).
27–13	ASTM D–4294	Standard test method for sulfur in petroleum and petroleum products by energy-dispersive x-ray fluorescence spectrometry.

Anyone wishing to employ this entity to conduct laboratory analyses should request and receive written assurances from the entity that it is accredited or approved by the U.S. Customs and Border Protection to conduct the specific test requested. Alternatively, inquiries regarding the specific test this entity is accredited to perform may be directed to the U.S. Customs and Border Protection by calling (202) 344–1060. The inquiry may also be sent to *cbp.labhq@dhs.gov.* Please reference the Web site 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: March 9, 2016.

Ira S. Reese,

Executive Director, Laboratories and Scientific Services Directorate.

[FR Doc. 2016–06059 Filed 3–16–16; 8:45 am]

BILLING CODE 9111–14–P

DEPARTMENT OF HOMELAND SECURITY

U.S. Customs and Border Protection

Accreditation and Approval of Chemical and Petrochemical Inspections as a Commercial Gauger and Laboratory

AGENCY: U.S. Customs and Border Protection, Department of Homeland Security.

ACTION: Notice of accreditation and approval of Chemical and Petrochemical

Inspections as a commercial gauger and laboratory.

SUMMARY: Notice is hereby given, pursuant to CBP regulations, that Chemical and Petrochemical Inspections has been approved to gauge petroleum and certain petroleum products and accredited to test petroleum and certain petroleum products for customs purposes for the next three years as of September 18, 2015.

DATES: The accreditation and approval of Chemical and Petrochemical Inspections as commercial gauger and laboratory became effective on September 18, 2015. The next triennial inspection date will be scheduled for September 2018.

FOR FURTHER INFORMATION CONTACT: Approved Gauger and Accredited Laboratories Manager, Laboratories and Scientific Services Directorate, U.S. Customs and Border Protection, 1300 Pennsylvania Avenue NW., Suite 1500N, Washington, DC 20229, tel. 202–344–1060.

SUPPLEMENTARY INFORMATION: Notice is hereby given pursuant to 19 CFR 151.12 and 19 CFR 151.13, that Chemical and Petrochemical Inspections, 5300 39th St., Groves, TX 77619, has been approved to gauge petroleum and certain petroleum products and accredited to test petroleum and certain petroleum products for customs purposes, in accordance with the provisions of 19 CFR 151.12 and 19 CFR 151.13. Chemical and Petrochemical Inspections is approved for the following gauging procedures for petroleum and certain petroleum products from the American Petroleum Institute (API):

API Chapters	Title
3	Tank gauging.
7	Temperature determination.
8	Sampling.
12	Calculations.
17	Maritime measurement.

Chemical and Petrochemical Inspections is accredited for the following laboratory analysis procedures and methods for petroleum and certain petroleum products set forth by the U.S. Customs and Border Protection Laboratory Methods (CBPL) and American Society for Testing and Materials (ASTM):

CBPL No.	ASTM	Title
27–05	D4928	Standard Test Method for Water in Crude Oils by Coulometric Karl Fischer Titration.
27–08	D86	Standard Test Method for Distillation of Petroleum Products.
27–48	D4052	Standard Test Method for Density and Relative Density of Liquids by Digital Density Meter.

Anyone wishing to employ this entity to conduct laboratory analyses and gauger services should request and receive written assurances from the entity that it is accredited or approved by the U.S. Customs and Border Protection to conduct the specific test or gauger service requested. Alternatively, inquiries regarding the specific test or gauger service this entity is accredited or approved to perform may be directed to the U.S. Customs and Border Protection by calling (202) 344–1060. The inquiry may also be sent to *CBPGaugersLabs@cbp.dhs.gov.* Please reference the Web site 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: March 10, 2016.

Ira S. Reese,

Executive Director, Laboratories and Scientific Services Directorate.

[FR Doc. 2016–06060 Filed 3–16–16; 8:45 am]

BILLING CODE 9111–14–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[Docket ID: FEMA–FEMA–2016–0006; OMB No. 1660–0006

Agency Information Collection Activities: Proposed Collection; Comment Request; National Flood Insurance Program Policy Forms

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Notice.

SUMMARY: The Federal Emergency Management Agency, as part of its continuing effort to reduce paperwork and respondent burden, invites the general public and other Federal agencies to take this opportunity to comment on a revision of a currently approved information collection. In accordance with the Paperwork Reduction Act of 1995, this notice seeks comments concerning information collected for National Flood Insurance Program (NFIP) policies to accommodate the changing insurance needs of policyholders. The changes to the program were made as a result of the implementation of certain provisions of the Biggert-Waters Flood Insurance Reform Act of 2012 and Homeowners Flood Insurance Affordability Act of 2014.

DATES: Comments must be submitted on or before May 16, 2016.

ADDRESSES: To avoid duplicate submissions to the docket, please use only one of the following means to submit comments:

(1) *Online.* Submit comments at *www.regulations.gov* under Docket ID FEMA–2016–0006. Follow the instructions for submitting comments.

(2) *Mail.* Submit written comments to Docket Manager, Office of Chief Counsel, DHS/FEMA, 500 C Street SW., 8NE, Washington, DC 20472–3100.

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 Act notice that is available via the link in the footer of *www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT: Mary Ann Chang, Insurance Examiner, Mitigation Directorate, 202–212–4712. You may contact the Records Management Division for copies of the proposed collection of information at email address: *FEMA-Information-Collections-Management@fema.dhs.gov.*

SUPPLEMENTARY INFORMATION: The NFIP is authorized by Public Law 90–448 (1968) and expanded by Public Law 93–234 (1973). The National Flood Insurance Act of 1968 requires that the Federal Emergency Management Agency (FEMA) provide flood insurance at full actuarial rates reflecting the complete flood risk to structures built or substantially improved on or after the effective date for the initial Flood Insurance Rate Map for the community, or after December 31, 1974, whichever is later, so that the risks associated with buildings in flood-prone areas are borne by those located in such areas and not by the taxpayers at large. In accordance with Public Law 93–234, the purchase of flood insurance is mandatory when Federal or federally related financial assistance is being provided for acquisition or construction of buildings located, or to be located, within FEMA identified special flood hazard areas of communities that are participating in the NFIP.

Collection of Information

Title: National Flood Insurance Program Policy Forms.

Type of Information Collection: Revision of a currently approved information collection.

OMB Number: 1660–0006.

FEMA Forms: FEMA Form 086–0–1, Flood Insurance Application; FEMA Form 0860–2, Flood Insurance Cancellation/Nullification Request Form; FEMA Form 086–0–3, Flood Insurance General Change Endorsement; FEMA Form 086–0–4, V-Zone Risk Factor Rating Form and Instructions; and FEMA Form 086–0–5, Flood Insurance Preferred Risk Application.

Abstract: In order to provide for the availability of policies for flood insurance, policies are marketed through the facilities of licensed insurance agents or brokers in the various States. Applications from agents or brokers are forwarded to a servicing company designated as fiscal agent by the Federal Insurance Administration (FIA). Upon receipt and examination of the application and required premium, the servicing company issues the appropriate Federal flood insurance policy.

Affected Public: Individuals or households; State, local or Tribal Government; Business or other for profit; Not-for-profit institutions; and Farms.

Number of Respondents: 601,067.

Number of Responses: 601,067.

Estimated Total Annual Burden Hours: 91,016.

Estimated Cost: 6,500.

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.

Dated: March 3, 2016.

Richard W. Mattison,

Records Management Program Chief, Mission Support, Federal Emergency Management Agency, Department of Homeland Security.

[FR Doc. 2016–05983 Filed 3–16–16; 8:45 am]

BILLING CODE 9110–11–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[Docket ID FEMA–2016–0002]

Changes in Flood Hazard Determinations

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Final notice.

SUMMARY: New or modified Base (1-percent annual chance) Flood Elevations (BFEs), base flood depths, Special Flood Hazard Area (SFHA) boundaries or zone designations, and/or regulatory floodways (hereinafter referred to as flood hazard determinations) as shown on the indicated Letter of Map Revision (LOMR) for each of the communities listed in the table below are finalized. Each LOMR revises the Flood Insurance Rate Maps (FIRMs), and in some cases the Flood Insurance Study (FIS) reports, currently in effect for the listed communities. The flood hazard determinations modified by each LOMR will be used to calculate flood insurance premium rates for new buildings and their contents.

DATES: The effective date for each LOMR is indicated in the table below.

ADDRESSES: Each LOMR is available for inspection at both the respective Community Map Repository address listed in the table below and online through the FEMA Map Service Center at *www.msc.fema.gov.*

FOR FURTHER INFORMATION CONTACT: Luis Rodriguez, Chief, Engineering Management Branch, Federal Insurance and Mitigation Administration, FEMA, 500 C Street SW., Washington, DC 20472, (202) 646–4064, or (email) *Luis.Rodriguez3@fema.dhs.gov;* or visit the FEMA Map Information eXchange (FMIX) online at *www.floodmaps.fema.gov/fhm/fmx_main.html.*

SUPPLEMENTARY INFORMATION: The Federal Emergency Management Agency (FEMA) makes the final flood hazard determinations as shown in the LOMRs for each community listed in the table below. Notice of these modified flood hazard determinations has been published in newspapers of local circulation and 90 days have elapsed since that publication. The Deputy Associate Administrator for Mitigation has resolved any appeals resulting from this notification.

The modified flood hazard determinations are made pursuant to section 206 of the Flood Disaster Protection Act of 1973, 42 U.S.C. 4105, and are in accordance with the National Flood Insurance Act of 1968, 42 U.S.C. 4001 *et seq.,* and with 44 CFR part 65.

For rating purposes, the currently effective community number is shown and must be used for all new policies and renewals.

The new or modified flood hazard information is the basis for the floodplain management measures that the community is required either to adopt or to show evidence of being already in effect in order to remain qualified for participation in the National Flood Insurance Program (NFIP).

This new or modified flood hazard information, together with the floodplain management criteria required by 44 CFR 60.3, are the minimum that are required. They should not be construed to mean that the community must change any existing ordinances that are more stringent in their floodplain management requirements. The community may at any time enact stricter requirements of its own or pursuant to policies established by other Federal, State, or regional entities.

This new or modified flood hazard determinations are used to meet the floodplain management requirements of

the NFIP and also are used to calculate the appropriate flood insurance premium rates for new buildings, and for the contents in those buildings. The changes in flood hazard determinations are in accordance with 44 CFR 65.4.

Interested lessees and owners of real property are encouraged to review the final flood hazard information available at the address cited below for each community or online through the FEMA Map Service Center at *www.msc.fema.gov.*

(Catalog of Federal Domestic Assistance No. 97.022, ''Flood Insurance.'')

Dated: February 24, 2016.

Roy E. Wright,

Deputy Associate Administrator for Insurance and Mitigation, Department of Homeland Security, Federal Emergency Management Agency.

State and county	Location and case No.	Chief executive officer of community	Community map repository	Effective date of modification	Community No.
Alabama:					
Jefferson. (FEMA Docket No.: B–1545).	City of Birmingham (15–04–7923X).	The Honorable William A. Bell, Sr., Mayor, City of Birmingham, 710 North 20th Street, Birmingham, AL 35203.	Planning and Engineering Office, 710 North 20th Street, Birmingham, AL 35203.	Dec. 31, 2015	010116
Jefferson. (FEMA Docket No.: B–1545).	City of Mountain Brook (15–04–7923X).	The Honorable Lawrence T. Oden, City of Mountain Brook, P.O. Box 130009, Mountain Brook, AL 35213.	City Hall, 3928 Montclair Road, Mountain Brook, AL 35213.	Dec. 31, 2015	010128
Jefferson. (FEMA Docket No.: B–1538).	City of Leeds (15–04–4032P).	The Honorable David Miller, Mayor, City of Leeds, 1040 Park Drive, Leeds, AL 35094.	Inspections Department, 1040 Park Drive, Leeds, AL 35094.	Nov. 30, 2015	010125
St. Clair. (FEMA Docket No.: B–1538).	City of Moody (15–04–4032P).	The Honorable Joe Lee, Mayor, City of Moody, 670 Park Avenue, Moody, AL 35004.	Inspection and Public Works Department, 670 Park Avenue, Moody, AL 35004.	Nov. 30, 2015	010187
Shelby. (FEMA Docket No.: B–1545).	Unincorporated areas of Shelby County (15–04–4263P).	The Honorable Rick Shepherd, Chairman, Shelby County Board of Commissioners, 200 West College Street, Columbiana, AL 35051.	Shelby County Engineer's Office, 506 Highway 70, Columbiana, AL 35051.	Dec. 14, 2015	010191
Tuscaloosa. (FEMA Docket No.: B–1554).	City of Tuscaloosa (15–04–4630P).	The Honorable Walter Maddox, Mayor, City of Tuscaloosa, P.O. Box 2089, Tuscaloosa, AL 35401.	Engineering Department, 2201 University Boulevard, Tuscaloosa, AL 35401.	Oct. 21, 2015	010203
Colorado:					
Arapahoe. (FEMA Docket No.: B–1545).	City of Centennial (15–08–0299P).	The Honorable Cathy Noon, Mayor, City of Centennial, 13133 East Arapahoe Road, Centennial, CO 80112.	Southeast Metro Stormwater Authority, 7437 South Fairplay Street, Centennial, CO 80112.	Dec. 11, 2015	080315
Arapahoe. (FEMA Docket No.: B–1545).	City of Centennial (15–08–0563P).	The Honorable Cathy Noon, Mayor, City of Centennial, 13133 East Arapahoe Road, Centennial, CO 80112.	Southeast Metro Stormwater Authority, 7437 South Fairplay Street, Centennial, CO 80112.	Dec. 28, 2015	080315
Arapahoe. (FEMA Docket No.: B–1545).	Unincorporated areas of Arapahoe County (15–08–0299P).	The Honorable Nancy N. Sharpe, Chair, Arapahoe County Board of Commissioners, 5334 South Prince Street, Littleton, CO 80166.	Arapahoe County Public Works Department, 6924 South Lima Street, Centennial, CO 80112.	Dec. 11, 2015	080011
Denver. (FEMA Docket No.: B–1545).	City and County of Denver (15–08–0521P).	The Honorable Michael Hancock, Mayor, City and County of Denver, 1437 Bannock Street, Suite 350, Denver, CO 80202.	Department of Public Works, 201 West Colfax Avenue, Denver, CO 80202.	Dec. 28, 2015	080046
Douglas. (FEMA Docket No.: B–1538).	Town of Castle Rock (15–08–0069P).	The Honorable Paul Donahue, Mayor, Town of Castle Rock, 100 North Wilcox Street, Castle Rock, CO 80104.	Utilities Department, 175 Kellogg Road, Castle Rock, CO 80109.	Dec. 4, 2015	080050
Douglas. (FEMA Docket No.: B–1538).	Unincorporated areas of Douglas County (15–08–0069P).	The Honorable Jill Repella, Chair, Douglas County Board of Commissioners, 100 3rd Street, Castle Rock, CO 80104.	Douglas County Public Works Department, 100 3rd Street, Castle Rock, CO 80104.	Dec. 4, 2015	080049
Adams and Jefferson. (FEMA Docket No.: B–1545).	City of Westminster (15–08–0180P).	The Honorable Herb Atchison, Mayor, City of Westminster, 4800 West 92nd Avenue, Westminster, CO 80031.	City Hall, 4800 West 92nd Avenue, Westminster, CO 80031.	Nov. 27, 2015	080008
Broomfield. (FEMA Docket No.: B–1545).	City and County of Broomfield (15–08–0180P).	The Honorable Randy Ahrens, Mayor, City and County of Broomfield, 1 DesCombes Drive, Broomfield, CO 80020.	Engineering Department, 1 DesCombes Drive, Broomfield, CO 80020.	Nov. 27, 2015	085073
Jefferson. (FEMA Docket No.: B–1545).	Unincorporated areas of Jefferson County (15–08–0180P).	The Honorable Casey Tighe, Chairman, Jefferson County Board of Commissioners, 100 Jefferson County Parkway, Golden, CO 80419.	Jefferson County Department of Planning and Zoning, 100 Jefferson County Parkway, Golden, CO 80419.	Nov. 27, 2015	080087
Jefferson. (FEMA Docket No.: B–1545).	City of Lakewood, (14–08–1263P).	The Honorable Bob Murphy, Mayor, City of Lakewood, Lakewood Civic Center South, 480 South Allison Parkway, Lakewood, CO 80226.	Public Works Department, 480 South Allison Parkway, Lakewood, CO 80226.	Dec. 18, 2015	085075
Jefferson. (FEMA Docket No.: B–1545).	Unincorporated areas of Jefferson County (14–08–1263P).	The Honorable Casey Tighe, Chairman, Jefferson County Board of Commissioners, 100 Jefferson County Parkway, Golden, CO 80419.	Jefferson County Department of Planning and Zoning, 100 Jefferson County Parkway, Golden, CO 80419.	Dec. 18, 2015	080087
Weld. (FEMA Docket No.: B–1538).	City of Severance (15–08–0837P).	The Honorable Don Brookshire, Mayor, City of Severance, P.O. Box 339, Severance, CO 80546.	Town Hall, 231 West 4th Avenue, Severance, CO 80546.	Nov. 27, 2015	080317

State and county	Location and case No.	Chief executive officer of community	Community map repository	Effective date of modification	Community No.
Connecticut: Fairfield. (FEMA Docket No.: B–1545)	City of Norwalk (15–01–1793P).	The Honorable Harry W. Rilling, Mayor, City of Norwalk, 125 East Avenue, Norwalk, CT 06856.	Planning and Zoning Department, 125 East Avenue, Norwalk, CT 06856.	Dec. 30, 2015	090012
Florida:					
Charlotte. (FEMA Docket No.: B–1545).	Unincorporated areas of Charlotte County (15–04–4023P).	The Honorable Bill Truex, Chairman, Charlotte County Board of Commissioners, 18500 Murdock Circle, Suite 536, Port Charlotte, FL 33948.	Charlotte County Department of Community Development, 18500 Murdock Circle, Port Charlotte, FL 33948.	Dec. 31, 2015	120061
Charlotte. (FEMA Docket No.: B–1538).	Unincorporated areas of Charlotte County (15–04–6067P).	The Honorable Bill Truex, Chairman, Charlotte County Board of Commissioners, 18500 Murdock Circle, Suite 536, Port Charlotte, FL 33948.	Charlotte County Community Development Department, 18500 Murdock Circle, Port Charlotte, FL 33948.	Dec. 1, 2015	120061
Lee. (FEMA Docket No.: B–1545).	Unincorporated areas of Lee County (15–04–4830P).	The Honorable Brian Hamman, Chairman, Lee County Board of Commissioners, P.O. Box 398, Fort Myers, FL 33902.	Lee County Administration Office, 1700 Monroe Street, 2nd Floor, Fort Myers, FL 33902.	Dec. 14, 2015	125124
Miami-Dade. (FEMA Docket No.: B–1545).	City of Sunny Isles Beach (15–04–7479X).	The Honorable George "Bud" Scholl, Mayor, City of Sunny Isles Beach, 18070 Collins Avenue, Sunny Isles Beach, FL 33160.	Building Department, 18070 Collins Ave, 3rd Floor, Sunny Isles Beach, FL 33160.	Jan. 4, 2016	120688
Orange. (FEMA Docket No.: B–1545).	Unincorporated areas of Orange County (15–04–2752P).	The Honorable Teresa Jacobs, Mayor, Orange County, 201 South Rosalind Avenue, 5th Floor, Orlando, FL 32801.	Orange County Public Works Department, 4200 South John Young Parkway, Orlando, FL. 32839.	Dec. 31, 2015	120179
Orange. (FEMA Docket No.: B–1545).	Unincorporated areas of Orange County (15–04–4919P).	The Honorable Teresa Jacobs, Mayor, Orange County, 201 South Rosalind Avenue, 5th Floor, Orlando, FL 32801.	Orange County Public Works Department, 4200 South John Young Parkway, Orlando, FL. 32839.	Dec. 24, 2015	120179
St. Johns. (FEMA Docket No.: B–1545).	Unincorporated areas of St. Johns County (15–04–5124P).	The Honorable James K. Johns, Chairman, St. Johns County Board of Commissioners, District 1, 500 San Sebastian View, St. Augustine, FL 32084.	St. Johns County Growth Management Department, 4040 Lewis Speedway, St. Augustine, FL 32084.	Dec. 14, 2015	125147
Walton. (FEMA Docket No.: B–1545).	Unincorporated areas of Walton County (15–04–4766P).	The Honorable Bill Imfeld, Chairman, Walton County Board of Commissioners, 6570 U.S. Highway 90 West, DeFuniak Springs, FL 32433.	Walton County Planning and Development Services Department, 31 Coastal Centre Boulevard, Santa Rosa Beach, FL 32459.	Dec. 26, 2015	120317
Massachusetts: Essex. (FEMA Docket No.: B–1545)	Town of Rockport (15–01–1271P).	The Honorable Erin M. Battistelli, Chair, Town of Rockport Board of Selectmen, 34 Broadway, Rockport, MA 01966.	Building Inspections Division, 26 Broadway, Rockport, MA 01966.	Dec. 14, 2015	250100
Mississippi: Lafayette. (FEMA Docket No.: B–1545)	City of Oxford (15–04–8440P).	The Honorable George Patterson, Mayor, City of Oxford, 107 Courthouse Square, Oxford, MS 38655.	City Hall, 107 Courthouse Square, Oxford, MS 38655.	Jan. 4, 2016	280094
New Mexico: Bernalillo. (FEMA Docket No.: B–1545)	Unincorporated areas of Bernalillo County (14–06–4933P).	The Honorable Maggie Hart Stebbins, Chair, Bernalillo County Board of Commissioners, 1 Civic Plaza Northwest, Albuquerque, NM 87102.	Bernalillo County Public Works Division, 2400 Broadway Boulevard Southeast, Albuquerque, NM 87102.	Nov. 23, 2015	350001
Pennsylvania:					
Blair. (FEMA Docket No.: B–1538).	City of Altoona (14–03–3324P).	The Honorable Matt Pacifico, Mayor, City of Altoona, 1301 12th Street, Suite 100, Altoona, PA 16601.	Public Works Department, 1301 12th Street, Suite 300, Altoona, PA 16601.	Nov. 27, 2015	420159
Blair. (FEMA Docket No.: B–1538).	Township of Logan (14–03–3324P).	Mr. James A. Patterson, Chairman, Township of Logan Board of Supervisors, 100 Chief Logan Circle, Altoona, PA 16602.	Department of Zoning, 100 Chief Logan Circle, Altoona, PA 16602.	Nov. 27, 2015	421391
Texas:					
Bexar. (FEMA Docket No.: B–1545).	City of San Antonio (15–06–1484P).	The Honorable Ivy R. Taylor, Mayor, City of San Antonio, P.O. Box 839966, San Antonio, TX 78283.	Transportation and Capital Improvements Department, Storm Water Division, 1901 South Alamo Street, 2nd Floor, San Antonio, TX 78204.	Dec. 3, 2015	480045
Collin. (FEMA Docket No.: B–1538).	City of Frisco (15–06–0486P).	The Honorable Maher Maso, Mayor, City of Frisco, 6101 Frisco Square Boulevard, Frisco, TX 75034.	Engineering Services Department, 6101 Frisco Square Boulevard, Frisco, TX 75034.	Dec. 7, 2015	480134
Collin. (FEMA Docket No.: B–1545).	City of Murphy (14–06–4329P).	The Honorable Eric Barna, Mayor, City of Murphy, 206 North Murphy Road, Murphy, TX 75094.	Department of Public Works, 206 North Murphy Road, Murphy, TX 75094.	Dec. 11, 2015	480137
Dallas. (FEMA Docket No.: B–1545).	Town of Addison (15–06–1036P).	The Honorable Todd Meier, Mayor, Town of Addison, 5300 Belt Line Road, Dallas, TX 75254.	Town Service Center, 16801 Westgrove Drive, Dallas, TX 75001.	Dec. 28, 2015	481089
Dallas. (FEMA Docket No.: B–1538).	City of Dallas (14–06–3370P).	The Honorable Michael S. Rawlings, Mayor, City of Dallas, 1500 Marilla Street, Dallas, TX 75201.	Department of Public Works, 320 East Jefferson Boulevard, Dallas, TX 75203.	Nov. 30, 2015	480171
Ellis. (FEMA Docket No.: B–1538).	City of Waxahachie (15–06–0140P).	The Honorable Kevin Strength, Mayor, City of Waxahachie, 401 South Rogers Street, Waxahachie, TX 75165.	City Hall, 401 South Rogers Street, Waxahachie, TX 75165.	Dec. 2, 2015	480211
Harris. (FEMA Docket No.: B–1538).	Unincorporated areas of Harris County (15–06–1550P).	The Honorable Ed M. Emmett, Harris County Judge, 1001 Preston Street, Suite 911, Houston, TX 77002.	Harris County Permit Office, 10555 Northwest Freeway, Suite 120, Houston, TX 77092.	Dec. 1, 2015	480287

State and county	Location and case No.	Chief executive officer of community	Community map repository	Effective date of modification	Community No.
Hidalgo. (FEMA Docket No.: B–1545).	Unincorporated areas of Hidalgo County (15–06–2601P).	The Honorable Ramon Garcia, Hidalgo County Judge, 100 East Cano Street, 2nd Floor, Edinburg, TX 78542.	Hidalgo County Drainage District, 902 North Doolittle Road, Edinburg, TX 78542.	Dec. 24, 2015	480334
Utah: Uintah. (FEMA Docket No.: B–1545)	Unincorporated areas of Uintah County (15–08–0414P).	The Honorable Mike McKee, Chairman, Uintah County Board of Commissioners, 152 East 100 North, Vernal, UT 84078.	Uintah County Community Development Department, 152 East 100 North, Vernal, UT 84078.	Dec. 16, 2015	490147

[FR Doc. 2016–05990 Filed 3–16–16; 8:45 am]

BILLING CODE 9110–12–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[Docket ID FEMA–2016–0002; Internal Agency Docket No. FEMA–B–1600]

Changes in Flood Hazard Determinations

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Notice.

SUMMARY: This notice lists communities where the addition or modification of Base Flood Elevations (BFEs), base flood depths, Special Flood Hazard Area (SFHA) boundaries or zone designations, or the regulatory floodway (hereinafter referred to as flood hazard determinations), as shown on the Flood Insurance Rate Maps (FIRMs), and where applicable, in the supporting Flood Insurance Study (FIS) reports, prepared by the Federal Emergency Management Agency (FEMA) for each community, is appropriate because of new scientific or technical data. The FIRM, and where applicable, portions of the FIS report, have been revised to reflect these flood hazard determinations through issuance of a Letter of Map Revision (LOMR), in accordance with Title 44, Part 65 of the Code of Federal Regulations (44 CFR part 65). The LOMR will be used by insurance agents and others to calculate appropriate flood insurance premium rates for new buildings and the contents of those buildings. For rating purposes, the currently effective community number is shown in the table below and must be used for all new policies and renewals.

DATES: These flood hazard determinations will become effective on the dates listed in the table below and revise the FIRM panels and FIS report in effect prior to this determination for the listed communities.

From the date of the second publication of notification of these changes in a newspaper of local circulation, any person has 90 days in which to request through the community that the Deputy Associate Administrator for Mitigation reconsider the changes. The flood hazard determination information may be changed during the 90-day period.

ADDRESSES: The affected communities are listed in the table below. Revised flood hazard information for each community is available for inspection at both the online location and the respective community map repository address listed in the table below. Additionally, the current effective FIRM and FIS report for each community are accessible online through the FEMA Map Service Center at *www.msc.fema.gov* for comparison.

Submit comments and/or appeals to the Chief Executive Officer of the community as listed in the table below.

FOR FURTHER INFORMATION CONTACT: Luis Rodriguez, Chief, Engineering Management Branch, Federal Insurance and Mitigation Administration, FEMA, 500 C Street SW., Washington, DC 20472, (202) 646–4064, or (email) *Luis.Rodriguez3@fema.dhs.gov;* or visit the FEMA Map Information eXchange (FMIX) online at *www.floodmaps.fema.gov/fhm/fmx_main.html.*

SUPPLEMENTARY INFORMATION: The specific flood hazard determinations are not described for each community in this notice. However, the online location and local community map repository address where the flood hazard determination information is available for inspection is provided.

Any request for reconsideration of flood hazard determinations must be submitted to the Chief Executive Officer of the community as listed in the table below.

The modifications are made pursuant to section 201 of the Flood Disaster Protection Act of 1973, 42 U.S.C. 4105, and are in accordance with the National Flood Insurance Act of 1968, 42 U.S.C. 4001 *et seq.,* and with 44 CFR part 65.

The FIRM and FIS report are the basis of the floodplain management measures that the community is required either to adopt or to show evidence of having in effect in order to qualify or remain qualified for participation in the National Flood Insurance Program (NFIP).

These flood hazard determinations, together with the floodplain management criteria required by 44 CFR 60.3, are the minimum that are required. They should not be construed to mean that the community must change any existing ordinances that are more stringent in their floodplain management requirements. The community may at any time enact stricter requirements of its own or pursuant to policies established by other Federal, State, or regional entities. The flood hazard determinations are in accordance with 44 CFR 65.4.

The affected communities are listed in the following table. Flood hazard determination information for each community is available for inspection at both the online location and the respective community map repository address listed in the table below. Additionally, the current effective FIRM and FIS report for each community are accessible online through the FEMA Map Service Center at *www.msc.fema.gov* for comparison.

(Catalog of Federal Domestic Assistance No. 97.022, ''Flood Insurance.'')

Dated: February 24, 2016.

Roy E. Wright,

Deputy Associate Administrator for Insurance and Mitigation, Department of Homeland Security, Federal Emergency Management Agency.

State and county	Location and case No.	Chief executive officer of community	Community map repository	Online location of letter of map revision	Effective date of modification	Community No.
Alabama:						
Jefferson	Unincorporated areas of Jefferson County (15–04–9295P).	The Honorable Jimmie Stephens, Chairman, Jefferson County Commission, 716 Richard Arrington Jr. Boulevard North, Birmingham, AL 35203.	Jefferson County Land Development Department, 716 Richard Arrington Jr. Boulevard North, Birmingham, AL 35203.	*http://www.msc.fema.gov/lomc.*	Apr. 14, 2016	010217
Arkansas:						
Benton	City of Rogers (15–06–1201P).	The Honorable Greg Hines, Mayor, City of Rogers, 301 West Chestnut Street, Rogers, AR 72756.	City Hall, 301 West Chestnut Street, Rogers, AR 72756.	*http://www.msc.fema.gov/lomc.*	Apr. 5, 2016	050013
Pulaski	City of Sherwood (14–06–4719P).	The Honorable Virginia Hillman Young, Mayor, City of Sherwood, P.O. Box 6256, Sherwood, AR 72124.	City Hall, 2199 East Kiehl Avenue, Sherwood, AR 72120.	*http://www.msc.fema.gov/lomc.*	Apr. 8, 2016	050235
Colorado:						
Denver	City and County of Denver (15–08–0294P).	The Honorable Michael B. Hancock, Mayor, City and County of Denver, 1437 Bannock Street, Suite 350, Denver, CO 80202.	Department of Public Works, 201 West Colfax Avenue, Denver, CO 80202.	*http://www.msc.fema.gov/lomc.*	Apr. 15, 2016	080046
Fremont	Town of Williamsburg (15–08–0985P).	The Honorable Joshua Baker, Mayor, Town of Williamsburg, 1 John Street, Williamsburg, CO 81226.	City Hall, 1 John Street, Williamsburg, CO 81226.	*http://www.msc.fema.gov/lomc.*	Apr. 14, 2016	080028
Fremont	Unincorporated areas of Fremont County (15–08–0985P).	The Honorable Ed Norden, Chairman, Fremont County Board of Commissioners, 615 Macon Avenue, Canon City, CO 81212.	Fremont County Administrator's Office, 615 Macon Avenue, Canon City, CO 81212.	*http://www.msc.fema.gov/lomc.*	Apr. 14, 2016	080067
Jefferson	City of Golden (15–08–1205P).	The Honorable Marjorie Sloan, Mayor, City of Golden, 911 10th Street, Golden, CO 80401.	Public Works Department, 1445 10th Street, Golden, CO 80401.	*http://www.msc.fema.gov/lomc.*	Apr. 22, 2016	080090
Jefferson	City of Lakewood (15–08–0294P).	The Honorable Bob Murphy, Mayor, City of Lakewood, Lakewood Civic Center South, 480 South Allison Parkway, Lakewood, CO 80226.	Public Works Department, Lakewood Civic Center North, 480 South Allison Parkway, Lakewood, CO 80226.	*http://www.msc.fema.gov/lomc.*	Apr. 15, 2016	085075
Larimer	City of Fort Collins (15–08–1293P).	The Honorable Wade Troxell, Mayor, City of Fort Collins, P.O. Box 580, Fort Collins, CO 80522.	Stormwater Utilities Department, 700 Wood Street, Fort Collins, CO 80521.	*http://www.msc.fema.gov/lomc.*	Mar. 28, 2016	080102
Delaware:						
New Castle	Unincorporated areas of New Castle County (14–03–3246P).	The Honorable Thomas P. Gordon, New Castle County Executive, 87 Reads Way, New Castle, DE 19720.	New Castle County Land Use Department, 87 Reads Way, New Castle, DE 19720.	*http://www.msc.fema.gov/lomc.*	Apr. 15, 2016	105085
Florida:						
Bay	City of Lynn Haven (15–04–6857P).	The Honorable Margo Anderson, Mayor, City of Lynn Haven, 825 Ohio Avenue, Lynn Haven, FL 32444.	Building Department, 907 Pennsylvania Avenue, Lynn Haven, FL 32444.	*http://www.msc.fema.gov/lomc.*	Apr. 4, 2016	120009
Bay	Unincorporated areas of Bay County (15–04–6857P).	The Honorable Guy M. Tunnell, Chairman, Bay County Board of Commissioners, 840 West 11th Street, Panama City, FL 32401.	Bay County Planning and Zoning Department, 840 West 11th Street, Panama City, FL 32401.	*http://www.msc.fema.gov/lomc.*	Apr. 4, 2016	120004
Broward	City of Pompano Beach (15–04–4261P).	The Honorable Lamar Fisher, Mayor, City of Pompano Beach, 100 West Atlantic Boulevard, Pompano Beach, FL 33060.	Building Division, 100 West Atlantic Boulevard, Pompano Beach, FL 33060.	*http://www.msc.fema.gov/lomc.*	Apr. 6, 2016	120055
Broward	Unincorporated areas of Broward County (15–04–4261P).	The Honorable Tim Ryan, Mayor, Broward County Commission, 115 South Andrews Avenue, Room 413, Fort Lauderdale, FL 33301.	Broward County Building Permitting Division, 1 North University Drive, Suite 201A, Plantation, FL 33324.	http://www.msc.fema.gov/lomc.	Apr. 6, 2016	125093

State and county	Location and case No.	Chief executive officer of community	Community map repository	Online location of letter of map revision	Effective date of modification	Community No.
Charlotte	Unincorporated areas of Charlotte County (15–04–9981P).	The Honorable Bill Truex, Chairman, Charlotte County Board of Commissioners, 18500 Murdock Circle, Suite 536, Port Charlotte, FL 33948.	Charlotte County Community Development Department, 18500 Murdock Circle, Port Charlotte, FL 33948.	*http://www.msc.fema.gov/lomc.*	Apr. 4, 2016	120061
Collier	City of Marco Island, (16–04–0095X).	The Honorable Bob Brown, Chairman, City of Marco Island Council, 50 Bald Eagle Drive, Marco Island, FL 34145.	City Hall, 50 Bald Eagle Drive, Marco Island, FL 34145.	*http://www.msc.fema.gov/lomc.*	Apr. 4, 2016	120426
Duval	City of Jacksonville (15–04–A463P).	The Honorable Lenny Curry, Mayor, City of Jacksonville, 117 West Duval Street, Suite 400, Jacksonville, FL 32202.	Development Services Division, 214 North Hogan Street, Room 2100, Jacksonville, FL 32202.	*http://www.msc.fema.gov/lomc.*	Apr. 17, 2016	120077
Hillsborough	City of Plant City (15–04–0825P).	The Honorable Rick A. Lott, Mayor, City of Plant City, 302 West Reynolds Street, Plant City, FL 33563.	Engineering Division, 302 West Reynolds Street, Plant City, FL 33563.	*http://www.msc.fema.gov/lomc.*	Apr. 7, 2016	120113
Lee	Town of Fort Myers Beach (15–04–6044P).	The Honorable Anita Cereceda, Mayor, Town of Fort Myers Beach, 2525 Estero Boulevard, Fort Myers Beach, FL 33931.	Public Works Department, 2525 Estero Boulevard, Fort Myers Beach, FL 33931.	*http://www.msc.fema.gov/lomc.*	Apr. 4, 2016	120673
Lee	Unincorporated areas of Lee County (15–04–5461P).	The Honorable Brian Hamman, Chairman, Lee County Board of Commissioners, District 4, P.O. Box 398, Fort Myers, FL 33902.	Lee County Planning and Zoning Department, 1500 Monroe Street, Fort Myers, FL 33901.	*http://www.msc.fema.gov/lomc.*	Dec. 30, 2015	125124
Lee	Unincorporated areas of Lee County (15–04–9971X).	The Honorable Brian Hamman, Chairman, Lee County Board of Commissioners, District 4, P.O. Box 398, Fort Myers, FL 33902.	Lee County Planning and Zoning Department, 1500 Monroe Street, Fort Myers, FL 33901.	*http://www.msc.fema.gov/lomc.*	Mar. 30, 2016	125124
Manatee	Unincorporated areas of Manatee County (15–04–3585P).	The Honorable Betsy Benac, Chair, Manatee County Board of Commissioners, 1112 Manatee Avenue West, 9th Floor, Bradenton, FL 34205.	Manatee County Public Works Department, 1022 26th Avenue East, Bradenton, FL 34208.	*http://www.msc.fema.gov/lomc.*	Apr. 5, 2016	120153
Miami-Dade	City of Miami (15–04–9564P).	The Honorable Tomás P. Regalado, Mayor, City of Miami, 3500 Pan American Drive, Miami, FL 33133.	Building Department, 444 Southwest 2nd Avenue, 4th Floor, Miami, FL 33130.	*http://www.msc.fema.gov/lomc.*	Mar. 22, 2016	120650
Monroe	Unincorporated areas of Monroe County (15–04–9458P).	The Honorable Danny Kolhage, Mayor, Monroe County Board of Commissioners, 530 Whitehead Street, Suite 102, Key West, FL 33040.	Monroe County Building Department, 2798 Overseas Highway, Suite 300, Marathon, FL 33050.	*http://www.msc.fema.gov/lomc.*	Mar. 16, 2016	125129
Nassau	Unincorporated areas of Nassau County (15–04–7268P).	The Honorable Pat Edwards, Chairman, Nassau County Board of Commissioners, 96135 Nassau Place, Suite 1, Yulee, FL 32097.	Nassau County Building Department, 96161 Nassau Place, Yulee, FL 32097.	*http://www.msc.fema.gov/lomc.*	Apr. 7, 2016	120170
Osceola	City of Kissimmee (14–04–A481P).	The Honorable Jim Swan, Mayor, City of Kissimmee, 101 Church Street, Kissimmee, FL 34741.	Engineering Department, 101 Church Street, Kissimmee, FL 34741.	*http://www.msc.fema.gov/lomc.*	Apr. 15, 2016	120190
Osceola	Unincorporated areas of Osceola County (14–04–A481P).	The Honorable Brandon Arrington, Chairman, Osceola County Board of Commissioners, 1 Courthouse Square, Suite 4700, Kissimmee, FL 34741.	Osceola County Stormwater Department, 1 Courthouse Square, Suite 3100, Kissimmee, FL 34741.	*http://www.msc.fema.gov/lomc.*	Apr. 15, 2016	120189
St. Johns	Unincorporated areas of St. Johns County (15–04–9919P).	The Honorable Rachael L. Bennett, Chair, St. Johns County Board of Commissioners, 500 San Sebastian View, St. Augustine, FL 32084.	St. Johns County Building Services Division, 4040 Lewis Speedway, St. Augustine, FL 32084.	*http://www.msc.fema.gov/lomc.*	Apr. 13, 2016	125147

State and county	Location and case No.	Chief executive officer of community	Community map repository	Online location of letter of map revision	Effective date of modification	Community No.
Georgia:						
Columbia	Unincorporated areas of Columbia County (15–04–3832P).	The Honorable Ron C. Cross, Chairman, Columbia County Board of Commissioners, P.O. Box 498, Evans, GA 30809.	Columbia County Planning Department, 630 Ronald Reagan Drive, Evans, GA 30809.	*http://www.msc.fema.gov/lomc.*	Apr. 7, 2016	130059
Mississippi:						
Rankin	City of Richland (15–04–6709P).	The Honorable Mark Scarborough, Mayor, City of Richland, P.O. Box 180609, Richland, MS 39218.	City Hall, 380 Scarbrough Street, Richland, MS 39218.	*http://www.msc.fema.gov/lomc.*	Apr. 21, 2016	280299
North Carolina:						
Haywood	Unincorporated areas of Haywood County (15–04–9975P).	The Honorable Mark S. Swanger, Chairman, Haywood County Board of Commissioners, 215 North Main Street, Waynesville, NC 28786.	Haywood County Planning Department, 157 Paragon Parkway, Suite 200, Clyde, NC 28721.	*http://www.msc.fema.gov/lomc.*	Apr. 5, 2016	370120
Macon	Town of Highlands (15–04–7513P).	The Honorable Patrick Taylor, Mayor, Town of Highlands, P.O. Box 460, Highlands, NC 28741.	Town Hall, 210 North 4th Street, Highlands, NC 28741.	*http://www.msc.fema.gov/lomc.*	Mar. 11, 2016	370574
Union	Town of Waxhaw (15–04–4099P).	The Honorable Stephen E. Maher, Mayor, Town of Waxhaw, P.O. Box 6, Waxhaw, NC 28173.	Town Hall, 1150 North Broome Street, Waxhaw, NC 28173.	*http://www.msc.fema.gov/lomc.*	Mar. 10, 2016	370473
Union	Unincorporated areas of Union County (15–04–4099P).	The Honorable Stony Rushing, Chairman, Union County Board of Commissioners, 500 North Main Street, Room 921, Monroe, NC 28112.	Union County Office of Growth Management, Planning Division, 500 North Main Street, Monroe, NC 28112.	*http://www.msc.fema.gov/lomc.*	Mar. 10, 2016	370234
Wake	Town of Fuquay-Varina (15–04–2204P).	The Honorable John Byrne, Mayor, Town of Fuquay-Varina, 401 Old Honeycutt Road, Fuquay-Varina, NC 27256.	Engineering Department, 401 Old Honeycutt Road, Fuquay-Varina, NC 27256.	*http://www.msc.fema.gov/lomc.*	Dec. 18, 2015	370239
Wake	Unincorporated areas of Wake County (15–04–2204P).	The Honorable James West, Chairman, Wake County Board of Commissioners, P.O. Box 550, Raleigh, NC 27602.	Wake County Environmental Services Department, 336 Fayetteville Street, Raleigh, NC 27601.	*http://www.msc.fema.gov/lomc.*	Dec. 18, 2015	370368
Watauga	Town of Blowing Rock (15–04–2144P).	The Honorable J. B. Lawrence, Mayor, Town of Blowing Rock, P.O. Box 47, Blowing Rock, NC 28605.	Planning and Inspections Department, 1038 Main Street, Blowing Rock, NC 28605.	*http://www.msc.fema.gov/lomc.*	Apr. 21, 2016	370252
Oklahoma:						
Cleveland	City of Moore (15–06–1047P).	The Honorable Stephen O. Eddy, Manager, City of Moore, 301 North Broadway Street, Moore, OK 73160.	City Hall, 301 North Broadway Street, Moore, OK 73160.	*http://www.msc.fema.gov/lomc.*	Apr. 27, 2016	400044
Cleveland	City of Oklahoma City (15–06–1047P).	The Honorable Mick Cornett, Mayor, City of Oklahoma City, 200 North Walker Avenue, 3rd Floor, Oklahoma City, OK 73102.	Department of Public Works, 420 West Main Street, Suite 700, Oklahoma City, OK 73102.	*http://www.msc.fema.gov/lomc.*	Apr. 27, 2016	405378
Oklahoma	City of Edmond (15–06–3272P).	The Honorable Charles Lamb, Mayor, City of Edmond, P.O. Box 2970, Edmond, OK 73083.	Planning and Public Works Department, 10 South Littler, Edmond, OK 73084.	*http://www.msc.fema.gov/lomc.*	Apr. 7, 2016	400252
South Carolina:						
Charleston	City of Charleston (15–04–9773P).	The Honorable Joseph P. Riley, Jr., Mayor, City of Charleston, P.O. Box 652, Charleston, SC 29402.	Building Inspections Department, 2 George Street, Charleston, SC 29401.	*http://www.msc.fema.gov/lomc.*	Mar. 28, 2016	455412
Charleston	Town of Mount Pleasant, (16–04–0085P).	The Honorable Linda Page, Mayor, Town of Mount Pleasant, 100 Ann Edwards Lane, Mount Pleasant, SC 29464.	Planning and Development Department, 100 Ann Edwards Lane, Mount Pleasant, SC 29464.	*http://www.msc.fema.gov/lomc.*	Apr. 28, 2016	455417
South Dakota:						

State and county	Location and case No.	Chief executive officer of community	Community map repository	Online location of letter of map revision	Effective date of modification	Community No.
Codington	City of Watertown (15–08–0555P).	The Honorable Steve Thorson, Mayor, City of Watertown, 23 2nd Street Northeast, Watertown, SD 57201.	City Hall, 23 2nd Street Northeast, Watertown, SD 57201.	*http://www.msc.fema.gov/lomc.*	Mar. 22, 2016	460016
Codington	Unincorporated areas of Codington County (15–08–0555P).	The Honorable Elmer Brinkman, Chairman, Codington County Board of Commissioners, 14 1st Avenue Southeast, Watertown, SD 57201.	Codington County Planning and Zoning Department, 1910 West Kemp Avenue, Watertown, SD 57201.	*http://www.msc.fema.gov/lomc.*	Mar. 22, 2016	460260
Tennessee:						
Knox	City of Knoxville (15–04–6041P).	The Honorable Madeline Rogero, Mayor, City of Knoxville, P.O. Box 1631, Knoxville, TN 37901.	Stormwater Engineering Division, 400 Main Street, Suite 480, Knoxville, TN 37902.	*http://www.msc.fema.gov/lomc.*	Apr. 8, 2016	475434
Texas:						
Bell	City of Temple (15–06–3320P).	The Honorable Danny Dunn, Mayor, City of Temple, 2 North Main Street, Suite 103, Temple, TX 76501.	Engineering Department, 3210 East Avenue H, Building A, Suite 107, Temple, TX 76501.	*http://www.msc.fema.gov/lomc.*	Apr. 12, 2016	480034
Collin	City of Frisco (15–06–1583P).	The Honorable Maher Maso, Mayor, City of Frisco, 6101 Frisco Square Boulevard, Frisco, TX 75034.	Engineering Services Department, 6101 Frisco Square Boulevard, Frisco, TX 75034.	*http://www.msc.fema.gov/lomc.*	Mar. 21, 2016	480134
Comal	City of New Braunfels (15–06–4062P).	The Honorable Barron Casteel, Mayor, City of New Braunfels, 424 South Castell Avenue, New Braunfels, TX 78130.	Building Division, 424 South Castell Avenue, New Braunfels, TX 78130.	*http://www.msc.fema.gov/lomc.*	Mar. 31, 2016	485493
El Paso	City of El Paso (15–06–3494P).	The Honorable Oscar Leeser, Mayor, City of El Paso, 300 North Campbell Street, El Paso, TX 79901.	Land Development Department, 801 Texas Avenue, El Paso, TX 79901.	*http://www.msc.fema.gov/lomc.*	Apr. 14, 2016	480214
Grimes	Unincorporated areas of Grimes County (15–06–3274P).	The Honorable Ben Leman, Grimes County Judge, P.O. Box 160, Anderson, TX 77830.	Grimes County Road and Bridge Engineering Department, 1010 Highway 90 South, Anderson, TX 77830.	*http://www.msc.fema.gov/lomc.*	Apr. 14, 2016	481173
Johnson	City of Burleson (15–06–3404P).	The Honorable Ken Shetter, Mayor, City of Burleson, 141 West Renfro Street, Burleson, TX 76028.	Development Services Department, 141 West Renfro Street, Burleson, TX 76028.	*http://www.msc.fema.gov/lomc.*	Apr. 18, 2016	485459
McClennan	City of Hewitt (15–06–2410P).	The Honorable Ed Passaligo, Mayor, City of Hewitt, 105 Tampico Drive, Hewitt, TX 76643.	City Hall, 105 Tampico Drive, Hewitt, TX 76643.	*http://www.msc.fema.gov/lomc.*	Apr. 4, 2016	480458
McClennan	Unincorporated areas of McClennan County (15–06–2410P).	The Honorable Malcolm Duncan Jr., Mayor, City of Waco, 300 Austin Avenue, Waco, TX 76702.	Engineering Services Department, 401 Franklin Avenue, Waco, TX 76701.	*http://www.msc.fema.gov/lomc.*	Apr. 4, 2016	480461
Rockwall	City of Rockwall (15–06–0488P).	The Honorable Jim Pruitt, Mayor, City of Rockwall, 385 South Goliad Street, Rockwall, TX 75087.	City Hall, 385 South Goliad Street, Rockwall, TX 75087.	*http://www.msc.fema.gov/lomc.*	Mar. 28, 2016	480547
Travis	City of Manor (15–06–2824P).	The Honorable Rita G. Jonse, Mayor, City of Manor, P.O. Box 387, Manor, TX 78653.	City Hall, 201 East Parsons Street, Manor, TX 78653.	*http://www.msc.fema.gov/lomc.*	Apr. 11, 2016	481027
Travis	Unincorporated areas of Travis County (15–06–2824P).	The Honorable Sarah Eckhardt, Travis County Judge, P.O. Box 1748, Austin, TX 78767.	Travis County Office of Emergency Management, 5010 Old Manor Road, Austin TX 78723.	*http://www.msc.fema.gov/lomc.*	Apr. 11, 2016	481026
Virginia:						
Fairfax	Unincorporated areas of Fairfax County (15–03–1692P).	The Honorable Edward L. Long, Jr., Fairfax County Executive, 12000 Government Center Parkway, Fairfax, VA 22035.	Fairfax County Stormwater Planning Division, 12000 Government Center Parkway, Fairfax, VA 22035.	*http://www.msc.fema.gov/lomc.*	Mar. 29, 2016	515525

[FR Doc. 2016–05982 Filed 3–16–16; 8:45 am]

BILLING CODE 9110–12–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[Docket ID FEMA–2008–0010]

Board of Visitors for the National Fire Academy

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Committee management; notice of open federal advisory committee meeting.

SUMMARY: The Board of Visitors for the National Fire Academy (Board) will meet via teleconference on April 7, 2016. The meeting will be open to the public.

DATES: The meeting will take place on Thursday, April 7, 2016, from 2 to 4 p.m. Eastern Daylight Time. Please note that the meeting may close early if the Board has completed its business.

ADDRESSES: Members of the public who wish to participate in the teleconference should contact Ruth MacPhail as listed in the **FOR FURTHER INFORMATION CONTACT** section by close of business April 5, 2016, to obtain the call-in number and access code. For information on services for individuals with disabilities or to request special assistance, contact Ruth MacPhail as soon as possible.

To facilitate public participation, we are inviting public comment on the issues to be considered by the Board as listed in the **SUPPLEMENTARY INFORMATION** section. Comments must be submitted in writing no later than April 5, 2016, and must be identified by Docket ID FEMA–2008–0010 and may be submitted by *one* of the following methods:

- *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments.
- *Email FEMA-RULES@fema.dhs.gov.* Include the docket number in the subject line of the message.
- *Mail/Hand Delivery* Ruth MacPhail, 16825 South Seton Avenue, Emmitsburg, Maryland 21727.

Instructions All submissions received must include the words ''Department of Homeland Security'' and the Docket ID for this action. Comments received will be posted without alteration at *http://www.regulations.gov,* including any personal information provided.

Docket: For access to the docket to read background documents or comments received by the National Fire Academy Board of Visitors, go to *http://www.regulations.gov,* click on ''Advanced Search,'' then enter ''FEMA–2008–0010'' in the ''By Docket ID'' box, then select ''FEMA'' under ''By Agency,'' and then click ''Search.''

FOR FURTHER INFORMATION CONTACT: *Alternate Designated Federal Officer:* Kirby E. Kiefer, telephone (301) 447–1117, email *Kirby.Kiefer@fema.dhs.gov.*

Logistical Information: Ruth MacPhail, telephone (301) 447–1333, fax (301) 447–1834, and email *Ruth.Macphail@fema.dhs.gov.*

SUPPLEMENTARY INFORMATION: Notice of this meeting is given under the Federal Advisory Committee Act, 5 U.S.C. Appendix.

Purpose of the Board

The purpose of the Board is to review annually the programs of the National Fire Academy (NFA) and advise the Administrator of the Federal Emergency Management Agency (FEMA), through the United States Fire Administrator, on the operation of the NFA and any improvements therein that the Board deems appropriate. In carrying out its responsibilities, the Board examines NFA programs to determine whether these programs further the basic missions that are approved by the Administrator of FEMA, examines the physical plant of the NFA to determine the adequacy of the NFA's facilities, and examines the funding levels for NFA programs. The Board submits a written annual report through the United States Fire Administrator to the Administrator of FEMA. The report provides detailed comments and recommendations regarding the operation of the NFA.

Agenda

1. The Board will receive updates on U.S. Fire Administration data, research, and response support initiatives.
2. The Board will discuss deferred maintenance and capital improvements on the National Emergency Training Center campus and Fiscal Year 2016 Budget Request/Budget Planning.
3. The Board will review and give feedback on NFA program activities, including:

- Fire and Emergency Services Higher Education (FESHE) Recognition Program update, a certification program acknowledging that a collegiate emergency services degree meets the minimum standards of excellence established by FESHE development committees and the NFA;
- Online training—evolution and current state of the NFA distance learning program: self-study, mediated and blended;
- BYOD (Bring Your Own Device) status report and technical upgrades to classrooms to support BYOD;
- Managing Officer Program Status—program review as it completes the first year of a two-year program cycle;
- Curriculum and Instruction program activities including conversion of existing material to new delivery modes;
- Executive Fire Officer (EFO) Program updates and program direction discussion;
- EFO Symposium scheduled for September 8–10, 2016—report on planned agenda;
- National Professional Development Symposium scheduled for June 26–29, 2016—report on planned agenda;
- Staffing updates;
- NFA Budget status and forecast;
- Professional Development Initiative Subcommittee status report, established to bring the FESHE and Training Resources and Data Exchange groups together for a central point for coordination of professional development tasks;
- Whole Community Subcommittee status report, established to define the ''Whole Community'' concept and develop a strategy for sharing of information and programmatic initiatives and/or best practices to encourage ''whole community'' preparedness and prevention; and
- National Fire Incident Reporting System (NFIRS) Subcommittee status report, established to review the coding scheme of NFIRS for accuracy, timeliness, user friendliness, and module relevancy.

There will be a 10-minute comment period after each agenda item; each speaker will be given no more than 2 minutes to speak. Please note that the public comment period may end before the time indicated, following the last call for comments. Contact Ruth MacPhail to register as a speaker. Meeting materials will be posted at *http://www.usfa.fema.gov/nfa/about/bov.shtm* by March 31, 2016.

Dated: March 11, 2016.

Kirby E. Kiefer,

Acting Superintendent, National Fire Academy, United States Fire Administration, Federal Emergency Management Agency.

[FR Doc. 2016–06039 Filed 3–16–16; 8:45 am]

BILLING CODE 9111–45–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[Docket ID FEMA–2016–0002]

Changes in Flood Hazard Determinations

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Final notice.

SUMMARY: New or modified Base (1-percent annual chance) Flood Elevations (BFEs), base flood depths, Special Flood Hazard Area (SFHA) boundaries or zone designations, and/or regulatory floodways (hereinafter referred to as flood hazard determinations) as shown on the indicated Letter of Map Revision (LOMR) for each of the communities listed in the table below are finalized. Each LOMR revises the Flood Insurance Rate Maps (FIRMs), and in some cases the Flood Insurance Study (FIS) reports, currently in effect for the listed communities. The flood hazard determinations modified by each LOMR will be used to calculate flood insurance premium rates for new buildings and their contents.

DATES: The effective date for each LOMR is indicated in the table below.

ADDRESSES: Each LOMR is available for inspection at both the respective Community Map Repository address listed in the table below and online through the FEMA Map Service Center at *www.msc.fema.gov*.

FOR FURTHER INFORMATION CONTACT: Luis Rodriguez, Chief, Engineering Management Branch, Federal Insurance and Mitigation Administration, FEMA, 500 C Street SW., Washington, DC 20472, (202) 646–4064, or (email) *Luis.Rodriguez3@fema.dhs.gov;* or visit the FEMA Map Information eXchange (FMIX) online at *www.floodmaps.fema.gov/fhm/fmx_main.html*.

SUPPLEMENTARY INFORMATION: The Federal Emergency Management Agency (FEMA) makes the final flood hazard determinations as shown in the LOMRs for each community listed in the table below. Notice of these modified flood hazard determinations has been published in newspapers of local circulation and 90 days have elapsed since that publication. The Deputy Associate Administrator for Mitigation has resolved any appeals resulting from this notification.

The modified flood hazard determinations are made pursuant to section 206 of the Flood Disaster Protection Act of 1973, 42 U.S.C. 4105, and are in accordance with the National Flood Insurance Act of 1968, 42 U.S.C. 4001 *et seq.,* and with 44 CFR part 65.

For rating purposes, the currently effective community number is shown and must be used for all new policies and renewals.

The new or modified flood hazard information is the basis for the floodplain management measures that the community is required either to adopt or to show evidence of being already in effect in order to remain qualified for participation in the National Flood Insurance Program (NFIP).

This new or modified flood hazard information, together with the floodplain management criteria required by 44 CFR 60.3, are the minimum that are required. They should not be construed to mean that the community must change any existing ordinances that are more stringent in their floodplain management requirements. The community may at any time enact stricter requirements of its own or pursuant to policies established by other Federal, State, or regional entities.

This new or modified flood hazard determinations are used to meet the floodplain management requirements of the NFIP and also are used to calculate the appropriate flood insurance premium rates for new buildings, and for the contents in those buildings. The changes in flood hazard determinations are in accordance with 44 CFR 65.4.

Interested lessees and owners of real property are encouraged to review the final flood hazard information available at the address cited below for each community or online through the FEMA Map Service Center at *www.msc.fema.gov*.

(Catalog of Federal Domestic Assistance No. 97.022, ''Flood Insurance.'')

Dated: February 24, 2016.

Roy E. Wright,

Deputy Associate Administrator for Insurance and Mitigation, Department of Homeland Security, Federal Emergency Management Agency.

State and county	Location and case No.	Chief executive officer of community	Community map repository	Effective date of modification	Community No.
Oregon: Deschutes (FEMA Docket No.: B–1503).	(Unincorporated areas of Deschutes County) (15–10–0345P).	The Honorable Tom Anderson, Deschutes County Administrator, 1300 NW Wall Street, Suite 200, Bend, OR 97701.	Deschutes County Courthouse, 1164 NW Bond Street, Bend, OR 97701.	July 6, 2015	410055

[FR Doc. 2016–05985 Filed 3–16–16; 8:45 am]

BILLING CODE 9110–12–P

DEPARTMENT OF HOMELAND SECURITY

Transportation Security Administration

[Docket No. TSA–2004–19515]

Extension of Agency Information Collection Activity Under OMB Review: Air Cargo Security Requirements

AGENCY: Transportation Security Administration, DHS.

ACTION: 30-day notice.

SUMMARY: This notice announces that the Transportation Security Administration (TSA) has forwarded the Information Collection Request (ICR), Office of Management and Budget (OMB) control number 1652–0040, abstracted below to OMB for review and approval of an extension of the currently approved collection under the Paperwork Reduction Act (PRA). The ICR describes the nature of the information collection and its expected burden. TSA published a **Federal Register** notice, with a 60-day comment period soliciting comments, of the following collection of information on December 15, 2015, 80 FR 77650. This ICR involves three broad categories of affected populations operating under a security program: Aircraft operators, foreign air carriers, and indirect air carriers. The collections of information that make up this ICR include security programs, security threat assessments (STA) on certain individuals, known shipper data via the Known Shipper Management System (KSMS), Indirect Air Carrier Management System (IACMS), and evidence of compliance recordkeeping.

DATES: Send your comments by April 18, 2016. A comment to OMB is most effective if OMB receives it within 30 days of publication.

ADDRESSES: Interested persons are invited to submit written comments on the proposed information collection to the Office of Information and Regulatory Affairs, OMB. Comments should be addressed to Desk Officer, Department of Homeland Security/TSA, and sent via electronic mail to *oira_submission@omb.eop.gov* or faxed to (202) 395–6974.

FOR FURTHER INFORMATION CONTACT: Christina A. Walsh, TSA PRA Officer, Office of Information Technology (OIT), TSA–11, Transportation Security Administration, 601 South 12th Street, Arlington, VA 20598–6011; telephone (571) 227–2062; email *TSAPRA@tsa.dhs.gov.*

SUPPLEMENTARY INFORMATION:

Comments Invited

In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The ICR documentation is available at *http://www.reginfo.gov.* Therefore, in preparation for OMB review and approval of the following information collection, TSA is soliciting comments to—

(1) Evaluate whether the proposed information requirement 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;

(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 using appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

Information Collection Requirement

Title: Air Cargo Security Requirements.

Type of Request: Extension of a currently approved collection.

OMB Control Number: 1652–0040.

Form(s): Aviation Security Known Shipper Verification Form, Aircraft Operator or Air Carrier Reporting Template, and Security Threat Assessment Application.

Affected Public: This ICR involves regulated entities including aircraft operators, foreign air carriers, and indirect air carriers operating under a TSA-approved security program.

Abstract: TSA uses the information collected to comply with the Aviation and Transportation Security Act (ATSA) and provisions enacted as part of the Implementing Recommendations of the 9/11 Commission Act of 2007 (Pub. L. 110–53, 121 Stat. 266, Aug. 3, 2007) for the security of aircraft operators, foreign air carriers and indirect air carriers operating under a TSA-approved security program. *See* ATSA sec. 110 as codified at 49 U.S.C. 44901(a) and (f). TSA is seeking a revision of the collection of information.

Currently, this information collection requires aircraft operators, foreign air carriers, and indirect air carriers (IACs) to collect certain information as part of the implementation of a standard security program, to submit modifications to the standard security program to TSA for approval, and update such programs as necessary. As part of these security programs, the regulated entities must also collect personal information and submit such information to TSA so that TSA may conduct STAs on individuals with unescorted access to cargo.

Further, the collection of information requires both companies and individuals whom aircraft operators, foreign air carriers, and IACs have qualified to ship cargo on passenger aircraft, also referred to as ''known shippers,'' to submit information to TSA. This information is collected electronically through the KSMS.

In addition, the information collection requires that regulated entities enter into IACMS the information required from applicants requesting to be approved as IACs and the information required for their IAC annual renewal in accordance with 49 CFR 1548.7. Regulated entities must also maintain records, including records pertaining to security programs, training, and compliance to demonstrate adherence with the regulatory requirements.

TSA is revising the collection to include information from select aircraft operators and foreign air carriers operating under certain amendments to their security programs. These entities must provide to TSA detailed screening volumes and the methodology utilized to arrive at these volumes, as well as demonstrating progress toward full compliance with the cargo security measures specified in such amendments.

Number of Respondents: 209,390.

Estimated Annual Burden Hours: An estimated 74,785 hours.

Dated: March 10, 2016.

Christina A. Walsh,

TSA Paperwork Reduction Act Officer, Office of Information Technology.

[FR Doc. 2016–05979 Filed 3–16–16; 8:45 am]

BILLING CODE 9110–05–P

DEPARTMENT OF HOMELAND SECURITY

Transportation Security Administration

[Docket No. TSA–2005–21866]

Extension of Agency Information Collection Activity Under OMB Review: Enhanced Security Procedures at Ronald Reagan Washington National Airport

AGENCY: Transportation Security Administration, DHS.

ACTION: 30-Day notice.

SUMMARY: This notice announces that the Transportation Security Administration (TSA) has forwarded the Information Collection Request (ICR), OMB control number 1652–0035, abstracted below to the Office of Management and Budget (OMB) for review and approval of an extension of the currently approved collection under the Paperwork Reduction Act. The ICR describes the nature of the information collection and its expected burden. TSA published a **Federal Register** notice, with a 60-day comment period soliciting comments, of the following collection of information on January 8, 2016, 81 FR 943. TSA requires general aviation (GA) aircraft operators who wish to fly into or out of Ronald Reagan Washington National Airport (DCA) to designate a security coordinator and adopt the DCA Access Standard Security Program (DASSP).

DATES: Send your comments by April 18, 2016. A comment to OMB is most effective if OMB receives it within 30 days of publication.

ADDRESSES: Interested persons are invited to submit written comments on the proposed information collection to the Office of Information and Regulatory Affairs, OMB. Comments should be addressed to Desk Officer, Department of Homeland Security/TSA, and sent via electronic mail to *oira_submission@omb.eop.gov* or faxed to (202) 395–6974.

FOR FURTHER INFORMATION CONTACT: Christina A. Walsh, TSA PRA Officer, Office of Information Technology (OIT), TSA–11, Transportation Security Administration, 601 South 12th Street, Arlington, VA 20598–6011; telephone (571) 227–2062; email *TSAPRA@tsa.dhs.gov.*

SUPPLEMENTARY INFORMATION:

Comments Invited

In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The ICR documentation is available at *www.reginfo.gov.* Therefore, in preparation for OMB review and approval of the following information collection, TSA is soliciting comments to—

(1) Evaluate whether the proposed information requirement 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;

(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 using appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

Information Collection Requirement

Title: Enhanced Security Procedures at Ronald Reagan Washington National Airport.

Type of Request: Extension of a currently approved collection.

OMB Control Number: 1652–0035.

Forms(s): N/A.

Affected Public: GA aircraft operators and passengers, armed security officers (ASOs), flight crew, fixed base operators, and gateway airport operators.

Abstract: TSA is hereby requesting an extension of this information collection. In accordance with 49 CFR part 1562, subpart B, TSA requires GA aircraft operators who wish to fly into or out of DCA to designate a security coordinator and adopt the DASSP. Once aircraft operators have complied with the DASSP requirements, they must request a slot reservation from the Federal Aviation Administration (FAA) and request authorization from TSA for each flight into and out of DCA. This information collection is approved under OMB control number 1652–0033, TSA Airspace Waiver Applications.

As part of the DASSP requirements, individuals designated as security coordinators, armed security officers, and flight crewmembers assigned to duty on a GA aircraft flying into and out of DCA must submit fingerprints for a Criminal History Records Check (CHRC). In addition, GA aircraft operators must also maintain CHRC records of all employees and authorized representatives for whom a CHRC has been completed.

Number of Respondents: 704 annually.[1]

Estimated Annual Burden Hours: An estimated 799 hours annually.

Dated: March 10, 2016.

Christina A. Walsh,

TSA Paperwork Reduction Act Officer, Office of Information Technology.

[FR Doc. 2016–05971 Filed 3–16–16; 8:45 am]

BILLING CODE 9110–05–P

[1] In the 60-day notice, TSA reported the annual respondents' amount as 5,304 and the annual burden as 5,547. Since the publication, TSA has obtained actual data and has adjusted the numbers accordingly.

DEPARTMENT OF HOMELAND SECURITY

Transportation Security Administration

Intent to Request Approval From OMB of One New Public Collection of Information: TSA infoBoards

AGENCY: Transportation Security Administration, DHS.

ACTION: 60-Day notice.

SUMMARY: The Transportation Security Administration (TSA) invites public comment on a new Information Collection Request (ICR) abstracted below that we will submit to the Office of Management and Budget (OMB) for approval in compliance with the Paperwork Reduction Act (PRA). The ICR describes the nature of the information collection and its expected burden for the TSA infoBoards. TSA infoBoards (formerly WebBoards) are an information-sharing environment designed to serve stakeholders in the transportation security community and are used to disseminate mission-critical information. It provides stakeholders with an online portal, which allows authorized users to obtain, post, and exchange information, access common resources, and communicate with similarly situated individuals. Utilizing and inputting information into TSA infoBoards is completely voluntary.

DATES: Send your comments by May 16, 2016.

ADDRESSES: Comments may be emailed to *TSAPRA@tsa.dhs.gov* or delivered to the TSA PRA Officer, Office of Information Technology (OIT), TSA–11, Transportation Security Administration, 601 South 12th Street, Arlington, VA 20598–6011.

FOR FURTHER INFORMATION CONTACT: Christina A. Walsh at the above address, or by telephone (571) 227–2062.

SUPPLEMENTARY INFORMATION:

Comments Invited

In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The ICR documentation is available at *www.reginfo.gov.* Therefore, in preparation for OMB review and approval of the following information collection, TSA is soliciting comments to—

(1) Evaluate whether the proposed information requirement 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;

(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 using appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

Information Collection Requirement

Purpose of Data Collection

TSA infoBoards were developed by TSA as part of its broad responsibilities and authorities under the Aviation and Transportation Security Act (ATSA), and delegated authority from the Secretary of Homeland Security, for ''security in all modes of transportation . . . including security responsibilities . . . over modes of transportation that are exercised by the Department of Transportation.'' [1]

The TSA infoBoards are a data management system that provides coordination and collaboration with parties that have a relevant interest in

[1] *See* Public Law 107–71 (115 Stat. 597, Nov. 19, 2001), codified at 49 U.S.C. 114 (d). The TSA Assistant Secretary's current authorities under ATSA have been delegated to him by the Secretary of Homeland Security. Section 403(2) of the Homeland Security Act (HSA) of 2002, Public Law 107–296 (116 Stat. 2315, Nov. 25, 2002), transferred all functions of TSA, including those of the Secretary of Transportation and the Under Secretary of Transportation of Security related to TSA, to the Secretary of Homeland Security. Pursuant to DHS Delegation Number 7060.2, the Secretary delegated to the Assistant Secretary (then referred to as the Administrator of TSA), subject to the Secretary's guidance and control, the authority vested in the Secretary with respect to TSA, including that in section 403(2) of the HSA.

transportation security and an appropriate level of need to access transportation security information–such as, regulated parties and other industry stakeholders, Federal agencies, and state and local governments. This system also integrates other security-related information and communications at the sensitive security information (SSI) level. It is located in a secure online environment and is accessible from the Homeland Security Information Network (HSIN) and TSA (for TSA staff only). It disseminates mission-critical information to users inside and outside of the TSA organization. It provides an online portal allowing authorized users to obtain, post, and exchange information, access common resources, and communicate with similarly situated individuals.

TSA infoBoards are primarily used for disseminating TSA mission-critical information, such as Security Directives (SD), compliance status, policy updates, and watch lists; however, some groups of stakeholders utilize infoBoards for collaboration and to upload transportation security information. InfoBoards allow stakeholders to filter alerts and information based on their particular needs, such as their regulated areas of operation or their treaty relationship for foreign government staff.

TSA intends TSA infoBoards to be used primarily by individuals with transportation security responsibilities, such as aircraft operators, airport security coordinators, and international transportation security coordinators. These individuals can voluntarily contact TSA to request access to TSA infoBoards; TSA does not require participation in TSA infoBoards.

Description of Data Collection

TSA will collect two types of information through TSA infoBoards. The collection is voluntary. TSA infoBoards users are not required to provide all information requested, but users who choose to withhold information will not receive the benefits of TSA infoBoards associated with that information collection.

1. *User registration information.* TSA will collect this information to ensure only those members of the transportation community with a relevant interest in transportation security and with an appropriate level of need to access transportation security information can be allowed onto TSA infoBoards. Such registration information will include the user's name, professional contact information, agency/company, job title, employer, airport (optional), citizenship, regulatory interest, and employment verification contact information.

2. User's choice of infoBoards. TSA will collect this information to select TSA infoBoards community(ies) appropriate for the particular user. Users are asked to submit their transportation security interest(s) and desired infoBoard(s) (to assess the user's qualifications and needs together with the user registration information).

Use of Results

TSA will use this information to assess and improve the capabilities of all transportation modes to prevent, prepare for, mitigate against, respond to, and recover from transportation security incidents. A failure to collect this information will limit TSA's ability to effectively enable modal operators to respond to, and quickly recover after, a transportation security incident. Insufficient awareness, prevention, response, and recovery to a transportation security incident will result in increased vulnerability of the U.S. transportation network.

Based on industry population estimates and growth rates, and interest generated amongst the transportation modes prior to TSA infoBoards' release to the public, TSA estimates that there will be approximately 10,000 users within the first three years of the system's use. TSA estimates users will spend approximately 1 hour per TSA infoBoards user inputting the information described above. Given this information, the total annual hour burden for this information collection for all respondents within the first three years of TSA infoBoards' release is estimated to be approximately 30,000 hours. There are no fees to use TSA infoBoards.

Dated: March 10, 2016.

Christina A. Walsh,

TSA Paperwork Reduction Act Officer, Office of Information Technology.

[FR Doc. 2016–05981 Filed 3–16–16; 8:45 am]

BILLING CODE 9110–05–P

DEPARTMENT OF HOMELAND SECURITY

Transportation Security Administration

Extension of Agency Information Collection Activity Under OMB Review: Transportation Security Officer (TSO) Medical Questionnaire

AGENCY: Transportation Security Administration, DHS.

ACTION: 30-Day notice.

SUMMARY: This notice announces that the Transportation Security Administration (TSA) has forwarded the Information Collection Request (ICR), OMB control number 1652–0032, abstracted below to the Office of Management and Budget (OMB) for review and approval of an extension of the currently approved collection under the Paperwork Reduction Act. The ICR describes the nature of the information collection and its expected burden. TSA published a **Federal Register** notice, with a 60-day comment period soliciting comments, of the following collection of information on November 25, 2015, 80 FR 73806. The collection involves using a questionnaire to collect medical information from candidates for the job of Transportation Security Officer (TSO) to ensure their qualifications to perform TSO duties pursuant to sec. 111 of the Aviation and Transportation Security Act (ATSA).

DATES: Send your comments by April 18, 2016. A comment to OMB is most effective if OMB receives it within 30 days of publication.

ADDRESSES: Interested persons are invited to submit written comments on the proposed information collection to the Office of Information and Regulatory Affairs, Office of Management and Budget. Comments should be addressed to Desk Officer, Department of Homeland Security/TSA, and sent via electronic mail to *oira_submission@omb.eop.gov* or faxed to (202) 395–6974.

FOR FURTHER INFORMATION CONTACT: Christina Walsh, TSA Paperwork Reduction Act (PRA) Officer, Office of Information Technology (OIT), TSA–40, Transportation Security Administration, 601 South 12th Street, Arlington, VA 20598–6040; telephone (571) 227–2062; email *TSAPRA@dhs.gov.*

SUPPLEMENTARY INFORMATION:

Comments Invited

In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The ICR documentation is available at *www.reginfo.gov.* Therefore, in preparation for OMB review and approval of the following information collection, TSA is soliciting comments to—

(1) Evaluate whether the proposed information requirement 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;

(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 using appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

Information Collection Requirement

Title: Transportation Security Officer (TSO) Medical Questionnaire.

Type of Request: Extension of a currently approved collection.

OMB Control Number: 1652–0032.

Forms(s): Transportation Security Officer Medical Questionnaire, Release of Information Form, Further Evaluation Instruction Form, Cancer Further Evaluation, Cardiovascular Further Evaluation, Diabetes Further Evaluation, Drug or Alcohol Use Further Evaluation, General Medical Further Evaluation, Hearing Further Evaluation, Hepatitis Further Evaluation, Hernia Further Evaluation, Implantable Device Further Evaluation, Lift Assessment Further Evaluation, Medical Evaluation Form, Mental Health Further Evaluation Form, Orthopedic Further Evaluation, Palmar Sensation Further Evaluation, Respiratory Further Evaluation, Seizure Further Evaluation, Sleep Disorder Further Evaluation, Tuberculosis Further Evaluation, Vision Further Evaluation, and Vital Signs Further Evaluation.

Affected Public: Applicants for employment as a Transportation Security Officer with TSA.

Abstract: TSA currently collects relevant medical information from Transportation Security Officer (TSO) candidates for the purpose of assessing whether the candidates meet the medical qualification standards the agency has established pursuant to the Aviation and Transportation Security Act (ATSA) (49 U.S.C. 44935). TSA collects this information through a medical questionnaire completed by TSO candidates and, in certain cases, further evaluation forms completed by TSO candidates' health care providers. The medical questionnaire and further evaluation forms evaluate a candidate's physical and medical qualifications to be a TSO, including visual and aural acuity, physical coordination, and motor skills.

Total Number of Respondents: 30,094.[1]

Estimated Annual Burden Hours: 16,489 hours.

Dated: March 10, 2016.

Christina Walsh,

TSA Paperwork Reduction Act Officer, Office of Information Technology.

[FR Doc. 2016–05980 Filed 3–16–16; 8:45 am]

BILLING CODE 9110–05–P

[1] The respondents' amount has been adjusted from the reported number in the 60-day notice of 58,032 to correct an error that resulted from double counting. The burden hours have also changed from 16,477 to 16,489 due to the rounding of numbers.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

[Docket No. FR–5913–N–07]

60-Day Notice of Proposed Information Collection for Public Comment Under the Paperwork Reduction Act—Rental Assistance Demonstration (RAD) Documents

AGENCY: Office of the Assistant Secretary for Housing, HUD.

ACTION: Notice.

SUMMARY: The proposed information collection requirement described below will be submitted to the Office of Management and Budget (OMB) for review, as required by the Paperwork Reduction Act. HUD is soliciting public comments on the subject proposal.

The Rental Assistance Demonstration allows Public Housing, Moderate Rehabilitation (Mod Rehab), Rent Supplement (Rent Supp), and Rental Assistance Payment (RAP) properties to convert to long-term project-based Section 8 rental assistance contracts. The documents that are the subject of this notice are those used to process and complete the conversion process for Public Housing, Mod Rehab, Rent Supp, and RAP properties.

DATES: *Comment Due Date:* May 16, 2016.

ADDRESSES: Interested persons are invited to submit comments regarding this notice to the Regulations Division, Office of General Counsel, Department of Housing and Urban Development, 451 7th Street SW., Room 10276, Washington, DC 20410–0500. Communications must refer to the above docket number and title. There are two methods for submitting public comments. All submissions must refer to the above docket number and title.

1. *Submission of Comments by Mail.* Comments may be submitted by mail to the Regulations Division, Office of General Counsel, Department of Housing and Urban Development, 451 7th Street SW., Room 10276, Washington, DC 20410–0500.

2. *Electronic Submission of Comments.* Interested persons may submit comments electronically through the Federal eRulemaking Portal at *www.regulations.gov.* HUD strongly encourages commenters to submit comments electronically. Electronic submission of comments allows the commenter maximum time to prepare and submit a comment, ensures timely receipt by HUD, and enables HUD to make public comments immediately available to the public. Comments submitted electronically through the *www.regulations.gov* Web site can be viewed by other commenters and interested members of the public. Commenters should follow the instructions provided on that site to submit comments electronically.

Note: To receive consideration as public comments, comments must be submitted through one of the two methods specified above. Again, all submissions must refer to the docket number and title of the notice.

No Facsimile Comments. Facsimile (FAX) comments are not acceptable.

FOR FURTHER INFORMATION CONTACT: Marilyn M. Edge, Senior Advisor, Multifamily Housing Office of Recapitalization, Office of Housing, U.S. Department of Housing and Urban Development, 451 7th Street SW., Washington, DC 20410; telephone 202–708–3730, (this is not a toll-free number). Persons with hearing or speech impairments may access this number via TTY by calling the Federal Relay Service at (800) 877–8339.

SUPPLEMENTARY INFORMATION:

I. Evaluation of Proposed Information Collection

HUD will submit the proposed information collection to OMB for review, as required by the Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35, as amended). This notice is soliciting comments from members of the public and affected agencies concerning the proposed collection of information on the following:

(1) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

(2) The accuracy of the agency's estimate of the burden of the proposed collection of information;

(3) Ways to enhance the quality, utility and clarity of information to be collected; and,

(4) Ways to minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated collection techniques or other forms of information technology; *e.g.* permitting electronic submission of responses.

II. Description of Proposed Information Collection

Description of the need for the information and proposed use: RAD allows Public Housing, Mod Rehab, Rent Supp, and RAP properties to convert to long-term project-based Section 8 rental assistance contracts. Participation in the demonstration is voluntary. Participating Public Housing Agencies (PHAs) and Multifamily Owners are required to submit documentation for the purpose of processing and completing the conversion. Through these documents (collectively, the RAD documents), HUD evaluates whether the PHA or owner has met all of the requirements necessary to complete conversion as outlined in PIH Notice 2012–32 Rev 2 Rental Assistance Demonstration—Final Implementation Notice (RAD Notice).

The RAD processing request is made through a Web-based portal. Overall, the RAD documents and information requested through such documents allow HUD to determine which applicants continue to meet the eligibility and conversion requirements Finally, all applicants will be required to sign the appropriate contractual documents to complete conversion and bind both the applicant and HUD, as well as set forth the rights and duties of the applicant and HUD, with respect to the converted project and any payments under that project.

Agency form number(s), if applicable: N/A.

Members of affected public: State, Local or Tribal Government entities, public housing agencies and multifamily owners.

Estimation of the total number of hours needed to prepare the information collection including respondents: The estimated number of respondents is 2,140 annually that have only one response per respondent. The average number for each response to each document in the information collection ranges from 1 hour to 3 hours, for a total burden of 6,640.

Status of the proposed information collection: Renewal of Existing Collection

Authority: Section 3506 of the Paperwork Reduction Act of 1995, 44 U.S.C. Chapter 35, as amended.

The documents that currently comprise the RAD documents can be viewed at the RAD Web site: *www.hud.gov/rad/*. These documents are those that are currently used for RAD processing.

III. Proposed Changes to RAD Documents

HUD proposes to make the following changes:

1. Inclusion of Fair Housing, Civil Rights and Relocation Requirements in RAD Documents

Consistent with HUD's RAD Implementation Notice, PIH–2012–32 (HA), REV–2 (June 15, 2015), HUD expects that RAD transactions will comply with fair housing, civil rights and relocation requirements. HUD has made some changes to the materials published as part of this PRA Notice to assist all participants in RAD transactions in complying with appropriate fair housing, civil rights and relocation requirements, as well as to provide notice to the public. HUD is currently considering further revisions to the materials published as a part of this PRA Notice (including the FHEO Accessibility and Relocation Plan Checklist, the RAD Financing Plan, the RAD Use Agreement, the RAD Conversion Commitment, and the various Housing Assistance Payments Contracts) to ensure all participants in RAD transactions comply with fair housing, civil rights and relocation requirements. The changes under consideration include the following:

(i) Modifications to the various Housing Assistance Payments contracts to ensure appropriate enumeration of existing fair housing and civil rights requirements and clarification of such requirements;

(ii) Revision and expansion of the FHEO Accessibility and Relocation Plan Checklist to more comprehensively address all federal fair housing and civil rights reviews identified in the RAD Notice (including those derived from the Fair Housing Act, Title VI of the Civil Rights Act of 1964, HUD's Equal Access Rule, and other authorities) and resident relocation compliance issues;

(iii) Revisions to the RAD Conversion Commitment to add certifications and representations to ensure compliance with fair housing and civil rights requirements until and after the RAD closing.

2. Clarification of Davis-Bacon Standards

HUD is reviewing the Davis-Bacon Standards in the RCC and HAP Contracts to determine whether they are sufficiently clear or if further clarification is needed.

HUD encourages all interested persons to submit comments regarding the information collection requirements presented in this proposal.

Dated: March 10, 2016.

Genger Charles,

General Deputy Assistant, Secretary for Housing.

[FR Doc. 2016–05954 Filed 3–16–16; 8:45 am]

BILLING CODE 4210–67–P

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

[Docket No. FR–5871–N–04]

Notice of Regulatory Waiver Requests Granted for the Fourth Quarter of Calendar Year 2015

AGENCY: Office of the General Counsel, HUD.

ACTION: Notice.

SUMMARY: Section 106 of the Department of Housing and Urban Development Reform Act of 1989 (the HUD Reform Act) requires HUD to publish quarterly **Federal Register** notices of all regulatory waivers that HUD has approved. Each notice covers the quarterly period since the previous **Federal Register** notice. The purpose of this notice is to comply with the requirements of section 106 of the HUD Reform Act. This notice contains a list of regulatory waivers granted by HUD during the period beginning on October 1, 2015, and ending on December 31, 2015.

FOR FURTHER INFORMATION CONTACT: For general information about this notice, contact Camille E. Acevedo, Associate General Counsel for Legislation and Regulations, Department of Housing and Urban Development, 451 7th Street SW., Room 10282, Washington, DC 20410–0500, telephone 202–708–1793 (this is not a toll-free number). Persons with hearing- or speech-impairments may access this number through TTY by calling the toll-free Federal Relay Service at 800–877–8339.

For information concerning a particular waiver that was granted and for which public notice is provided in this document, contact the person whose name and address follow the description of the waiver granted in the accompanying list of waivers that have been granted in the fourth quarter of calendar year 2015.

SUPPLEMENTARY INFORMATION: Section 106 of the HUD Reform Act added a new section 7(q) to the Department of Housing and Urban Development Act (42 U.S.C. 3535(q)), which provides that:

1. Any waiver of a regulation must be in writing and must specify the grounds for approving the waiver;

2. Authority to approve a waiver of a regulation may be delegated by the

Secretary only to an individual of Assistant Secretary or equivalent rank, and the person to whom authority to waive is delegated must also have authority to issue the particular regulation to be waived;

3. Not less than quarterly, the Secretary must notify the public of all waivers of regulations that HUD has approved, by publishing a notice in the **Federal Register**. These notices (each covering the period since the most recent previous notification) shall:

a. Identify the project, activity, or undertaking involved;

b. Describe the nature of the provision waived and the designation of the provision;

c. Indicate the name and title of the person who granted the waiver request;

d. Describe briefly the grounds for approval of the request; and

e. State how additional information about a particular waiver may be obtained.

Section 106 of the HUD Reform Act also contains requirements applicable to waivers of HUD handbook provisions that are not relevant to the purpose of this notice.

This notice follows procedures provided in HUD's Statement of Policy on Waiver of Regulations and Directives issued on April 22, 1991 (56 FR 16337). In accordance with those procedures and with the requirements of section 106 of the HUD Reform Act, waivers of regulations are granted by the Assistant Secretary with jurisdiction over the regulations for which a waiver was requested. In those cases in which a General Deputy Assistant Secretary granted the waiver, the General Deputy Assistant Secretary was serving in the absence of the Assistant Secretary in accordance with the office's Order of Succession.

This notice covers waivers of regulations granted by HUD from July 1, 2015 through September 30, 2015. For ease of reference, the waivers granted by HUD are listed by HUD program office (for example, the Office of Community Planning and Development, the Office of Housing, and the Office of Public and Indian Housing, etc.). Within each program office grouping, the waivers are listed sequentially by the regulatory section of title 24 of the Code of Federal Regulations (CFR) that is being waived. For example, a waiver of a provision in 24 CFR part 58 would be listed before a waiver of a provision in 24 CFR part 570.

Where more than one regulatory provision is involved in the grant of a particular waiver request, the action is listed under the section number of the first regulatory requirement that appears in 24 CFR and that is being waived. For example, a waiver of both § 58.73 and § 58.74 would appear sequentially in the listing under § 58.73.

Waiver of regulations that involve the same initial regulatory citation are in time sequence beginning with the earliest-dated regulatory waiver.

Should HUD receive additional information about waivers granted during the period covered by this report (the fourth quarter of calendar year 2015) before the next report is published (the first quarter of calendar year 2016), HUD will include any additional waivers granted for the fourth quarter in the next report.

Accordingly, information about approved waiver requests pertaining to HUD regulations is provided in the Appendix that follows this notice.

Dated: March 11, 2016.

Helen R. Kanovsky,

General Counsel.

Appendix

Listing of Waivers of Regulatory Requirements Granted by Offices of the Department of Housing and Urban Development October 1, 2015 Through December 31, 2015

Note to Reader: More information about the granting of these waivers, including a copy of the waiver request and approval, may be obtained by contacting the person whose name is listed as the contact person directly after each set of regulatory waivers granted.

The regulatory waivers granted appear in the following order:

I. Regulatory waivers granted by the Office of Community Planning and Development.

II. Regulatory waivers granted by the Office of Housing.

III. Regulatory waivers granted by the Office of Public and Indian Housing.

I. Regulatory Waivers Granted by the Office of Community Planning and Development

For further information about the following regulatory waivers, please see the name of the contact person that immediately follows the description of the waiver granted.

• Regulation: 24 CFR 92.251(a)(1).

Project/Activity: The City of East Cleveland, OH requested a waiver of 24 CFR 92.251(a)(1) to allow the City to consider a homeowner rehabilitation activity that cannot be brought into compliance with local rehabilitation standards.

Nature of Requirement: The HOME Investment Partnerships Program (HOME) regulation at 24 CFR 92.251(a)(1) requires all housing rehabilitated with HOME funds to meet all applicable local codes and rehabilitation standards at the time of project completion.

Granted By: Harriet Tregoning, Principal Deputy Assistant Secretary for Community Planning and Development.

Date Granted: October 21, 2015.

Reason Waived: The City expended $83,749.77 of the $91,101 HOME funds committed to a homeowner rehabilitation project in 2004, but the homeowner refused to permit the City to complete the rehabilitation work necessary to bring the property fully into compliance with local rehabilitation standards. The City made exhaustive efforts to complete the project, but was unable to obtain the homeowner's permission to complete the rehabilitation work. HUD waived the property standard because the City could not meet the property standards despite its due diligence.

Contact: Virginia Sardone, Director, Office of Affordable Housing Programs, Office of Community Planning and Development, Department of Housing and Urban Development, 451 7h Street SW., Room 7164, Washington, DC 20410, telephone (202) 708–2684.

• Regulation: 24 CFR 92.214(a)(6).

Project/Activity: Prince George's County, MD requested a waiver of 24 CFR 92.214(a)(6) in order to invest $850,000 of HOME funds into Rainer Manor Phase II, a 57-unit affordable housing project for low-income seniors that had been previously assisted with HOME funds during the period of affordability.

Nature of Requirement: The regulation at 24 CFR 92.214(a)(6) prohibits, except for one year after project completion, HOME assistance from being provided to a project that was previously assisted with HOME funds during the period of affordability established by the participating jurisdiction in the written agreement required by 24 CFR 92.504.

Granted By: Harriet Tregoning, Principal Deputy Assistant Secretary for Community Planning and Development.

Date Granted: November 20, 2015.

Reason Waived: Rainer Manor Phase II will be developed on a parcel of land subdivided and purchased from the original Rainer Manor project (Rainier Manor I), a project previously assisted with $2,325,000 of HOME funds. HUD granted a waiver to invest additional HOME funds because of the shortage of affordable housing options for low-income seniors in the County. The additional 6 HOME units will be subject to a 40 year period of affordability, and part of the land sale proceeds will be used to supplement the replacement reserves for Rainier Manor I.

Contact: Virginia Sardone, Director, Office of Affordable Housing Programs, Office of Community Planning and Development, Department of Housing and Urban Development, 451 7th Street SW., Room 7164, Washington, DC 20410, telephone (202) 708–2684.

• Regulation: 24 CFR 92.252(j) and 24 CFR 92.504(a).

Project/Activity: In 1996, the Commonwealth of Kentucky designated all 32 units of the Park Place Townhomes in Prestonsburg as HOME-assisted with a 40 year period of affordability period, which designation far exceeded the minimum requirements established in the HOME regulations. As a result of a weak local affordable housing market, Park Place Townhomes has experienced negative cash flow, low rental income, and high debt collection losses. The Commonwealth of

Kentucky requested a waiver of 24 CFR 92.252(j) and 24 CFR 92.504(a) in order to reduce the number of HOME units as units become vacant, and the period of affordability to 20 years, the minimum that the HOME regulations require. This action will help the Commonwealth to recapitalize and rehabilitate the project in the near future so that it can become financially viable.

Nature of Requirement: The regulation at 24 CFR 92.252(j) requires the participating jurisdiction to designate the HOME-assisted units in the written agreement with the owner and maintain that number of units through the period of affordability. The regulation at 24 CFR 92.504(a) requires the participating jurisdiction to ensure that all HOME funds are used in accordance with HOME program requirements and the written agreement.

Granted By: Harriet Tregoning, Principal Deputy Assistance Secretary for Community Planning and Development.

Date Granted: December 9, 2015.

Reason Waived: HUD granted the request because of the highly unusual market conditions in the area. There is an oversupply of affordable rental units resulting in a high vacancy rate for HOME-assisted units in the project. The vacancy rate and resulting operating deficit will lead to default and foreclosure in the near term. Reducing the number of HOME units and the period of affordability to what the HOME regulations require, will help the Commonwealth to recapitalize and rehabilitate the project in the near future so that it can become financially viable.

Contact: Virginia Sardone, Director, Office of Affordable Housing Programs, Office of Community Planning and Development, Department of Housing and Urban Development, 451 7th Street SW., Room 7164, Washington, DC 20410, telephone (202) 708–2684.

II. Regulatory Waivers Granted by the Office of Housing

For further information about the following regulatory waivers, please see the name of the contact person that immediately follows the description of the waiver granted.

• Regulation: 24 CFR 200.73(c).

Project/Activity: Glynn Courtyard Apartments, Bath, Maine, Project Number: 022–44007.

Nature of Requirement: HUD's regulation at 24 CFR 200.73(c) requires, in relevant part that ''not less than five rental dwelling units [of an FHA insured multifamily housing project] shall be on one site.''

Granted by: Edward L. Golding, Principal Deputy Assistant Secretary for Housing.

Date Granted: December 9, 2015.

Reason Waived: The project has been professionally managed as one project since inception. The project has one operating budget and the physical improvements have been ongoing. This, coupled with the project's name change and improved reputation, has contributed to a steady average occupancy of 98 percent. Demand for affordable housing and rental housing in general in Bath, Maine is high. There have been no building permits for multifamily rental units issued in the last ten years. The owner has elected to maintain the project as affordable by agreeing to a Rental Use Agreement, dedicating 20 percent of the units for households at or below 50 percent of median income for the life of the 223(f) loan.

Contact: Theodore K. Toon, Director, FHA Multifamily Production, Office of Multifamily Housing Programs, Office of Production, Office of Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 6134, Washington, DC 20410, telephone (202) 402–8386.

• Regulation: 24 CFR 219.220(b).

Project/Activity: St. John's Towers, FHA Project Number 052–SH007, Havre de Grace, MD. St. John's Towers, Incorporated (Owner) seeks approval to defer repayment of the Flexible Subsidy Operating Assistance Loans on the subject project.

Nature of Requirement: HUD's regulation at 24 CFR 219.220(b) (1995), which governs the repayment of operating assistance provided under the Flexible Subsidy Program for Troubled Properties, states ''Assistance that has been paid to a project owner under this subpart must be repaid at the earlier of the expiration of the term of the mortgage, termination of mortgage insurance, prepayment of the mortgage, or a sale of the project.''

Granted by: Edward L. Golding, Principal Deputy Assistant Secretary for Housing.

Date Granted: October 22, 2015.

Reason Waived: The owner requested and was granted waiver of the requirement to repay the Flexible Subsidy Operating Assistance Loan in full when it became due. Deferring the loan payment will preserve this affordable housing resource for an additional 35 years through the execution and recordation of a Rental Use Agreement.

Contact: Cindy Bridges, Account Executive, Office of Housing, Department of Housing and Urban Development, 451 7th Street SW., Washington, DC 20410, telephone (202) 402–2603.

• Regulation: 24 CFR 219.220(b).

Project/Activity: Stephen Smith Towers, FHA Project Number 034–SH015, Philadelphia, PA. Stephen Smith Towers, Incorporated (Owner) seeks approval to defer repayment of the Flexible Subsidy Operating Assistance Loan on the project.

Nature of Requirement: HUD's regulation at 24 CFR 219.220(b) (1995), which governs the repayment of operating assistance provided under the Flexible Subsidy Program for Troubled Properties, states ''Assistance that has been paid to a project owner under this subpart must be repaid at the earlier of the expiration of the term of the mortgage, termination of mortgage insurance, prepayment of the mortgage, or a sale of the project.''

Granted by: Edward L. Golding, Principal Deputy Assistant Secretary for Housing.

Date Granted: November 3, 2015.

Reason Waived: The owner requested and was granted waiver of the requirement to repay the Flexible Subsidy Operating Assistance Loan in full when it is due. Deferring the loan payment will preserve this affordable housing resource for an additional 35 years through the execution and recordation of a Rental Use Agreement.

Contact: Cindy Bridges, Account Executive, Office of Housing, Department of Housing and Urban Development, 451 Seventh Street SW., Room 6168, Washington, DC 20410, telephone (202) 402–2603.

• Regulation: 24 CFR 219.220(b).

Project/Activity: Miles City Eagles Manor, FHA Project Number 093–44805, Miles City, MT. Miles City Eagles Manor (Owner) seeks approval to defer repayment of the Flexible Subsidy Operating Assistance Loan on the project.

Nature of Requirement: HUD's regulation at 24 CFR 219.220(b) (1995), which governs the repayment of operating assistance provided under the Flexible Subsidy Program for Troubled Properties, states ''Assistance that has been paid to a project owner under this subpart must be repaid at the earlier of the expiration of the term of the mortgage, termination of mortgage insurance, prepayment of the mortgage, or a sale of the project.''

Granted by: Edward L. Golding, Principal Deputy Assistant Secretary for Housing.

Date Granted: November 20, 2015.

Reason Waived: The owner requested and was granted waiver of the requirement to repay the Flexible Subsidy Operating Assistance Loan in full when it is due. Deferring the loan payment will preserve this affordable housing resource for an additional 20 years through the execution and recordation of a Rental Use Agreement.

Contact: Marilyn Carlson, Account Executive, Office of Housing, Department of Housing and Urban Development, 451 Seventh Street SW., Room 6156, Washington, DC 20410, telephone (202) 402–2602.

• Regulation: 24 CFR 266.200(b)(2).

Project/Activity: Federal Financing Bank (FFB) Risk Sharing Initiative, Substantial Rehabilitation Defined. Colorado Housing and Finance Authority (CHFA).

Nature of Requirement: HUD's regulation at 24 CFR 266.200(b)(2) defines substantial rehabilitation as any combination of covered work to the existing facilities of a project that aggregates to at least 15 percent of project's value after the rehabilitation and that results in material improvement of the project's economic life, livability, marketability, and profitability. Covered work includes replacement, alteration and/or modernization of building spaces, long-lived building or mechanical system components, or project facilities. The following changes apply to both Level I and II Housing Finance Agencies Definition of Substantial Rehabilitation (S/R) revised as: Work that exceeds either: (a) $15,000 times the high cost factor ''as adjusted by HUD for inflation'', or (b) replacement of two or more building systems. 'Replacement' is when cost of replacement work exceeds 50 percent of the cost of replacing the entire system. The base limit is revised to $15,000 per unit for 2015, and will be adjusted annually based on the percentage change published by the Consumer Financial Protection Bureau, or other inflation cost index published by HUD. This is consistent with proposed changes in MAP Guide.

Granted by: Edward L. Golding, Principal Deputy Assistant Secretary for Housing.

Date Granted: October 23, 2015.

Reason Waived: The waiver was necessary to effectuate the Federal Financing Bank (FFB) Risk Sharing Initiative (Initiative)

between HUD and the Treasury Department/ FFB announced in Fiscal Year 2014. The waiver is consistent with changes that HUD's Office of Multifamily Housing is seeking now to the regulation and as previously approved in March 2015 for the first 11 HFAs participating in the Initiative. Under this Initiative, FFB provides capital to participating Housing Finance Agencies (HFAs) to make multifamily loans insured under the FHA Multifamily Risk Sharing Program.

Contact: Theodore K. Toon, Director, FHA Multifamily Production, Office of Multifamily Housing Programs, Office of Production, Office of Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 6134, Washington, DC 20410, telephone (202) 402–8386.

• Regulation: 24 CFR 266.200(b)(2).

Project/Activity: Federal Financing Bank (FFB) Risk Sharing Initiative, Substantial Rehabilitation Defined. New Hampshire Housing Finance Agency (NHHFA).

Nature of Requirement: HUD's regulation at 24 CFR 266.200(b)(2) defines substantial rehabilitation as any combination of covered work to the existing facilities of a project that aggregates to at least 15 percent of project's value after the rehabilitation and that results in material improvement of the project's economic life, livability, marketability, and profitability. Covered work includes replacement, alteration and/or modernization of building spaces, long-lived building or mechanical system components, or project facilities. The following changes apply to both Level I and II Housing Finance Agencies Definition of Substantial Rehabilitation (S/R) revised as: Work that exceeds either: (a) $15,000 times the high cost factor ''as adjusted by HUD for inflation'', or (b) replacement of two or more building systems. 'Replacement' is when cost of replacement work exceeds 50 percent of the cost of replacing the entire system. The base limit is revised to $15,000 per unit for 2015, and will be adjusted annually based on the percentage change published by the Consumer Financial Protection Bureau, or other inflation cost index published by HUD. This is consistent with proposed changes in MAP Guide.

Granted by: Edward L. Golding, Principal Deputy Assistant Secretary for Housing.

Date Granted: October 23, 2015.

Reason Waived: The waiver was necessary to effectuate the Federal Financing Bank (FFB) Risk Sharing Initiative (Initiative) between HUD and the Treasury Department/ FFB announced in Fiscal Year 2014. The waivers are consistent with changes that HUD's Office of Multifamily Housing is seeking now to the regulation and as previously approved in March 2015 for the first 11 HFAs participating in the Initiative. Under this Initiative, FFB provides capital to participating Housing Finance Agencies (HFAs) to make multifamily loans insured under the FHA Multifamily Risk Sharing Program.

Contact: Theodore K. Toon, Director, FHA Multifamily Production, Office of Multifamily Housing Programs, Office of Production, Office of Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 6134, Washington, DC 20410, telephone (202) 402–8386.

• Regulation: 24 CFR 266.200(b)(2).

Project/Activity: Federal Financing Bank (FFB) Risk Sharing Initiative, Substantial Rehabilitation Defined. Vermont Housing Finance Agency (VHFA).

Nature of Requirement: HUD's regulation at 24 CFR 266.200(b)(2) defines substantial rehabilitation as any combination of covered work to the existing facilities of a project that aggregates to at least 15 percent of project's value after the rehabilitation and that results in material improvement of the project's economic life, livability, marketability, and profitability. Covered work includes replacement, alteration and/or modernization of building spaces, long-lived building or mechanical system components, or project facilities. The following changes apply to both Level I and II Housing Finance Agencies Definition of Substantial Rehabilitation (S/R) revised as: Work that exceeds either: (a) $15,000 times the high cost factor ''as adjusted by HUD for inflation'', or (b) replacement of two or more building systems. 'Replacement' is when cost of replacement work exceeds 50 percent of the cost of replacing the entire system. The base limit is revised to $15,000 per unit for 2015, and will be adjusted annually based on the percentage change published by the Consumer Financial Protection Bureau, or other inflation cost index published by HUD. This is consistent with proposed changes in MAP Guide.

Granted by: Edward L. Golding, Principal Deputy Assistant Secretary for Housing.

Date Granted: October 23, 2015.

Reason Waived: The waiver was necessary to effectuate the Federal Financing Bank (FFB) Risk Sharing Initiative (Initiative) between HUD and the Treasury Department/ FFB announced in Fiscal Year 2014. The waiver is consistent with changes that HUD's Office of Multifamily Housing is seeking now to the regulation and as previously approved in March 2015 for the first 11 HFAs participating in the Initiative. Under this Initiative, FFB provides capital to participating Housing Finance Agencies (HFAs) to make multifamily loans insured under the FHA Multifamily Risk Sharing Program.

Contact: Theodore K. Toon, Director, FHA Multifamily Production, Office of Multifamily Housing Programs, Office of Production, Office of Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 6134, Washington, DC 20410, telephone (202) 402–8386.

• Regulation: 24 CFR 266.200(c)(2).

Project/Activity: Federal Financing Bank (FFB) Risk Sharing Initiative, Equity Take-Outs. New Hampshire Housing Finance Authority (NHHFA).

Nature of Requirement: HUD's regulation at 24 CFR 266.200(c)(2) allows existing projects to be refinanced if certain criteria are met. If the property is subject to an HFA financed loan to be refinanced and such refinancing will result in the preservation of affordable housing, refinancing of these properties is permissible if project occupancy is not less than 93 percent (to include consideration of rent in arrears), based on the average occupancy in the project over the most recent 12 months, and the mortgage does not exceed an amount supportable by the lower of the unit rents being collected under the rental assistance agreement or the unit rents being collected at unassisted projects in the market area that are similar in amenities and location to the project for which insurance is being requested. The HUD-insured mortgage may not exceed the sum of the existing indebtedness, cost of refinancing, the cost of repairs and reasonable transaction costs as determined by the Commissioner. If a loan to be refinanced has been in default within the 12 months prior to application for refinancing, the HFA must assume not less than 50 percent of the risk. Equity take-outs for existing projects (refinance transactions) permit the insured mortgage to exceed the sum of the total cost of acquisition, cost of financing, cost of repairs, and reasonable transaction costs or ''equity take-outs'' in refinances of HFA-financed projects and those outside of HFA's portfolio if the result is preservation with the following conditions: (1) Occupancy is no less than 93 percent for previous 12 months; (2) no defaults in the last 12 months of the HFA loan to be refinanced; (3) a 20 year affordable housing deed restriction placed on title that conforms to the 542(c) statutory definition; (4) a Capital Needs Assessment (CNA) must be performed and funds escrowed for all necessary repairs, and reserves funded for future capital needs; and (5) for projects subsidized by Section 8 Housing Assistance Payment (HAP) contracts, the Owner agrees to renew HAP contract(s) for 20 year term, (subject to appropriations and statutory authorization, etc.), and existing and post-refinance HAP residual receipts are set aside to be used to reduce future HAP payments.

Granted by: Edward L. Golding, Principal Deputy Assistant Secretary for Housing.

Date Granted: October 23, 2015.

Reason Waived: The waiver was necessary to effectuate the Federal Financing Bank (FFB) Risk Sharing Initiative (Initiative) between HUD and the Treasury Department/ FFB announced in Fiscal Year 2014. The waiver is consistent with changes that HUD's Office of Multifamily Housing is seeking now to the regulation and as previously approved in March 2015 for the first 11 HFAs participating in the Initiative. Under this Initiative, FFB provides capital to participating Housing Finance Agencies (HFAs) to make multifamily loans insured under the FHA Multifamily Risk Sharing Program.

Contact: Theodore K. Toon, Director, FHA Multifamily Production, Office of Multifamily Housing Programs, Office of Production, Office of Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 634, Washington, DC 20410, telephone (202) 402–8386.

• Regulation: 24 CFR 891.165.

Project/Activity: Montclair 4, Montclair, CA, Project Number: 143–HD018/CA43–Q091–001.

Nature of Requirement: Section 891.165 provides that the duration of the fund reservation of the capital advance is 18-months from the date of issuance with limited exceptions up to 36 months, as approved by HUD on a case-by-case basis.

Granted By: Edward L. Golding, Principal Deputy Assistant Secretary for Housing.

Date Granted: October 22, 2015.

Reason Waived: Additional time was needed for the office to complete the review of the closing documents and for the Office of General Counsel to schedule the closing for this mixed-financed project.

Contact: Alicia Anderson, Branch Chief, Grants and New Funding, Office of Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 6138, Washington, DC 20410, telephone (202)402–5787.

• Regulation: 24 CFR 891.165.

Project/Activity: Ludlow Commons, Yonkers, NY, Project Number: 012–EE383/NY36–S101–007.

Nature of Requirement: Section 891.165 provides that the duration of the fund reservation of the capital advance is 18-months from the date of issuance with limited exceptions up to 36 months, as approved by HUD on a case-by-case basis.

Granted By: Edward L. Golding, Principal Deputy Assistant Secretary for Housing.

Date Granted: October 22, 2015.

Reason Waived: Additional time was needed for the office to process the firm commitment package.

Contact: Alicia Anderson, Branch Chief, Grants and New Funding, Office of Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 6138, Washington, DC 20410, telephone (202)402–5787.

• Regulation: 24 CFR 891.165.

Project/Activity: Sagetree Terrace, Houston, TX, Project Number: 114–EE149/TX24–S101–003.

Nature of Requirement: Section 891.165 provides that the duration of the fund reservation of the capital advance is 18-months from the date of issuance with limited exceptions up to 36 months, as approved by HUD on a case-by-case basis.

Granted By: Edward L. Golding, Principal Deputy Assistant Secretary for Housing.

Date Granted: November 13, 2015.

Reason Waived: Additional time was needed for the office to process the firm commitment package.

Contact: Alicia Anderson, Branch Chief, Grants and New Funding, Department of Housing and Urban Development, 4517th Street SW., Room 6138, Washington, DC 20410, telephone (202)402–5787.

• Regulation: 24 CFR 891.165.

Project/Activity: Golf View Apartments, Miami, FL, Project Number: 066–EE121/FL29–S101–008.

Nature of Requirement: Section 891.165 provides that the duration of the fund reservation of the capital advance is 18-months from the date of issuance with limited exceptions up to 36 months, as approved by HUD on a case-by-case basis.

Granted By: Edward L. Golding, Principal Deputy Assistant Secretary for Housing.

Date Granted: November 13, 2015.

Reason Waived: Additional time was needed for the office to process the firm commitment package.

Contact: Alicia Anderson, Branch Chief, Grants and New Funding, Office of Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 6138, Washington, DC 20410, telephone (202)402–5787.

• Regulation: 24 CFR 891.165.

Project/Activity: Middletown Homes 2009, Middletown, NJ, Project Number: 031–HD168/NJ39–Q101–003

Nature of Requirement: Section 891.165 provides that the duration of the fund reservation of the capital advance is 18-months from the date of issuance with limited exceptions up to 36 months, as approved by HUD on a case-by-case basis.

Granted By: Edward L. Golding, Principal Deputy Assistant Secretary for Housing.

Date Granted: December 9, 2015.

Reason Waived: Additional time was needed for unforeseen delays due to permits and to initially close the project.

Contact: Alicia Anderson, Branch Chief, Grants and New Funding, Office of Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 6138, Washington, DC 20410, telephone (202)402–5787.

• Regulation: 24 CFR 891.100(d).

Project/Activity: Oscar Eason Senior Elderly Apartments, San Antonio, TX, Project Number: 115–EE097/TX59–S101–003.

Nature of Requirement: Section 891.100(d) prohibits amendment of the amount of the approved capital advance funds prior to closing.

Granted By: Edward L. Golding, Principal Deputy Assistant Secretary for Housing.

Date Granted: December 16, 2015.

Reason Waived: The project is economically designed and comparable in cost to similar projects in the area, and the sponsor/owner exhausted all efforts to obtain additional funding from other sources.

Contact: Alicia Anderson, Branch Chief, Grants and New Funding, Office of Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 6138, Washington, DC 20410, telephone (202)402–5787.

• Regulation: Section (IV)(E) of the FY 2014—FY 2015 Comprehensive Housing Counseling Program (HCP) Notice of Funding Availability (NOFA).

Project/Activity: This waiver is applicable to all grant funds provided under the FY 2014—FY 2015 Comprehensive HCP NOFA during Fiscal Year 2015 for use October 1, 2014 through September 30, 2016.

Nature of Requirement: Section (IV)(E) of the FY 2014—FY 2015 Comprehensive HCP NOFA would prohibit HUD HCP participants from using HUD HCP grant funds under the NOFA to reimburse housing counseling activity costs for any counseling recipient for which the program participant also received a National Foreclosure Mitigation Counseling (NFMC) Program reimbursement.

Granted By: Edward L. Golding, Principal Deputy Assistant Secretary for Housing.

Date Granted: September 23, 2015.

Reason Waived: HUD found good cause to waive Section (IV)(E) and enable program participants to use FY 2015 HUD HCP grant funds in conjunction with NFMC grant funds because housing counseling industry conditions have changed since the restriction was originally implemented in FY 2012. Funding for the NFMC Program has decreased in recent years; however, housing counseling agencies still continue to provide counseling services in foreclosure prevention for clients who face long-term, complex foreclosure cases. Fixed-price reimbursements provided to counseling agencies under the NFMC Program are insufficient to cover the counseling costs, and the funding restriction had the unintended consequence of creating a hardship for housing counseling agencies and their clients who are involved in complex foreclosure cases.

Contact: Brian Siebenlist, Director, Office of Policy and Grant Administration, Office of Housing Counseling, Department of Housing and Urban Development, 451 7th Street SW., Room 7282, Washington, DC 20410, telephone (202) 402–4548.

III. Regulatory Waivers Granted by the Office of Public and Indian Housing

For further information about the following regulatory waivers, please see the name of the contact person that immediately follows the description of the waiver granted.

• Regulation: 24 CFR 905.314(l)(1).

Project/Activity: The Madison, Wisconsin, Community Development Authority (MCDA).

Nature of Requirement: HUD's regulation at 24 CFR 905.314(l)(1) and section 9(g)(1) of the United States Housing Act of 1937 (1937 Act) provides that Large PHAs may use no more than 20 percent of their annual Capital Fund grant for activities that are eligible under the Operating Fund. However, the Consolidated and Further Continuing Appropriations Act, 2015 (Pub. L. 113–235) permits any PHA to use up to 25 percent of annual Capital Fund grants to for Operating Fund activities and to also permit waivers of the statutory limitation in section 9(e)(1)(C) of the 1937 Act and allow Capital Funds to be used for above baseline anticrime and antidrug activities.

Granted by: Lourdes Castro Ramirez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: December 11, 2015.

Reason Waiver: The waiver was granted to allow MCDA to use Capital Funds in excess of 20 percent of its 2015 Capital Fund grant to fund above baseline anticrime and antidrug activities, Operating Fund-eligible activities, based on the authority permitted by Public Law 113–235.

Contact: Dominique Blom, Deputy Assistant Secretary for the Office of Public Housing Investments, Office of Public and Indian Housing, 451 7th Street SW., Washington, DC 20140, Room 4130, telephone (202) 402–4181.

• Regulation: 24 CFR 5.801(c)(1) and 24 CFR 5.801(d)(1).

Project/Activity: Harrison County Housing Authority.

Nature of Requirement: The regulation establishes certain reporting compliance dates. The audited financial statements are required to be submitted to the Real Estate Assessment Center (REAC) no later than nine months after the housing authority's (HA) fiscal year end (FYE), in accordance with the Single Audit Act and OMB Circular A–133.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: October 16, 2015.

Reason Waived: The housing authority is a Section 8 only and nonprofit entity

requesting additional time to submit its audited financial data for fiscal year end December 31, 2014. The agency is under investigation by HUD's Office of Inspector General (OIG), in addition to an assessment of operations conducted by the Departmental Enforcement Center (DEC). The additional time would allow the completion of the DEC assessment and provide the necessary time needed for the auditor to complete the agency's audited financial data report.

Contact: Dee Ann R. Walker, Acting Program Manager, NASS, Real Estate Assessment Center, Office of Public and Indian Housing, Department of Housing and Urban Development, 550 12th Street SW., Suite 100, Washington, DC 20410, telephone (202) 475–7908.

• Regulation: 24 CFR 5.801(c)(1) and 24 CFR 5.801(d)(1).

Project/Activity: Texarkana Housing Authority.

Nature of Requirement: The regulation establishes certain reporting compliance dates. The audited financial statements are required to be submitted to the Real Estate Assessment Center (REAC) no later than nine months after the housing authority's (HA) fiscal year end (FYE), in accordance with the Single Audit Act and OMB Circular A–133.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: October 15, 2015.

Reason Waived: The housing authority is requesting an additional 31 days to submit its audited financial data for its fiscal year end of December 31, 2014. The agency has experienced constant change in Executive Directors and Financial Directors leading to investigations by HUD's Office of Inspector General (OIG), in addition to investigations conducted by the Federal Bureau of Investigations (FBI). The additional time would allow for the necessary time needed by the auditor to complete the agency's audited financial data report.

Contact: Dee Ann R. Walker, Acting Program Manager, NASS, Real Estate Assessment Center, Office of Public and Indian Housing, Department of Housing and Urban Development, 550 12th Street SW., Suite 100, Washington, DC 20410, telephone (202) 475–7908.

• Regulation: 24 CFR 982.503(a)(3).

Project/Activity: Housing Authority of the County of Los Angeles (HACoLA), Alhambra, CA.

Nature of Requirement: HUD's regulation at 24 CFR 982.503(a)(3) states that the public housing agency's (PHA) voucher payment standard schedule shall establish a single payment standard amount for each unit size. For each unit size, the PHA may establish a single payment standard amount for the whole fair market rent (FMR) area, or may establish a separate payment standard amount for each designated part of the FMR area.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: November 16, 2015.

Reason Waived: For HACoLA, HUD–VASH families take considerably longer to locate affordable units than non HUD–VASH families. This is due in part to extremely low vacancy rates and the high cost of housing, which particularly affect VASH families. The waiver will allow veterans to be more successful in locating suitable housing.

Contact: Becky Primeaux, Housing Voucher Management and Operations Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 982.503(a)(3).

Project/Activity: San Diego Housing Commission (SDHC), San Diego, CA.

Nature of Requirement: HUD's regulation at 24 CFR 982.503(a)(3) states that the public housing agency's (PHA) voucher payment standard schedule shall establish a single payment standard amount for each unit size. For each unit size, the PHA may establish a single payment standard amount for the whole fair market rent (FMR) area, or may establish a separate payment standard amount for each designated part of the FMR area.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: December 4, 2015.

Reason Waived: For SDHC, HUD–VASH families face current barriers to housing homeless veterans at the current payment standards due to: (1) A competitive local housing market with a shortage of affordable rental units; (2) landlords able to charge higher rents to market rate tenants; (3) landlord reluctance to rent to homeless individuals due to poor credit history; and (4) a rental market with low vacancy rates and high rent burden.

Contact: Becky Primeaux, Housing Voucher Management and Operations Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 982.503(a)(3).

Project/Activity: Housing Authority of the County of Santa Clara (HACSC), San Jose, CA.

Nature of Requirement: HUD's regulation at 24 CFR 982.503(a)(3) states that the public housing agency's (PHA) voucher payment standard schedule shall establish a single payment standard amount for each unit size. For each unit size, the PHA may establish a single payment standard amount for the whole fair market rent (FMR) area, or may establish a separate payment standard amount for each designated part of the FMR area.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: December 22, 2015.

Reason Waived: Santa Clara County has one of the tightest rental markets in the nation. According to HUD data, the average vacancy rate for the last four quarters ending June 30, 2015, was 0.6 percent. HUD data also reflects that as of September 30, 2015, the leasing rate for HACSC's HUD–VASH participants was only 55 percent (of the 853 HUD–VASH vouchers awarded, only 468 were leased). In addition, the success rate for HUD–VASH voucher holders is only 29 percent for vouchers that are issued with extensions on the term of the voucher for up to a year. Because HUD–VASH families are traditionally more difficult to house and affordable housing is in short supply, HACSC wished to establish a different payment standard schedule at 120 percent of the 2015 FMRs for participants in its HUD-Veterans Affairs Supportive Housing (HUD–VASH) program.

Contact: Becky Primeaux, Housing Voucher Management and Operations Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 982.503(c)(3) through (5).

Project/Activity: Housing Authority of the County of Alameda (HACA), Hayward, CA.

Nature of Requirement: HUD's regulations at 24 CFR 982.503(c)(3) and (5) allow the Secretary to approve an exception payment standard over 120 percent of the fair market rents (FMR) with justification and for no more than 50 percent of the population of the FMR area.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: December 11, 2015.

Reason Waived: The proposed 2016 FMRs for HACA's jurisdiction had dropped and its rental survey had expired. Since it had provided comments to the final rule on the proposed FMRs and committed to another rental survey, these regulations were temporarily waived until March 1, 2015.

Contact: Becky Primeaux, Housing Voucher Management and Operations Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 982.503(c)(3) through (5).

Project/Activity: Berkeley Housing Authority (BHA), Berkeley, CA.

Nature of Requirement: HUD's regulations at 24 CFR 982.503(c)(3) and (5) allow the Secretary to approve an exception payment standard over 120 percent of the fair market rents (FMR) with justification and for no more than 50 percent of the population of the FMR area.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: December 11, 2015.

Reason Waived: The proposed 2016 FMRs for BHA's jurisdiction had dropped and its rental survey had expired. Since it had provided comments to the final rule on the proposed FMRs and committed to another rental survey, these regulations were temporarily waived until March 1, 2015.

Contact: Becky Primeaux, Housing Voucher Management and Operations

Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 982.503(c)(3) through (5).

Project/Activity: Contra Costa Housing Authority (CCHA), Contra Costa, CA.

Nature of Requirement: HUD's regulations at 24 CFR 982.503(c)(3) and (5) allow the Secretary to approve an exception payment standard over 120 percent of the fair market rents (FMR) with justification and for no more than 50 percent of the population of the FMR area.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: December 11, 2015.

Reason Waived: The proposed 2016 FMRs for CCHA's jurisdiction had dropped and its rental survey had expired. Since it had provided comments to the final rule on the proposed FMRs and committed to another rental survey, these regulations were temporarily waived until March 1, 2015.

Contact: Becky Primeaux, Housing Voucher Management and Operations Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 982.503(c)(3) through (5).

Project/Activity: Housing Authority of the City of Livermore (HACL), Livermore, CA.

Nature of Requirement: HUD's regulations at 24 CFR 982.503(c)(3) and (5) allow the Secretary to approve an exception payment standard over 120 percent of the fair market rents (FMR) with justification and for no more than 50 percent of the population of the FMR area.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: December 11, 2015.

Reason Waived: The proposed 2016 FMRs for HACL's jurisdiction had dropped and its rental survey had expired. Since it had provided comments to the final rule on the proposed FMRs and committed to another rental survey, these regulations were temporarily waived until March 1, 2015.

Contact: Becky Primeaux, Housing Voucher Management and Operations Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 982.503(c)(3) through (5).

Project/Activity: Oakland Housing Authority (OHA), Oakland, CA.

Nature of Requirement: HUD's regulations at 24 CFR 982.503(c)(3) and (5) allow the Secretary to approve an exception payment standard over 120 percent of the fair market rents (FMR) with justification and for no more than 50 percent of the population of the FMR area.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: December 11, 2015.

Reason Waived: The proposed 2016 FMRs for OHA's jurisdiction dropped and its rental survey expired. Since it had provided comments to the final rule on the proposed FMRs and committed to another rental survey, these regulations were temporarily waived until March 1, 2015.

Contact: Becky Primeaux, Housing Voucher Management and Operations Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 982.505(d).

Project/Activity: Orange County Housing Authority (OCHA), Santa Ana, CA.

Nature of Requirement: HUD's regulation at 24 CFR 982.505(d) states that a public housing agency may only approve a higher payment standard for a family as a reasonable accommodation if the higher payment standard is within the basic range of 90 to 110 percent of the fair market rent (FMR) for the unit size.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: October 16, 2015.

Reason Waived: The participant, who is a person with disabilities, required an exception payment standard to remain in his current unit which is wheelchair-accessible and meets the needs of his disability. To provide this reasonable accommodation so that the client could remain in his unit and pay no more than 40 percent of his adjusted income toward the family share, the OCHA was allowed to approve an exception payment standard that exceeded the basic range of 90 to 110 percent of the FMR.

Contact: Becky Primeaux, Housing Voucher Management and Operations Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 982.505(d).

Project/Activity: Orange County Housing Authority (OCHA), Santa Ana, CA.

Nature of Requirement: HUD's regulation at 24 CFR 982.505(d) states that a public housing agency may only approve a higher payment standard for a family as a reasonable accommodation if the higher payment standard is within the basic range of 90 to 110 percent of the fair market rent (FMR) for the unit size.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: October 16, 2015.

Reason Waived: The participant, who is a person with disabilities, required an exception payment standard to remain in his current unit (with his live-in aide) which is wheelchair-accessible and meets the needs of his disability. To provide this reasonable accommodation so that the client could remain in his unit and pay no more than 40 percent of his adjusted income toward the family share, the OCHA was allowed to approve an exception payment standard that exceeded the basic range of 90 to 110 percent of the FMR.

Contact: Becky Primeaux, Housing Voucher Management and Operations Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 982.505(d).

Project/Activity: Howard County Housing (HCH), Columbia, MD.

Nature of Requirement: HUD's regulation at 24 CFR 982.505(d) states that a public housing agency may only approve a higher payment standard for a family as a reasonable accommodation if the higher payment standard is within the basic range of 90 to 110 percent of the fair market rent (FMR) for the unit size.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: October 19, 2015.

Reason Waived: A voucher participant, who is a person with disabilities, required an exception payment standard to move to remain in his current unit that met his needs. To provide this reasonable accommodation so that the participant could remain in his unit and pay no more than 40 percent of his adjusted income toward the family share, the MCHA was allowed to approve an exception payment standard that exceeded the basic range of 90 to 110 percent of the FMR.

Contact: Becky Primeaux, Housing Voucher Management and Operations Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 Seventh Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 982.505(d).

Project/Activity: Marion County Housing Authority (MCHA), Salem, OR.

Nature of Requirement: HUD's regulation at 24 CFR 982.505(d) states that a public housing agency may only approve a higher payment standard for a family as a reasonable accommodation if the higher payment standard is within the basic range of 90 to 110 percent of the fair market rent (FMR) for the unit size.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: October 19, 2015.

Reason Waived: A voucher participant, who is a person with disabilities, required an exception payment standard to move to remain in his current unit that met his needs. To provide this reasonable accommodation so that the participant could remain in his unit and pay no more than 40 percent of his adjusted income toward the family share, the MCHA was allowed to approve an exception payment standard that exceeded the basic range of 90 to 110 percent of the FMR.

Contact: Becky Primeaux, Housing Voucher Management and Operations

Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 982.505(d).

Project/Activity: San Diego Housing Commission (SDHC), San Diego, CA.

Nature of Requirement: HUD's regulation at 24 CFR 982.505(d) states that a public housing agency may only approve a higher payment standard for a family as a reasonable accommodation if the higher payment standard is within the basic range of 90 to 110 percent of the fair market rent (FMR) for the unit size.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: October 27, 2015.

Reason Waived: A voucher participant, who is a person with disabilities, required an exception payment standard to remain in his current unit that met his needs. To provide this reasonable accommodation so that the participant could remain in his unit and pay no more than 40 percent of his adjusted income toward the family share, the SDHC was allowed to approve an exception payment standard that exceeded the basic range of 90 to 110 percent of the FMR.

Contact: Becky Primeaux, Housing Voucher Management and Operations Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 982.505(d).

Project/Activity: St. Paul Public Housing Agency (SPPHA), St. Paul, MN.

Nature of Requirement: HUD's regulation at 24 CFR 982.505(d) states that a public housing agency may only approve a higher payment standard for a family as a reasonable accommodation if the higher payment standard is within the basic range of 90 to 110 percent of the fair market rent (FMR) for the unit size.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: October 30, 2015.

Reason Waived: A voucher applicant, who is a person with disabilities, required an exception payment standard to move to a unit that met his needs. To provide this reasonable accommodation so that the participant could move to a unit and pay no more than 40 percent of his adjusted income toward the family share, the SPPHA was allowed to approve an exception payment standard that exceeded the basic range of 90 to 110 percent of the FMR.

Contact: Becky Primeaux, Housing Voucher Management and Operations Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 982.505(d).

Project/Activity: Arvada Housing Authority (AHA), Arvada, CO.

Nature of Requirement: HUD's regulation at 24 CFR 982.505(d) states that a public housing agency may only approve a higher payment standard for a family as a reasonable accommodation if the higher payment standard is within the basic range of 90 to 110 percent of the fair market rent (FMR) for the unit size.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: November 3, 2015.

Reason Waived: A voucher participant, who is a person with disabilities, required an exception payment standard to remain in her unit that is wheelchair accessible. To provide this reasonable accommodation so that the participant could remain in her current unit and pay no more than 40 percent of her adjusted income toward the family share, the AHA was allowed to approve an exception payment standard that exceeded the basic range of 90 to 110 percent of the FMR.

Contact: Becky Primeaux, Housing Voucher Management and Operations Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 982.505(d).

Project/Activity: Housing Authority of Grays Harbor (HAGH), Aberdeen, WA.

Nature of Requirement: HUD's regulation at 24 CFR 982.505(d) states that a public housing agency may only approve a higher payment standard for a family as a reasonable accommodation if the higher payment standard is within the basic range of 90 to 110 percent of the fair market rent (FMR) for the unit size.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: November 13, 2015.

Reason Waived: A voucher participant, who is a person with disabilities, required an exception payment standard to remain in her unit that meets her needs. To provide this reasonable accommodation so that the participant could remain in her current unit and pay no more than 40 percent of her adjusted income toward the family share, the HAGH was allowed to approve an exception payment standard that exceeded the basic range of 90 to 110 percent of the FMR.

Contact: Becky Primeaux, Housing Voucher Management and Operations Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 982.505(d).

Project/Activity: Howard County Housing (HCH), Columbia, MD.

Nature of Requirement: HUD's regulation at 24 CFR 982.505(d) states that a public housing agency may only approve a higher payment standard for a family as a reasonable accommodation if the higher payment standard is within the basic range of 90 to 110 percent of the fair market rent (FMR) for the unit size.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: December 18, 2015.

Reason Waived: A portable participant, who has an adult daughter with disabilities, required an exception payment standard to move to a unit that was wheelchair accessible to meet her daughter's needs. To provide this reasonable accommodation so that the family could move to this unit and pay no more than 40 percent of the family's adjusted income toward the family share, the HCH was allowed to approve an exception payment standard that exceeded the basic range of 90 to 110 percent of the FMR.

Contact: Becky Primeaux, Housing Voucher Management and Operations Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 Seventh Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 982.505(d).

Project/Activity: County of Maui Department of Housing and Human Concerns (DHHC), Wailuku, HI.

Nature of Requirement: HUD's regulation at 24 CFR 982.505(d) states that a public housing agency may only approve a higher payment standard for a family as a reasonable accommodation if the higher payment standard is within the basic range of 90 to 110 percent of the fair market rent (FMR) for the unit size.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: December 22, 2015.

Reason Waived: Two voucher applicants, who are persons with disabilities, each required an exception payment standard to move to units that met the needs of their disabilities. To provide these reasonable accommodations so that the applicants could move to these units and pay no more than 40 percent of each one's adjusted income toward the family share, the DHHC was allowed to approve an exception payment standard that exceeded the basic range of 90 to 110 percent of the FMR.

Contact: Becky Primeaux, Housing Voucher Management and Operations Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 Seventh Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 982.505(d).

Project/Activity: Colorado Department of Local Affairs (CDLA), Denver, CO.

Nature of Requirement: HUD's regulation at 24 CFR 982.505(d) states that a public housing agency may only approve a higher payment standard for a family as a reasonable accommodation if the higher payment standard is within the basic range of 90 to 110 percent of the fair market rent (FMR) for the unit size.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: December 23, 2015.

Reason Waived: A disabled participant required an exception payment standard to

remain in her unit that was wheelchair accessible to meet the needs of her disability. To provide this reasonable accommodation so that the family could remain in this unit and pay no more than 40 percent of the family's adjusted income toward the family share, the CDLA was allowed to approve an exception payment standard that exceeded the basic range of 90 to 110 percent of the FMR.

Contact: Becky Primeaux, Housing Voucher Management and Operations Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 982.505(d).

Project/Activity: County of Salt Lake Housing Authority (CSLHA), Salt Lake City, UT.

Nature of Requirement: HUD's regulation at 24 CFR 982.505(d) states that a public housing agency may only approve a higher payment standard for a family as a reasonable accommodation if the higher payment standard is within the basic range of 90 to 110 percent of the fair market rent (FMR) for the unit size.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: December 23, 2015.

Reason Waived: A disabled participant required an exception payment standard to move to a unit that was wheelchair accessible to meet the needs of her disability. To provide this reasonable accommodation so that the family could move to this unit and pay no more than 40 percent of the family's adjusted income toward the family share, the CSLHA was allowed to approve an exception payment standard that exceeded the basic range of 90 to 110 percent of the FMR.

Contact: Becky Primeaux, Housing Voucher Management and Operations Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 982.505(d).

Project/Activity: Boulder County Department of Housing and Human Services (DHHS), Boulder, CO.

Nature of Requirement: HUD's regulation at 24 CFR 982.505(d) states that a public housing agency may only approve a higher payment standard for a family as a reasonable accommodation if the higher payment standard is within the basic range of 90 to 110 percent of the fair market rent (FMR) for the unit size.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: December 28, 2015.

Reason Waived: A disabled participant required an exception payment standard to remain in a unit that met the needs of her disability. To provide this reasonable accommodation so that the family could remain in this unit and pay no more than 40 percent of the family's adjusted income toward the family share, the DHHS was allowed to approve an exception payment standard that exceeded the basic range of 90 to 110 percent of the FMR.

Contact: Becky Primeaux, Housing Voucher Management and Operations Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 983.6(b).

Project/Activity: Community Development Commission of Mendocino County (CDCMC), Ukiah, CA.

Nature of Requirement: HUD's regulation at 24 CFR 983.6(b) states that all project-based certificate and project-based voucher (PBV) units, for which the PHA has issued a notice of proposal selection or which are under an Agreement to enter into a Housing Assistance Payments (AHAP) or HAP contract, count against the 20 percent maximum amount of budget authority. This provision is also statutory in accordance with section 8(o)(13)(B) of the U. S. Housing Act of 1937.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: November 6, 2015.

Reason Waived: Budget authority only provided for two units to be project-based. The CDCMC received one proposal in response to its Request for Proposals for 10 units and the owner was not willing to project-base fewer units. If the CDCMC could not project-base all 10 vouchers, CDCMC would have to return its voucher allocation because of the difficulties the homeless veterans were having leasing units. The CDCMC's success rate for these vouchers was only 62 percent. In addition, the Appropriations Acts for the HUD–VASH program allow for waivers of statutes.

Contact: Becky Primeaux, Housing Voucher Management and Operations Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 985.101(a).

Project/Activity: Municipality of Aguas Beunas (MAB), Aguas Beuenas, PR.

Nature of Requirement: HUD's regulation at 24 CFR 985.101(a) states a PHA must submit the HUD-required Section Eight Management Assessment Program (SEMAP) certification form within 60 calendar days after the end of its fiscal year.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: October 16, 2015.

Reason Waived: This waiver was granted because between the time of the MGL's fiscal year ending June 30, 2015, and its SEMAP submission deadline, the Municipality of Aguas Buenas was declared to be in a state of emergency due to Tropical Storm Erika. Power and internet connections were unavailable. MAB was unable to submit its SEMAP certification.

Contact: Becky Primeaux, Housing Voucher Management and Operations Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 985.101(a).

Project/Activity: Municipality of Anasco (MA), Anasco, PR.

Nature of Requirement: HUD's regulation at 24 CFR 985.101(a) states a PHA must submit the HUD-required Section Eight Management Assessment Program (SEMAP) certification form within 60 calendar days after the end of its fiscal year.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: October 16, 2015.

Reason Waived: This waiver was granted because between the time of the MA's fiscal year ending June 30, 2015, and its SEMAP submission deadline, the Municipality of Anasco was declared to be in a state of emergency due to Tropical Storm Erika. Power and internet connections were unavailable. MA was unable to submit its SEMAP certification.

Contact: Becky Primeaux, Housing Voucher Management and Operations Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 985.101(a).

Project/Activity: Choanoke Area Development Association (CADA), Rich Square, NC.

Nature of Requirement: HUD's regulation at 24 CFR 985.101(a) states a PHA must submit the HUD-required Section Eight Management Assessment Program (SEMAP) certification form within 60 calendar days after the end of its fiscal year, June 30, 2015.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: October 16, 2015.

Reason Waived: This waiver was granted because at the time of SEMAP certification, submission, the CADA's Housing Manager was on extended leave due to emergency surgery. She was unable to guide anyone else through the process. Therefore, the CADA was unable to submit its SEMAP certification successfully.

Contact: Becky Primeaux, Housing Voucher Management and Operations Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 985.101(a).

Project/Activity: Municipal Government of Lajas (MGL), Lajas, PR.

Nature of Requirement: HUD's regulation at 24 CFR 985.101(a) states a PHA must submit the HUD-required Section Eight Management Assessment Program (SEMAP) certification form within 60 calendar days after the end of its fiscal year.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: October 16, 2015.

Reason Waived: This waiver was granted because between the time of the MGL's fiscal year ending June 30, 2015, and its SEMAP submission deadline, the Municipality of Lajas was declared to be in a state of emergency due to Tropical Storm Erika. Power and internet connections were unavailable. MGL was unable to submit its SEMAP certification.

Contact: Becky Primeaux, Housing Voucher Management and Operations Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 985.101(a).

Project/Activity: State of New Jersey Division of Housing and Community Resources (DHCR), Trenton, NJ.

Nature of Requirement: HUD's regulation at 24 CFR 985.101(a) states a PHA must submit the HUD-required Section Eight Management Assessment Program (SEMAP) certification form within 60 calendar days after the end of its fiscal year, June 30, 2015.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: October 16, 2015.

Reason Waived: This waiver was granted because DHCR had been involved with a major Internal Revenue Service audit which demanded a significant amount of staff time and shift work. The audit was initiated in the later part of April 2015 and the time demanded precluded the DHCR from submitting its SEMAP certification on time.

Contact: Becky Primeaux, Housing Voucher Management and Operations Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 985.101(a).

Project/Activity: Municipality of Toa Alta (MTA), Toa Alta, PR.

Nature of Requirement: HUD's regulation at 24 CFR 985.101(a) states a PHA must submit the HUD-required Section Eight Management Assessment Program (SEMAP) certification form within 60 calendar days after the end of its fiscal year.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: October 16, 2015.

Reason Waived: This waiver was granted because between the time of the MGL's fiscal year ending June 30, 2015, and its SEMAP submission deadline, the Municipality of Toa Altas was declared to be in a state of emergency due to Tropical Storm Erika. Power and internet connections were unavailable. MTA was unable to submit its SEMAP certification.

Contact: Becky Primeaux, Housing Voucher Management and Operations Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 985.101(a).

Project/Activity: South Tucson Housing Authority (STHA), South Tucson, AZ.

Nature of Requirement: HUD's regulation at 24 CFR 985.101(a) states a PHA must submit the HUD-required Section Eight Management Assessment Program (SEMAP) certification form within 60 calendar days after the end of its fiscal year.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: October 30, 2015.

Reason Waived: This waiver was granted because the STHA entered its SEMAP certification into the PIC Test Module instead of the PIC module during the reporting period. The STHA was unaware of this mistake until after the submission deadline.

Contact: Becky Primeaux, Housing Voucher Management and Operations Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 985.101(a).

Project/Activity: South Tucson Housing Authority (STHA), South Tucson, AZ.

Nature of Requirement: HUD's regulation at 24 CFR 985.101(a) states a PHA must submit the HUD-required Section Eight Management Assessment Program (SEMAP) certification form within 60 calendar days after the end of its fiscal year.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: October 30, 2015.

Reason Waived: This waiver was granted because the STHA entered its SEMAP certification into the PIC Test Module instead of the PIC module during the reporting period. The STHA was unaware of this mistake until after the submission deadline.

Contact: Becky Primeaux, Housing Voucher Management and Operations Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 985.101(a).

Project/Activity: Boley Centers Housing Authority (BCHA), St. Petersburg, FL.

Nature of Requirement: HUD's regulation at 24 CFR 985.101(a) states a PHA must submit the HUD-required Section Eight Management Assessment Program (SEMAP) certification form within 60 calendar days after the end of its fiscal year.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: December 4, 2015.

Reason Waived: This waiver was granted because the BCHA encountered repeated technical difficulties during the SEMAP certification process. It was the first time the new director attempted this process and the BCHA was unable to submit its certification before the deadline.

Contact: Becky Primeaux, Housing Voucher Management and Operations Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 985.101(a).

Project/Activity: Housing Authority of the City of Carrollton (HACC), Carrollton, GA.

Nature of Requirement: HUD's regulation at 24 CFR 985.101(a) states a PHA must submit the HUD-required Section Eight Management Assessment Program (SEMAP) certification form within 60 calendar days after the end of its fiscal year.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: December 15, 2015.

Reason Waived: This waiver was granted because the HACC is a small PHA required to submit SEMAP certifications every other year. The local field office provided incorrect information regarding reporting dates that precluded the HACC from submitted its certification at the correct fiscal year end.

Contact: Becky Primeaux, Housing Voucher Management and Operations Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

• Regulation: 24 CFR 985.101(a).

Project/Activity: Housing Authority of Newnan (HAN), Newnan, GA.

Nature of Requirement: HUD's regulation at 24 CFR 985.101(a) states a PHA must submit the HUD-required Section Eight Management Assessment Program (SEMAP) certification form within 60 calendar days after the end of its fiscal year.

Granted By: Lourdes Castro Ramírez, Principal Deputy Assistant Secretary for Public and Indian Housing.

Date Granted: December 15, 2015.

Reason Waived: This waiver was granted because the HAN is a small PHA required to submit SEMAP certifications every other year. The local field office provided incorrect information regarding reporting dates that precluded the HAN from submitted its certification at the correct fiscal year end.

Contact: Becky Primeaux, Housing Voucher Management and Operations Division, Office of Public Housing and Voucher Programs, Office of Public and Indian Housing, Department of Housing and Urban Development, 451 7th Street SW., Room 4216, Washington, DC 20410, telephone (202) 708–0477.

[FR Doc. 2016–05956 Filed 3–16–16; 8:45 am]

BILLING CODE 4210–67–P

DEPARTMENT OF THE INTERIOR

Bureau of Indian Affairs

[167 A2100DD/AAKC001030/ A0A501010.999900]

Proclaiming Certain Lands as Reservation for the Shakopee Mdewakanton Sioux Community of Minnesota

AGENCY: Bureau of Indian Affairs, Interior.

ACTION: Notice of reservation proclamation.

SUMMARY: This notice informs the public that the Assistant Secretary—Indian Affairs proclaimed approximately 2.00 acres, more or less, an addition to the reservation of the Shakopee Mdewakanton Sioux Community of Minnesota on March 11, 2016.

FOR FURTHER INFORMATION CONTACT: Ms. Sharlene Round Face, Bureau of Indian Affairs, Division of Real Estate Services, MS–4642–MIB, 1849 C Street NW., Washington, DC 20240, at (202) 208–3615.

SUPPLEMENTARY INFORMATION: This notice is published in the exercise of authority delegated by the Secretary of the Interior to the Assistant Secretary—Indian Affairs by part 209 of the Departmental Manual.

A proclamation was issued according to the Act of June 18, 1934 (48 Stat. 984; 25 U.S.C. 467), for the land described below. The land was proclaimed to be Shakopee Mdewakanton Sioux Community Reservation for the exclusive use of Indians on that reservation who are entitled to reside at the reservation by enrollment or Tribal membership.

Reservation of the Shakopee Mdewakanton Sioux Community, Township of Prior Lake, County of Scott and State of Minnesota

MWCC (Parcel 4) The Wilds

Legal Description Containing 2.00 Acres, More or Less

The West 249.00 feet of the South 350.00 feet, as measured along the South and West lines respectively, of Outlot O, The Wilds, according to the recorded plat thereof, and located in the Southwest Quarter of the Southeast Quarter of Section 28, Township 115 North, Range 22 West, 5th Principal Meridian.

This proclamation does not affect title to the land described above, nor does it affect any valid existing easements for public roads and highways, for public utilities and for railroads or pipelines and any other rights-of-way or reservations of record.

Dated: March 11, 2016.

Lawrence S. Roberts,

Acting Assistant Secretary—Indian Affairs.

[FR Doc. 2016–06050 Filed 3–16–16; 8:45 am]

BILLING CODE 4337–15–P

DEPARTMENT OF THE INTERIOR

Bureau of Indian Affairs

[167 A2100DD/AAKC001030/ A0A501010.999900]

Proclaiming Certain Lands as Reservation for the Shakopee Mdewakanton Sioux Community of Minnesota

AGENCY: Bureau of Indian Affairs, Interior.

ACTION: Notice of reservation proclamation.

SUMMARY: This notice informs the public that the Assistant Secretary—Indian Affairs proclaimed approximately 24.69 acres, more or less, an addition to the reservation of the Shakopee Mdewakanton Sioux Community of Minnesota on March 11, 2016.

FOR FURTHER INFORMATION CONTACT: Ms. Sharlene Round Face, Bureau of Indian Affairs, Division of Real Estate Services, MS–4642–MIB, 1849 C Street NW., Washington, DC 20240, at (202) 208–3615.

SUPPLEMENTARY INFORMATION: This notice is published in the exercise of authority delegated by the Secretary of the Interior to the Assistant Secretary—Indian Affairs by part 209 of the Departmental Manual.

A proclamation was issued according to the Act of June 18, 1934 (48 Stat. 984; 25 U.S.C. 467), for the land described below. The land was proclaimed to be Shakopee Mdewakanton Sioux Community Reservation for the exclusive use of Indians on that reservation who are entitled to reside at the reservation by enrollment or Tribal membership.

Reservation of the Shakopee Mdewakanton Sioux Community, Township of Prior Lake, County of Scott and State of Minnesota.

Wozupi

Legal description containing 24.69 acres, more or less

That part of the Northwest Quarter of the Northwest Quarter of Section 28, Township 115 North, Range 22 West, 5th Principal Meridian, Scott County, Minnesota, lying west of the following described line:

Beginning at a point on the north line of said Northwest Quarter of the Northwest Quarter distant 404.50 feet east of the northwest corner thereof; thence southerly to a point on the south line of said Northwest Quarter of the Northwest Quarter distant 411.15 feet east of the southwest corner of said Northwest Quarter of the Northwest Quarter and there terminating, containing 12.31 acres, more or less.

AND

That part of the Northwest Quarter of the Northwest Quarter (NW. ¼ of NW. ¼) of Section 28, Township 115 North, Range 22 West of the 5th Principal Meridian, Scott County, Minnesota, lying West of the East 500.00 feet of said Northwest Quarter of the Northwest Quarter and East of the following described line:

Beginning at a point on the North line of said Northwest Quarter of the Northwest Quarter distant 404.50 feet East of the Northwest corner thereof; thence Southerly to a point on the South line of said Northwest Quarter of the Northwest Quarter distant 411.15 feet East of the Southwest corner of said Northwest Quarter of the Northwest Quarter and there terminating, according to the United States Government Survey thereof and situate in Scott County, Minnesota, containing 12.38 acres, more or less.

This proclamation does not affect title to the land described above, nor does it affect any valid existing easements for public roads and highways, for public utilities and for railroads or pipelines and any other rights-of-way or reservations of record.

Dated: March 11, 2016.

Lawrence S. Roberts,

Acting Assistant Secretary—Indian Affairs.

[FR Doc. 2016–06043 Filed 3–16–16; 8:45 am]

BILLING CODE 4337–15–P

DEPARTMENT OF THE INTERIOR

Bureau of Indian Affairs

[167 A2100DD/AAKC001030/ A0A501010.999900]

Proclaiming Certain Lands as Reservation for the Shakopee Mdewakanton Sioux Community of Minnesota

AGENCY: Bureau of Indian Affairs, Interior.

ACTION: Notice of reservation proclamation.

SUMMARY: This notice informs the public that the Assistant Secretary—Indian Affairs proclaimed approximately 20.00

acres, more or less, an addition to the reservation of the Shakopee Mdewakanton Sioux Community of Minnesota on March 11, 2016.

FOR FURTHER INFORMATION CONTACT: Ms. Sharlene Round Face, Bureau of Indian Affairs, Division of Real Estate Services, MS–4642–MIB, 1849 C Street NW., Washington, DC 20240, at (202) 208–3615.

SUPPLEMENTARY INFORMATION: This notice is published in the exercise of authority delegated by the Secretary of the Interior to the Assistant Secretary—Indian Affairs by part 209 of the Departmental Manual.

A proclamation was issued according to the Act of June 18, 1934 (48 Stat. 984; 25 U.S.C. 467), for the land described below. The land was proclaimed to be Shakopee Mdewakanton Sioux Community Reservation for the exclusive use of Indians on that reservation who are entitled to reside at the reservation by enrollment or Tribal membership.

Reservation of the Shakopee Mdewakanton Sioux Community, Township of Prior Lake, County of Scott and State of Minnesota

Former Carlson Property

Legal Description Containing 20.00 Acres More or Less

The South Half of the Southwest Quarter of the Northwest Quarter of Section 28, Township 115 North, Range 22 West, 5th Principal Meridian.

This proclamation does not affect title to the land described above, nor does it affect any valid existing easements for public roads and highways, for public utilities and for railroads or pipelines and any other rights-of-way or reservations of record.

Dated: March 11, 2016.

Lawrence S. Roberts,

Acting Assistant Secretary—Indian Affairs.

[FR Doc. 2016–06044 Filed 3–16–16; 8:45 am]

BILLING CODE 4337–15–P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[LLNML00000 L12200000.DF0000 16XL1109AF]

Notice of Public Meeting, Las Cruces District Resource Advisory Council Meeting, New Mexico

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of Public Meeting.

SUMMARY: In accordance with the Federal Land Policy and Management Act and the Federal Advisory Committee Act, the Bureau of Land Management's (BLM), Las Cruces District Resource Advisory Council (RAC) will meet as indicated below.

DATES: The RAC will meet on April 5, 2016 at the BLM Las Cruces District Office, 1800 Marquess Street, Las Cruces, New Mexico from 9:00 to 11:30 a.m. Following the meeting, the BLM and RAC will tour the Doña Ana Mountains located on the Organ Mountains-Desert Peaks National Monument. The field tour will depart from the BLM office at 1:00 p.m. and conclude at 5:00 p.m. Both the meeting and field tour is open to the public. In addition, the public may send written comments to the RAC at the BLM Las Cruces District Office, 1800 Marquess Street, Las Cruces, NM 88001.

FOR FURTHER INFORMATION CONTACT: Deborah Stevens, BLM Las Cruces District, 1800 Marquess Street, Las Cruces, NM 88001, 575–525–4421. Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1–800–877–8229, to contact the above individual during normal business hours. The FIRS 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 10-member Las Cruces District RAC advises the Secretary of the Interior, through the BLM, on a variety of planning and management issues associated with public land management in New Mexico.

Planned agenda items include updates on current and proposed projects in the Las Cruces District, including lands/realty, planning and energy projects.

A half-hour public comment period, during which the public may address the Council, will begin at 11:00 a.m. Depending on the number of individuals wishing to comment and time available, the time for individual oral comments may be limited.

Byron Loosle,

Acting Deputy State Director.

[FR Doc. 2016–06002 Filed 3–16–16; 8:45 am]

BILLING CODE 4310–FB–P

INTERNATIONAL TRADE COMMISSION

[USITC SE–16–009]

Sunshine Act Meeting

AGENCY: United States International Trade Commission.

TIME AND DATE: March 25, 2016 at 9:30 a.m.

PLACE: Room 101, 500 E Street SW., Washington, DC 20436, Telephone: (202) 205–2000.

STATUS: Open to the public.

MATTERS TO BE CONSIDERED:

1. Agendas for future meetings: none
2. Minutes
3. Ratification List
4. Vote in Inv. Nos. 701–TA–557 and 731–TA–1312 (Preliminary) (Stainless Steel Sheet and Strip from China). The Commission is currently scheduled to complete and file its determinations on March 28, 2016; views of the Commission are currently scheduled to be completed and filed on April 4, 2016.
5. Outstanding action jackets: none

In accordance with Commission policy, subject matter listed above, not disposed of at the scheduled meeting, may be carried over to the agenda of the following meeting.

Issued: March 14, 2016.

By order of the Commission:

William R. Bishop,

Supervisory Hearings and Information Officer.

[FR Doc. 2016–06166 Filed 3–15–16; 4:15 pm]

BILLING CODE 7020–02–P

DEPARTMENT OF JUSTICE

Antitrust Division

Notice Pursuant to the National Cooperative Research and Production Act of 1993—UHD Alliance, Inc.

Notice is hereby given that, on February 12, 2016, pursuant to Section 6(a) of the National Cooperative Research and Production Act of 1993, 15 U.S.C. 4301 *et seq.* (''the Act''), UHD Alliance, Inc. (''UHD Alliance'') has filed written notifications simultaneously with the Attorney General and the Federal Trade Commission disclosing changes in its membership. The notifications were filed for the purpose of extending the Act's provisions limiting the recovery of antitrust plaintiffs to actual damages under specified circumstances. Specifically, Sky UK Ltd., Middlesex,

United Kingdom; Rogers Communications, Toronto, Ontario, Canada; Quantum Data, Inc., Elgin, IL; and Telus Communications Inc., Edmonton, Alberta, Canada, have been added as parties to this venture.

No other changes have been made in either the membership or planned activity of the group research project. Membership in this group research project remains open, and UHD Alliance intends to file additional written notifications disclosing all changes in membership.

On June 17, 2015, UHD Alliance filed its original notification pursuant to Section 6(a) of the Act. The Department of Justice published a notice in the **Federal Register** pursuant to Section 6(b) of the Act on July 17, 2015 (80 FR 42537).

The last notification was filed with the Department on November 27, 2015. A notice was published in the **Federal Register** pursuant to Section 6(b) of the Act on December 28, 2015 (80 FR 80810).

Patricia A. Brink,

Director of Civil Enforcement, Antitrust Division.

[FR Doc. 2016–06079 Filed 3–16–16; 8:45 am]

BILLING CODE P

DEPARTMENT OF JUSTICE

Antitrust Division

Notice Pursuant to the National Cooperative Research and Production Act of 1993—Petroleum Environmental Research Forum Project No. 2014–10, Direct Monitoring of Flare Combustion Efficiency

Notice is hereby given that, on February 18, 2016, pursuant to Section 6(a) of the National Cooperative Research and Production Act of 1993, 15 U.S.C. 4301 *et seq.* (''the Act''), Petroleum Environmental Research Forum Project No. 2014–10, Direct Monitoring of Flare Combustion Efficiency (''PERF Project No. 2014–10'') has filed written notifications simultaneously with the Attorney General and the Federal Trade Commission disclosing (1) the identities of the parties to the venture and (2) the nature and objectives of the venture. The notifications were filed for the purpose of invoking the Act's provisions limiting the recovery of antitrust plaintiffs to actual damages under specified circumstances.

Pursuant to Section 6(b) of the Act, the identities of the parties to the venture are: ExxonMobil Research and Engineering Company, Spring, TX; Aramco Services Company, Houston, TX; Chevron U.S.A. Inc., A Pennsylvania Corporation through its Division Chevron Energy Technology Company Division, San Ramon, CA; Chevron Phillips Chemical Company LP, The Woodlands, TX; Eastman Chemical Company, Kingsport, TN; and Phillips 66 Company, Houston, TX. The general area of PERF Project No. 2014–10's planned activity is, through cooperative research efforts, to explore a series of field tests at a commercial scale test flare to collect raw data regarding performance of third party vendor/licensor remote sensing technologies to continuously measure flare combustion efficiency (CE).

Patricia A. Brink,

Director of Civil Enforcement, Antitrust Division.

[FR Doc. 2016–06083 Filed 3–16–16; 8:45 am]

BILLING CODE P

DEPARTMENT OF LABOR

Employment and Training Administration

Comment Request for Information Collection for Registered Apprenticeship-College Consortium

AGENCY: Employment and Training Administration (ETA), Labor.

ACTION: Notice, extension without change.

SUMMARY: The Department of Labor (Department), as part of its continuing effort to reduce paperwork and respondent burden, conducts a preclearance consultation program to provide the general public and federal agencies with an opportunity to comment on proposed and/or continuing collections of information in accordance with the Paperwork Reduction Act of 1995 [44 U.S.C. 3506(c)(2)(A)] (PRA). The PRA helps to ensure that respondents can provide data in the desired format with minimal reporting burden (time and financial resources), collection instruments are clearly understood, and the impact of collection requirements on respondents can be properly assessed.

Currently, ETA is soliciting comments concerning the collection of data about the Registered Apprenticeship-College Consortium, which expires August 31, 2016.

DATES: Submit written comments to the office listed in the addressee's section below on or before May 16, 2016.

ADDRESSES: Send written comments to Laura Ginsburg, Office of Apprenticeship, Room C–5321, Employment and Training Administration, U.S. Department of Labor, 200 Constitution Avenue NW., Washington, DC 20210. Telephone number: 202–693–2796 (this is not a toll-free number). Individuals with hearing or speech impairments may access the telephone number above via TTY by calling the toll-free Federal Information Relay Service at 1–877–889–5627 (TTY/TDD). Fax: 202–693–3799. Email: *ginsburg.laura@dol.gov.* To obtain a copy of the proposed information collection request (ICR), please contact the person listed above.

SUPPLEMENTARY INFORMATION:

I. Background

The data collection includes three application forms to establish membership in the Registered Apprenticeship-College Consortium. The three types of membership are: Two- and four-year post-secondary institutions, Registered Apprenticeship sponsors, and organizations and associations that represent institutions or sponsors on a national, regional or state level and serve in a coordinating role to facilitate membership in the consortium. At the September 2011 meeting of the Secretary's Advisory Committee on Apprenticeship (ACA) a unanimous proposal was adopted to form a national consortium based on the Servicemembers Opportunity Colleges Consortium (SOC) model, which is a consortium of colleges that provides college articulation for soldiers and veterans who accumulate credits at a number of colleges. The SOC is supported by the Department of Defense. The ACA also adopted the Registered Apprenticeship-College Consortium Articulation Framework which outlines the goals of the consortium, the principles that guide the effort, conditions of membership, and criteria. The ACA authorizes this information collection.

II. Review Focus

The Department of Labor is particularly interested in comments which:

- Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;
- evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;

• enhance the quality, utility, and clarity of the information to be collected; and

• minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, *e.g.,* permitting electronic submissions of responses.

III. Current Actions

Type of Review: Extension without changes.

Title: Registered Apprenticeship-College Consortium.

OMB Number: 1205–0512.

Affected Public: Federal Government; State, Local, and Tribal Governments; and Private Sector—Businesses or other for-profit and not-for profit institutions.

Estimated Total Annual Respondents: 165 per year or 495 over three years.

Annual Frequency: Bi-annual (*i.e.,* once every two years.

Estimated Total Annual Responses: 165.

Average Estimated Response Time per Response: 10 minutes.

Estimated Total Annual Burden Hours: 31 hours.

Total Annual Estimated Burden Cost for Respondents: $843.00.

We will summarize and/or include in the request for OMB approval of the ICR, the comments received in response to this comment request; they will also become a matter of public record.

Portia Wu,

Assistant Secretary for Employment and Training, Labor.

[FR Doc. 2016–06020 Filed 3–16–16; 8:45 am]

BILLING CODE 4510–FR–P

LEGAL SERVICES CORPORATION

Sunshine Act Meeting

DATE AND TIME: The Legal Services Corporation's Institutional Advancement Committee will meet telephonically on March 22, 2016. The meeting will commence at 10:30 a.m., EDT, and will continue until the conclusion of the Committee's agenda.

LOCATION: John N. Erlenborn Conference Room, Legal Services Corporation Headquarters, 3333 K Street NW., 4th Floor Conference Room, Washington DC 20007.

PUBLIC OBSERVATION: Members of the public who are unable to attend in person but wish to listen to the public proceedings may do so by following the telephone call-in directions provided below.

CALL-IN DIRECTIONS FOR OPEN SESSIONS:

• Call toll-free number: 1–866–451–4981;

• When prompted, enter the following numeric pass code: 5907707348

• When connected to the call, please immediately ''MUTE'' your telephone.

Members of the public are asked to keep their telephones muted to eliminate background noises. To avoid disrupting the meeting, please refrain from placing the call on hold if doing so will trigger recorded music or other sound. From time to time, the Chair may solicit comments from the public.

STATUS OF MEETING: Open.

MATTERS TO BE CONSIDERED:

1. Approval of agenda
2. Board member visits to grantees
3. Consider and act on allocation of private funds
4. Update on Leaders Council
5. Public comment
6. Consider and act on other business
7. Consider and act on adjournment of meeting

CONTACT PERSON FOR INFORMATION: Katherine Ward, Executive Assistant to the Vice President & General Counsel, at (202) 295–1500. Questions may be sent by electronic mail to *FR_NOTICE_QUESTIONS@lsc.gov.*

ACCESSIBILITY: LSC complies with the Americans with Disabilities Act and Section 504 of the 1973 Rehabilitation Act. Upon request, meeting notices and materials will be made available in alternative formats to accommodate individuals with disabilities. Individuals needing other accommodations due to disability in order to attend the meeting in person or telephonically should contact Katherine Ward, at (202) 295–1500 or *FR_NOTICE_QUESTIONS@lsc.gov,* at least 2 business days in advance of the meeting. If a request is made without advance notice, LSC will make every effort to accommodate the request but cannot guarantee that all requests can be fulfilled.

Dated: March 14, 2016.

Katherine Ward,

Executive Assistant to the Vice President for Legal Affairs and General Counsel.

[FR Doc. 2016–06106 Filed 3–15–16; 11:15 am]

BILLING CODE 7050–01–P

NATIONAL SCIENCE FOUNDATION

Agency Information Collection Activities: Comment Request

AGENCY: National Science Foundation.

ACTION: Notice; submission for OMB review; comment request.

SUMMARY: The National Science Foundation (NSF) has submitted the following information collection requirement to OMB for review and clearance under the Paperwork Reduction Act of 1995, Public Law 104–13. This is the second notice for public comment; the first was published in the **Federal Register** at 81 FR 972, and no comments were received. NSF is forwarding the proposed renewal submission to the Office of Management and Budget (OMB) for clearance simultaneously with the publication of this second notice. The full submission may be found at: *http://www.reginfo.gov/public/do/PRAMain.* Comments regarding (a) 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; (b) the accuracy of the agency's estimate of burden including the validity of the methodology and assumptions used; (c) ways to enhance the quality, utility and clarity of the information to be collected; (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 should be addressed to: Office of Information and Regulatory Affairs of OMB, Attention: Desk Officer for National Science Foundation, 725 17th Street NW., Room 10235, Washington, DC 20503, and to Suzanne Plimpton, Reports Clearance Officer, National Science Foundation, 4201 Wilson Boulevard, Room 1265, Arlington, VA 22230, or by email to *splimpto@nsf.gov.* Comments regarding these information collections are best assured of having their full effect if received within 30 days of this notification. Copies of the submission(s) may be obtained by calling 703–292–7556.

NSF 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.

Under OMB regulations, the agency may continue to conduct or sponsor the collection of information while this submission is pending at OMB.

ADDRESSES: Submit written comments to Suzanne Plimpton, Reports Clearance Officer, National Science Foundation, 4201 Wilson Boulevard, Room 1265, Arlington, VA 22230, or by email to *splimpto@nsf.gov.*

FOR FURTHER INFORMATION CONTACT: Call or write, Suzanne Plimpton, Reports Clearance Officer, National Science Foundation, 4201 Wilson Boulevard, Room 1265, Arlington, VA 22230, or by 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: Antarctic emergency response plan and environmental protection information.

OMB Approval Number: 3145–0180.

Abstract: NSF, pursuant to the Antarctic Conservation Act of 1978 (16 U.S.C. 2401 *et seq.*) (''ACA'') regulates certain non-governmental activities in Antarctica. The ACA was amended in 1996 by the Antarctic Science, Tourism, and Conservation Act. On September 7, 2001, NSF published a final rule in the **Federal Register** (66 FR 46739) implementing certain of these statutory amendments. The rule requires non-governmental Antarctic expeditions using non-U.S. flagged vessels to ensure that the vessel owner has an emergency response plan. The rule also requires persons organizing a non-governmental expedition to provide expedition members with information on their environmental protection obligations under the Antarctic Conservation Act.

Expected Respondents. Respondents may include non-profit organizations and small and large businesses. The majority of respondents are anticipated to be U.S. tour operators, currently estimated to number fifteen.

Burden on the Public. The Foundation estimates that a one-time paperwork and recordkeeping burden of 40 hours or less, at a cost of $500 to $1400 per respondent, will result from the emergency response plan requirement contained in the rule. Presently, all respondents have been providing expedition members with a copy of the Guidance for Visitors to the Antarctic (prepared and adopted at the Eighteenth Antarctic Treaty Consultative Meeting as Recommendation XVIII–1). Because this Antarctic Treaty System document satisfies the environmental protection information requirements of the rule, no additional burden shall result from the environmental information requirements in the proposed rule.

Dated: March 9, 2016.

Suzanne H. Plimpton,

Reports Clearance Officer, National Science Foundation.

[FR Doc. 2016–06003 Filed 3–16–16; 8:45 am]

BILLING CODE 7555–01–P

POSTAL REGULATORY COMMISSION

[Docket Nos. MC2016–96 and CP2016–121; Order No. 3150]

New Postal Product

AGENCY: Postal Regulatory Commission.

ACTION: Notice.

SUMMARY: The Commission is noticing a recent Postal Service filing concerning the addition of First-Class Package Service Contract 45 to the competitive product list. This notice informs the public of the filing, invites public comment, and takes other administrative steps.

DATES: *Comments are due:* March 21, 2016.

ADDRESSES: Submit comments electronically via the Commission's Filing Online system at *http://www.prc.gov.* Those who cannot submit comments electronically should contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section by telephone for advice on filing alternatives.

FOR FURTHER INFORMATION CONTACT: David A. Trissell, General Counsel, at 202–789–6820.

SUPPLEMENTARY INFORMATION:

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I. Introduction
II. Notice of Commission Action
III. Ordering Paragraphs

I. Introduction

In accordance with 39 U.S.C. 3642 and 39 CFR 3020.30 through 3020.35, the Postal Service filed a formal request and associated supporting information to add First-Class Package Service Contract 45 to the competitive product list.[1]

The Postal Service contemporaneously filed a redacted contract related to the proposed new product under 39 U.S.C. 3632(b)(3) and 39 CFR 3015.5. Request, Attachment B.

To support its Request, the Postal Service filed a copy of the contract, a copy of the Governors' Decision authorizing the product, proposed changes to the Mail Classification Schedule, a Statement of Supporting Justification, a certification of compliance with 39 U.S.C. 3633(a), and an application for non-public treatment of certain materials. Request at 1–2. It also filed supporting financial workpapers.

II. Notice of Commission Action

The Commission establishes Docket Nos. MC2016–96 and CP2016–121 to consider the Request pertaining to the proposed First-Class Package Service Contract 45 product and the related contract, respectively.

The Commission invites comments on whether the Postal Service's filings in the captioned dockets are consistent with the policies of 39 U.S.C. 3632, 3633, or 3642, 39 CFR part 3015, and 39 CFR part 3020, subpart B. Comments are due no later than March 21, 2016. The public portions of these filings can be accessed via the Commission's Web site (*http://www.prc.gov*).

The Commission appoints Lyudmila Y. Bzhilyanskaya to serve as Public Representative in these dockets.

III. Ordering Paragraphs

It is ordered:

1. The Commission establishes Docket Nos. MC2016–96 and CP2016–121 to consider the matters raised in each docket.

2. Pursuant to 39 U.S.C. 505, Lyudmila Y. Bzhilyanskaya is appointed to serve as an officer of the Commission to represent the interests of the general public in these proceedings (Public Representative).

3. Comments are due no later than March 21, 2016.

4. The Secretary shall arrange for publication of this order in the **Federal Register**.

By the Commission.

Stacy L. Ruble,

Secretary.

[FR Doc. 2016–06038 Filed 3–16–16; 8:45 am]

BILLING CODE 7710–FW–P

[1] Request of the United States Postal Service to Add First-Class Package Service Contract 45 to Competitive Product List and Notice of Filing (Under Seal) of Unredacted Governors' Decision, Contract, and Supporting Data, March 11, 2016 (Request).

POSTAL REGULATORY COMMISSION

[Docket Nos. MC2016–95 and CP2016–120; Order No. 3149]

New Postal Product

AGENCY: Postal Regulatory Commission.

ACTION: Notice.

SUMMARY: The Commission is noticing a recent Postal Service filing concerning the addition of Priority Mail Contract 196 to the competitive product list. This notice informs the public of the filing,

invites public comment, and takes other administrative steps.

DATES: *Comments are due:* March 21, 2016.

ADDRESSES: Submit comments electronically via the Commission's Filing Online system at *http://www.prc.gov.* Those who cannot submit comments electronically should contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section by telephone for advice on filing alternatives.

FOR FURTHER INFORMATION CONTACT: David A. Trissell, General Counsel, at 202–789–6820.

SUPPLEMENTARY INFORMATION:

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I. Introduction
II. Notice of Commission Action
III. Ordering Paragraphs

I. Introduction

In accordance with 39 U.S.C. 3642 and 39 CFR 3020.30 through 3020.35, the Postal Service filed a formal request and associated supporting information to add Priority Mail Contract 196 to the competitive product list.[1]

The Postal Service contemporaneously filed a redacted contract related to the proposed new product under 39 U.S.C. 3632(b)(3) and 39 CFR 3015.5. Request, Attachment B.

To support its Request, the Postal Service filed a copy of the contract, a copy of the Governors' Decision authorizing the product, proposed changes to the Mail Classification Schedule, a Statement of Supporting Justification, a certification of compliance with 39 U.S.C. 3633(a), and an application for non-public treatment of certain materials. It also filed supporting financial workpapers.

II. Notice of Commission Action

The Commission establishes Docket Nos. MC2016–95 and CP2016–120 to consider the Request pertaining to the proposed Priority Mail Contract 196 product and the related contract, respectively.

The Commission invites comments on whether the Postal Service's filings in the captioned dockets are consistent with the policies of 39 U.S.C. 3632, 3633, or 3642, 39 CFR part 3015, and 39 CFR part 3020, subpart B. Comments are due no later than March 21, 2016. The public portions of these filings can be accessed via the Commission's Web site (*http://www.prc.gov*).

The Commission appoints Kenneth R. Moeller to serve as Public Representative in these dockets.

III. Ordering Paragraphs

It is ordered:

1. The Commission establishes Docket Nos. MC2016–95 and CP2016–120 to consider the matters raised in each docket.

2. Pursuant to 39 U.S.C. 505, Kenneth R. Moeller is appointed to serve as an officer of the Commission to represent the interests of the general public in these proceedings (Public Representative).

3. Comments are due no later than March 21, 2016.

4. The Secretary shall arrange for publication of this order in the **Federal Register**.

By the Commission.

Stacy L. Ruble,

Secretary.

[FR Doc. 2016–06037 Filed 3–16–16; 8:45 am]

BILLING CODE 7710–FW–P

[1] Request of the United States Postal Service to Add Priority Mail Contract 196 to Competitive Product List and Notice of Filing (Under Seal) of Unredacted Governors' Decision, Contract, and Supporting Data, March 11, 2016 (Request).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–77353; File No. SR–NASDAQ–2016–034]

Self-Regulatory Organizations; The NASDAQ Stock Market LLC; Notice of Filing of Proposed Rule Change Regarding Monthly Distributions, Excess Returns, and Share Index Factors of Certain AccuShares® Trust I Funds

March 11, 2016.

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 March 2, 2016, The NASDAQ Stock Market LLC (''NASDAQ'' or the ''Exchange'') filed with the Securities and Exchange Commission (''Commission'') the proposed rule change as described in in Items I and II below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

NASDAQ proposes to indicate the following:

(1) That regular distributions (''Regular Distributions'') of the following Paired Class Shares issued by AccuShares® Trust I (formerly known as AccuShares Commodities Trust I) (the ''AccuShares Trust'' or ''Trust'')[3] will be made on a monthly basis on behalf of each of the following segregated series AccuShares S&P® GSCI® Industrial Metals Spot Fund, AccuShares S&P GSCI Crude Oil Spot Fund, and AccuShares S&P GSCI Brent Oil Spot Fund (each a ''Distribution Fund'', and collectively the ''Distribution Funds'');[4]

(2) That the following Paired Class Shares issued by the Trust will have their indexes changed from the spot variant to the excess return variant of such indexes and the funds will be renamed to accurately reflect the changes to the indexes—the AccuShares S&P GSCI Crude Oil Spot Fund will have its index changed from the S&P GSCI Crude Oil Spot Index to the S&P GSCI Crude Oil Excess Return Index and the fund will be renamed AccuShares S&P GSCI Crude Oil Excess Return Fund, and the AccuShares S&P GSCI Natural Gas Spot Fund will have its index changed from S&P GSCI Natural Gas Spot Index to S&P GSCI Natural Gas Excess Return Index and the fund will be renamed AccuShares S&P GSCI Natural Gas Excess Return Fund; and

(3) That the Share Index Factors[5] for the AccuShares Spot CBOE VIX Fund would be reset on a weekly basis on each Tuesday (after certain distribution dates), and the regular distributions for the AccuShares Spot CBOE VIX Fund would be made monthly on the third Tuesday rather than monthly on the

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

[3] AccuShares® is a registered trademark of AccuShares Holdings LLC. S&P®, S&P GSCI®, S&P 500® and Standard & Poor's® are registered trademarks of Standard & Poor's® Financial Services LLC. CBOE®, Chicago Board Options Exchange®, CBOE Volatility Index® and VIX® are registered trademarks of Chicago Board Options Exchange®, Incorporated (''CBOE''). Dow Jones® is a registered trademark of Dow Jones® Trademark Holdings LLC.

[4] The Paired Class Shares funds discussed in this proposal—the three Distribution Funds and the AccuShares S&P GSCI Natural Gas Spot Fund—and in addition the AccuShares S&P GSCI Spot Fund, the AccuShares S&P GSCI Agriculture and Livestock Spot Fund, and the AccuShares Spot CBOE® VIX® Fund, are approved for listing. *See* Securities Exchange Act Release No. 74299 (February 18, 2015), 80 FR 9778 (February 24, 2015) (SR–NASDAQ–2014–065) (order approving new Rule 5713 and listing seven AccuShares funds) (the ''AccuShares Order''). The first, and only, AccuShares fund that is currently listed and trading on the Exchange is the AccuShares Spot CBOE® VIX® Fund. *See also* Securities Exchange Act Release No. 72412 (June 17, 2014), 79 FR 35610 (June 23, 2014) (SR–NASDAQ–2014–065) (notice of filing regarding new Rule 5713 and listing seven AccuShares funds) (the ''AccuShares Proposal''). The funds approved for listing in the AccuShares Order are together called the ''Funds''.

[5] Share Index Factors are discussed below.

15th so that each monthly distribution date (and the end of each monthly measuring period) coincides with a Share Index Factor reset.

The text of the proposed rule change is available at *http://nasdaq.cchwallstreet.com/,* at NASDAQ's principal office, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the 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 Statutory Basis for, the Proposed Rule Change

1. Purpose

The purpose of this proposed rule change is to indicate the following:

(1) That Regular Distributions will be made on a monthly basis on behalf of each of the Distribution Funds;

(2) That the following Paired Class Shares issued by the Trust will have their indexes changed from the spot variant to the excess return variant of such indexes and the funds will be renamed to accurately reflect the changes to the indexes—the AccuShares S&P GSCI Crude Oil Spot Fund (''Crude Oil Fund'') will have its index changed from the S&P GSCI Crude Oil Spot Index to the S&P GSCI Crude Oil Excess Return Index and the fund will be renamed AccuShares S&P GSCI Crude Oil Excess Return Fund (''Excess Crude Oil Fund''), and the AccuShares S&P GSCI Natural Gas Spot Fund (''Natural Gas Fund'') will have its index changed from S&P GSCI Natural Gas Spot Index to S&P GSCI Natural Gas Excess Return Index and the fund will be renamed AccuShares S&P GSCI Natural Gas Excess Return Fund (''Excess Natural Gas Fund'');[6] and

(3) That the Share Index Factors for the AccuShares Spot CBOE VIX Fund (''VIX Fund'')[7] would be reset on a weekly basis on each Tuesday (after certain distribution dates), and the regular distributions for the VIX Fund would be made monthly on the third Tuesday rather than monthly on the 15th so that each monthly distribution date (and the end of each monthly measuring period) coincides with a Share Index Factor reset.[8]

Paired Class Shares—A Short Background[9]

The structure of Paired Class Shares is designed to be a passive unmanaged investment vehicle with the objective to provide investors with exposure to changes in an Underlying Benchmark as defined below. Paired Class Shares are expected to provide retail as well as institutional investors with a simple, liquid and cost effective means of simulating an investment in an Underlying Benchmark.

As noted in Rule 5713, Paired Class Shares will be issued by a trust on behalf of a segregated series of the Trust,[10] each of which is known as a Fund. Paired Class Shares will have values that are based on an index or other numerical variable (''Underlying Benchmark'') whose value reflects the value of assets, prices, price volatility or other economic interests (''Reference Asset'').[11] The Trust will always issue Paired Class Shares in pairs of shares of opposing classes of each Fund. The values of the opposing classes will move in opposite directions as the value of the Fund's Underlying Benchmark, such as VIX for the VIX Fund, varies from its starting level, where one constituent of the pair is positively linked to the Fund's Underlying Benchmark (''Up Shares'') and the other constituent is negatively linked to the Fund's Underlying Benchmark (''Down Shares''). The rate of linkage or leverage of a Fund's Up Shares and Down Shares performance to the performance of the Fund's referenced Underlying Benchmark will be one-to-one. The calculation of the liquidation value of a Fund attributable to each of its classes of Paired Class Shares (''Class Value''), and each Share of such class' pro rata portion of Class Value (''Class Value per Share''), will be determined according to a mathematical formula.[12]

Each Fund will engage in: (1) Scheduled Regular Distributions, (2) special distributions that are

[6] Excess returns, which are discussed below, are generally investment returns from a security or portfolio that exceed a benchmark or index with a similar level of risk. For the Excess Return Crude Oil Fund and the Excess Return Natural Gas Fund, the excess return index is calculated from holding a nearest-to-expiration futures contract, and exchanging such nearest-to-expiration contract for the contract expiring in the next following month in accordance with the monthly S&P GSCI roll schedule. The S&P GSCI roll schedule holds the nearest-to-expiration futures contract until the fifth trading day of each month, and over the fifth to ninth trading day of each month sells the nearest-to-expiration contract and purchases the contract expiring in the next following month (*i.e.* rolls the futures contracts) in five equal installments of twenty percent each. The excess return is inclusive of two things: The gain or loss associated with holding a futures contract and the gain or loss associated with the rolling of a futures contract to the next following expiration. In contrast, the spot variant does not include the gain or loss associated with rolling from the nearest-to-expiration contract to the next following contract (*i.e.* the spot variant only captures the return related to holding a contract). The excess return is replicated by holding and trading futures contracts underlying the index in accordance with the S&P GSCI roll schedule. The spot variant, on the other hand, cannot be directly hedged with rolling futures contracts, and its hedging requires active anticipatory hedging and rolling based on the price differentials between forward expiry futures contracts. The spot variant has not been used for any index in exchange traded products, whereas the excess variant routinely continues to be used for these purposes. In the case of the excess return indexes for the Excess Return Crude Oil Fund and the Excess Return Natural Gas Fund, the changes in the excess return variant may be larger or smaller than the changes in the benchmark spot return variant. *See also http://www.investopedia.com/terms/e/excessreturn.asp.*

[7] The VIX is a key measure of market expectations of near-term volatility conveyed by S&P 500® stock index option prices.

[8] Share Index Factors would continue to reset after any Regular Distribution or special distribution. In addition to Regular Distributions and special distributions, discussed below, Funds may also have corrective distributions and net income distributions. Since this filing does not implicate or change any of these other types of distributions, they are not discussed herein.

[9] The Exchange will not engage in a detailed discussion of the Funds or all aspects of Paired Class Shares. This is done for purposes of brevity. This short background description is intended only to provide context for discussion of the proposed rule change. For additional detail, *see* the AccuShares Order or AccuShares Proposal. *See also* Rule 5713.

[10] The Trust in the case of AccuShares is a Delaware statutory trust that was established into separate AccuShares Funds pursuant to the Second Amended and Restated Trust Agreement of the AccuShares Trust, by AccuShares Investment Management, LLC, a Delaware limited liability company, as sponsor (the ''Sponsor''), and Wilmington Trust, N.A., a national banking association, as trustee (the ''Trustee''), as it may be amended and restated from time to time (the ''Trust Agreement''). Under the Trust Agreement, the Sponsor has exclusive management and control of all aspects of the business of each Fund. Specifically, the Sponsor selects the Funds' service providers, negotiates various fees and agreements and performs such other services as the Sponsor believes that the AccuShares Trust may require from time to time. *See* 79 FR 35610 at 35615 (AccuShares Proposal).

[11] Other economic interests would include, for example, currencies, interest rates, non-investable economic indices and other measures of financial instrument value.

[12] The mathematical formula is based on the following factors: (1) The value of Fund assets, (2) the allocation of such value based on changes in the level of the Fund's Underlying Benchmark which may be limited, reduced, capped or otherwise modified according to formula or pre-set parameters, and (3) the daily accrual of gain and income or loss on the assets of the Fund, less the liabilities of the Fund, as such gains, income losses and liabilities are allocated to each class of the Fund.

automatically triggered upon the Underlying Benchmark exceeding a fixed rate of change since the Fund's prior regular or special distribution date or inception date in the case of the first distribution (each a ''prior distribution date''), and (3) corrective distributions that are automatically triggered when the trading price of a Paired Class Share deviates by a specified amount from its Class Value per Share for a specified period of time. Immediately after each Regular, special and corrective distribution, the Fund's Underlying Benchmark participation or exposure will be reset and the Fund's Class Value per Share for each of its classes will be set to equal the lowest Class Value per Share of the two classes of Paired Class Shares. To the extent any class of Paired Class Shares of a Fund has a positive net income from income or gain on class assets, after deduction of class liabilities, on a Regular or special distribution date as measured from the prior distribution date, such class of Paired Class Shares will receive a distribution in cash equal to such positive net income regardless of whether such class is entitled to a Regular or special distribution on such date.

Share Index Factors are used for the determination of Class Value and Class Value Per Share of a Fund. On a daily basis the custodian of a Fund (''Custodian'') [13] will determine the Class Value of each class of a Fund, which is based on the value of the Fund's Eligible Assets (''Eligible Assets'') [14] attributable to such class, (a) plus any accrued income or gains or losses on such assets attributable to such class (''Investment Income''), (b) less all fees, expenses and taxes attributable to such class not otherwise assumed by the Sponsor,[15] where such income and gains after deduction of such fees, expenses and taxes is referred to as the class ''Net Investment Income.'' [16] The Class Value per Share of each Fund's Up Shares will have a fixed one-to-one positive linear relationship with such Fund's Underlying Benchmark (the ''Up Share Index Factor'') and the Class Value per Share of each Fund's Down Shares will have a fixed one-to-one inverse linear relationship with such Fund's Underlying Benchmark (the ''Down Share Index Factor'' and together with the Up Share Index Factor, the ''Share Index Factors''). The Down Share Index Factor will equal negative one times the Up Share Index Factor. At the inception of operations of each Fund, the Sponsor will establish such Fund's Share Index Factors. After any regular or special distribution by a Fund, the Fund will reset its Share Index Factors—the VIX Fund would have additional resets to the Share Index Factors as described below. The payment of cash distributions causes Class Values per Share to be equal following each such distribution, where the Class Values per Share will be equal to the lowest Class Value per Share of either class calculated in determining the distribution.

This filing is being made to reflect the change in the Regular Distribution interval for the Distribution Funds from quarterly to monthly, to reflect the index changes and name changes of two funds, and to reflect that the Share Index Factors for the VIX Fund would be reset on a weekly basis on each Tuesday and the regular distribution dates would be monthly on each third Tuesday to coincide with a Share Index Factor reset. Upon operational effectiveness of this proposal, each such Distribution Fund would, like the VIX Fund currently, engage in monthly Regular Distributions, the two excess return Funds (Excess Crude Oil Fund and Excess Natural Gas Fund) would reflect excess return, and Share Index Factors for the VIX Fund will be reset on a weekly basis on Tuesday with related changes to the regular monthly distribution date to the third Tuesday of each month such that distribution dates coincide with a Share Index Factor reset all as described in more detail below. The Exchange believes that these changes will be beneficial to market participants that choose to trade the Funds.

Monthly Distribution

Rule 5713 does not specify the interval for Regular Distributions. Rather, Rule 5713 states only that a Fund may engage in ''scheduled regular distributions''.[17] The only mention of an interval for Regular Distributions is in footnote 40 in the AccuShares Proposal, which states that other than monthly Regular Distributions for VIX Fund and the Natural Gas Fund, AccuShares ''will engage in quarterly regular distributions.'' [18] In this proposal the Exchange proposes to indicate that the Distribution Funds will have Regular Distributions on a monthly basis. Thus, the Exchange proposes that each of the Distribution Funds will, like the VIX Fund and the Natural Gas Fund, engage in Regular Distributions each calendar month. The Exchange believes that this proposed change will serve to add an additional measure of consistency to investors and traders that may want to trade one or more of the Distribution Funds by themselves or in addition to the currently-traded VIX Fund, which has monthly Regular Distributions.[19]

The Exchange believes that consistency across all Funds (except AccuShares S&P GSCI Spot Fund and AccuShares S&P GSCI Agriculture and Livestock Spot Fund) vis-a-vis monthly Regular Distributions will be helpful to investors and traders. While some may have become aware of AccuShares and Paired Class Shares when the Exchange filed the AccuShares Proposal, many more have become aware of AccuShares and its product offerings with the listing and trading of the first of the Paired Class Shares products, namely the VIX Fund.[20] The VIX Fund (as also the Natural Gas Fund, which is not yet listed and traded) is currently structured with monthly Regular Distributions. The Exchange believes that consistency across all Funds (except AccuShares S&P GSCI Spot Fund and AccuShares S&P GSCI Agriculture and Livestock Spot Fund) in terms of monthly Regular Distributions would avoid potential investor confusion, and, as discussed

[13] Each Fund will have a Custodian pursuant to appointment by the AccuShares Trust and the terms of a domestic custodian agreement. The Custodian will hold each Fund's securities and cash, and will perform each Fund's Class Value and Class Value per Share calculations.

[14] Regarding Eligible Assets, the Funds are designed so that the cash proceeds from the creation of Paired Class Shares may be held by a Fund only in Eligible Assets designed to preserve capital while earning an investment return that is consistent with the preservation of capital. *See* 80 FR 9778 at 9780 (AccuShares Order).

[15] The Sponsor has exclusive management and control of all aspects of the business of each of the Funds.

[16] Such accrued income, gains, losses, fees, expenses and taxes will be allocated to each Share class on a daily basis, where such allocation is equal to the amount of such accrued income, gains, losses, fees, expenses and taxes multiplied by a fraction the numerator of which is the closing Class Value per Share of the referenced class and the denominator of which is the sum of the closing Class Values per Share of both classes of the Fund.

[17] *See* Rule 5713(d).

[18] *See* 79 FR 35610 at 35619 (AccuShares Proposal).

[19] The AccuShares S&P GSCI Spot Fund and the AccuShares S&P GSCI Agriculture and Livestock Spot Fund would continue to have Regular Distributions on a quarterly basis. In addition, the Exchange proposes to change the name of the Crude Oil Fund and the Natural Gas Fund so that the new names, namely AccuShares S&P GSCI Crude Oil Excess Return Fund and AccuShares S&P GSCI Natural Gas Spot Excess Return Fund, more accurately reflect how these funds will function. The Exchange also proposes to indicate that the Share Index Factors for the VIX Fund would be reset on a weekly basis on each Tuesday, and the regular distributions for the VIX Fund would be made monthly on the third Tuesday rather than monthly on the 15th so that each monthly distribution date (and each end of a monthly measuring period) coincides with a Share Index Factor reset. These changes are described below.

[20] The VIX Fund began trading on May 19, 2015.

below, could be advantageous to market participants. For example, the proposed monthly distributions could allow investors to redeploy gains from Up Shares or Down Shares to alternative, non-Fund investments in a tax efficient manner more frequently than investors could do with quarterly distributions. In addition, monthly distributions would better align the changes in the Class Values per Share of both the Up Shares and the Down Shares with a more current valuation of the underlying index. Moreover, with the commencement of trading of the VIX Fund on the Exchange, the Sponsor has received feedback from both current and potential investors about preferred distribution frequency. In particular, the majority of these market participants have indicated to the Sponsor that monthly Regular Distributions would be preferable to a longer period and would improve both trading and hedging. Monthly distributions can be more frequently redeployed in a tax efficient manner into the opposing share class or other positions. Additionally, for traders or market makers hedging or arbitraging the fund's shares, monthly distributions and concurrent monthly Share Index Factor settings will more closely align the funds with the most liquid monthly futures contracts and other exchange traded products which also employ a monthly index roll similar to the S&P GSCI commodity indexes.

Finally, in each instance of a distribution the Sponsor will continue to post a notice of such event and its details on the Sponsor's Web site (*www.AccuShares.com*). The Sponsor has also represented to the Exchange that each Fund engaging in a Regular Distribution (or, for that matter, a special distribution, corrective distribution, or net income distribution) will provide at least three business days' advance notice (or longer advance notice as may be required by the Exchange) [21] of such an event.

Excess Crude Oil Fund and Excess Natural Gas Fund

The Exchange proposes to change the underlying indexes from their spot variant to their excess return variant and to rename the AccuShares S&P GSCI Crude Oil Spot Fund to AccuShares S&P GSCI Crude Oil Excess Return Fund and the AccuShares S&P GSCI Natural Gas Spot Fund to AccuShares S&P GSCI Natural Gas Excess Return Fund. Market participants, in particular Authorized Participants [22] of the AccuShares Trust and market participants who are expected to act as liquidity providers for excess return Funds (''liquidity providers''), have recommended the index change and the related name revision. The Authorized Participants and liquidity providers have indicated that market making in the spot variant of the indexes (the current indexes variant) would require wider bid/offer spreads in comparison to using the excess return variant of the indexes.[23] That is, the current spot variant would require anticipatory hedging, rolls, and the management of forward contango and backwardation [24] risk (together ''spot requirements''), while in contrast these spot requirements are not important with excess return because they are naturally embedded in the excess return variant. The excess return variant is an index variant that is not novel, but rather is one that has been in use and is thus familiar to market makers and other market participants.[25] Moreover, the excess return variant is expected to benefit market participants through both narrower bid/offer spreads and an increased ability and proclivity for providing liquidity in all market conditions.[26] As such, market participants that choose to trade Pair Class Shares and benefit from the efficiency and transparency inherent in the product will also be able to benefit from the more easily traded and hedged excess return variant.

Both the spot variant and the excess return variant are computed from the same underlying futures contracts at the same point in time. The difference between the two variants occurs only on 5 trading days: The 5th through the 9th trading days of each month (the ''five day period''). During the five day period, each S&P GSCI commodity index underlying a Fund, whether monthly return or excess return, moves its reference from the front-month expiry contract to the next following contract (that is, the futures contract for the next consecutive expiry month) in five equal installments of twenty percent per day in order to capture the cost or the benefit from rolling the nearby front-month expiry contract into the next following expiry contract. In the excess return variant, the cost or benefit of transacting out of the current or front-month expiry contract and into the next or following futures contract is added to (or subtracted from) the index value. In contrast, in the spot variant this cost or benefit is not added to (or subtracted from) the index value,[27] and

[21] The Exchange may determine that longer notice is advisable in some circumstances (*e.g.,* an extended market break).

[22] Per note 13 of the AccuShares Order, an Authorized Participant may place orders to create or redeem one or more Creation Units, and must be (1) a registered broker-dealer or other securities market participant such as a bank or other financial institution which is not required to register as a broker-dealer to engage in securities transactions, (2) a direct participant in The Depository Trust Company, and (3) a party to an Authorized Participant Agreement with the Sponsor setting forth the procedures for the creation and redemption of Creation Units in a Fund.

[23] Market participants have indicated that their expected average holding and reassessment periods would be in the area of two to eight weeks, and that funds that offer excess return would be less costly because they would offer narrower bid/offer spreads and less risk. This would have several positive effects. First, investors are expected to buy or sell Fund shares concurrent with each reassessment. Second, such buying or selling is expected to be cheaper. Third, the narrower bid/offer spreads are expected to increase liquidity in the Fund shares, thus reducing the risk of buying or selling across a range of market conditions.

[24] Contango is normally when a futures price is above the expected future spot price. Because the futures price must converge on the expected future spot price, contango implies that futures prices are falling over time as new information brings them into line with the expected future spot price. Backwardation is normally when a futures price is below the expected future spot price and increases with time. For additional information, *see http://www.investopedia.com/articles/07/contango_backwardation.asp.*

[25] Products that use the excess return variant include DBO, OIL, UCO, UGAZ, and DGAZ. The crude oil products (DBO, OIL, and UCO) have current assets ranging from $400 to 800 million, and daily trading volumes ranging from 1 million to 11 million shares. The natural gas products (UGAZ and DGAZ) have current assets ranging from $80 million to $300 million, and daily trading volumes ranging from 4 million to 11 million shares. Other funds seek to track an excess return variant by transacting directly in the related futures contracts and some of those funds are larger than those listed.

[26] Because the excess return variant can be found in standard indexes used in exchange traded products, market makers are already accustomed to trading and hedging fund shares based on this variant. In addition to promoting narrower spreads and added liquidity, the excess return variant is directly hedgeable with conventional futures contracts, which contain the cost or benefit of the roll forward. Because the excess return variant precisely tracks the prices of the futures that a market maker is expected to use to both arbitrage and hedge the Fund shares, many more market makers are expected to engage in trading and arbitrage activities. With the excess return variant, the rolling effect of the index will be identical to the rolling performance of a futures hedge; and because the excess return variant precisely tracks an actual futures holding, a hedge can essentially remain static throughout a month and may require rebalancing only on those five days on which the excess return variant rolls its hypothetical positions. In contrast, the spot variant would require a more complex daily rebalancing of the futures hedge. Hedging and arbitraging the spot variant requires holding a next following futures contract (rather than the current futures contract) and manually rebalancing the next following futures contract amount on a daily basis to account for contango or backwardation between the futures hedge and the spot variant index.

[27] The Sponsor expects more market makers to participate in the excess return variant because of the reduced market making complexity. The potential benefits of additional market maker participation include: (i) The ability of market participants to transact higher share quantities at tighter bid/offer spreads, and (ii) more robust and predictable trading prices in fast moving or volatile markets.

as such, gives rise to needed anticipatory hedging which, based on feedback from Authorized Participants and market makers, is expected to result in increased bid/offer spreads.

VIX Fund Share Index Factor and Distribution Date

The Exchange is proposing a periodic resetting of the Share Index Factors for the VIX Fund where the Share Index Factors reset weekly on each Tuesday and where the regular distributions for the VIX Fund would be made monthly on the third Tuesday of the month so that each monthly distribution date (and each end of a monthly measuring period) coincides with a Share Index Factor reset.

Currently, after any Regular Distribution or special distribution by a Fund, a Fund will reset its Share Index Factors. Cash distributions cause Class Values per Share to be equal following each such distribution. The lowest Class Value per Share of either class calculated is used for the Share Index Factor.[28] The Exchange is proposing that the resetting of the Share Index Factors for the VIX Fund not wait for a distribution but rather that [sic] be done on a more frequent, weekly basis on each Tuesday. In a related change, the regular distributions for the VIX Fund would be made monthly on the third Tuesday rather than monthly on the 15th so that each monthly distribution date and end of each monthly measuring period coincides with a Share Index Factor reset. The Exchange believes that more frequent resets of the Share Index Factors for the VIX Fund will be beneficial to market participants that trade the fund because it will improve the arbitrage function of the fund's shares by aligning the setting of the Share Index Factors with the expiry of each weekly VIX futures contract, and because the Share Index Factor will reset with a frequency closer to the daily measurements of spot VIX. The weekly VIX futures began trading in July 2015—approximately two months after the launch of the VIX Fund. The weekly VIX futures are the preferred hedging futures contract for spot VIX with both higher correlations to spot VIX than the monthly contracts, and more timely responsiveness to changes in spot VIX. Changing the Share Index Factors to a weekly determination is expected to have two benefits, both of which are expected to narrow bid/offer spreads and increase trading volumes. First, the fund shares are expected to be more easily hedged with shorter duration VIX futures. Aligning the Share Index Factor resets to the shorter VIX futures would make the fund shares' responsiveness to VIX better aligned with the preferred hedging instrument. The arbitrage and hedging of fund shares would be simplified because the settlement of the shorter VIX futures will be coincidental with each Share Index Factor reset. That is, the preferred hedge is expected to be rolled on its expiry cycle by an arbitrageur or hedger, and the expiry cycle will coincide with each Share Index Factor reset. Second, the improved hedgeability is expected to bring the trading prices in closer alignment with fund share class values which are algorithmic and tied directly to changes in spot VIX.

As a result of this proposed change, Share Index Factor resetting will be taking place more frequently to the benefit of market participants.[29]

The Exchange believes that all three of the proposed changes will be beneficial to traders and investors, and that they meet the requirements of the Act.

The Exchange notes that this proposal makes three changes, as discussed, to the original AccuShares Order and AccuShares Proposal, *see* 80 FR 9778 and 79 FR 35610, and that the representations made in the original AccuShares Order and AccuShares Proposal remain unchanged.

2. Statutory Basis

The Exchange believes the proposed rule change is consistent with the Act and the rules and regulations thereunder, including the requirements of Section 6(b) of the Act.[30] In particular, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)[31] requirements that the rules of an exchange be designed to promote just and equitable principles of trade, to prevent fraudulent and manipulative acts and practices, to foster cooperation and coordination with persons engaged in facilitating transactions in securities, to remove impediments to and to perfect the mechanism for a free and open market and a national market system, and, in general, to protect investors and the public interest. The Exchange proposes to indicate that Regular Distributions of the Distribution Funds will be done on a monthly rather than on a quarterly basis, to rename two Funds to reflect excess return rather than spot, and to indicate that Share Index Factors for the VIX Fund would be reset on a weekly basis on Tuesday and the regular distributions will occur monthly on the third Tuesday of each month rather than on the 15th, as discussed. Thus, each such monthly distribution Fund (and in fact all of the Funds with the exception of AccuShares S&P GSCI Spot Fund and AccuShares S&P GSCI Agriculture and Livestock Spot Fund) would engage in monthly Regular Distributions, and the excess return Funds would be indexed to their excess return variant and re-named AccuShares S&P GSCI Crude Oil Excess Return Fund and AccuShares S&P GSCI Natural Gas Excess Return Fund. The Exchange believes that these proposed changes will be beneficial to market participants that choose to trade the Funds.

The Exchange believes that consistency across all Funds (except AccuShares S&P GSCI Spot Fund and AccuShares S&P GSCI Agriculture and Livestock Spot Fund) vis-à-vis monthly Regular Distributions will be helpful to investors and traders. While some may have become aware of AccuShares and Paired Class Shares when the Exchange filed the AccuShares proposal, many more have become aware of AccuShares and its product offerings with the listing and trading of the first of the Paired Class Shares products, namely the VIX Fund that began trading on May 19, 2015. The Exchange believes that consistency across Funds as discussed in terms of monthly Regular Distributions would avoid potential investor confusion, and, as discussed above, could be advantageous to market participants. In addition, the Sponsor has heard from current and potential investors about distribution. In particular, the majority of these market participants indicated to the Sponsor that monthly Regular Distributions would be preferable to a longer period because this would tend to have a positive impact on trading activity because better alignment with both futures hedges and better alignment with other exchange traded products would reduce intraday spreads by being more easily hedged and arbitraged, and more widely traded. This would help trading price stability and tracking in terms of premiums and discounts by both overall increasing trading volumes and making intraday and inter-day trading volumes more consistent, all of which is expected to contribute to narrower bid/offer spreads and more predictable fund performance.

[28] Immediately after each distribution, the fund's exposure will be reset, and the fund's Class Value per Share for each of its classes will be set to equal the lowest Class Value per Share of the two classes of Paired Class Shares. *See* 80 FR 9778 at 9779 (AccuShares Order).

[29] Share Index Factors would, as now, continue to reset after any Regular Distribution and special distribution.

[30] 15 U.S.C. 78f(b).

[31] 15 U.S.C. 78f(b)(5).

The Exchange believes that, as discussed, re-indexing and renaming the excess return Funds will be helpful to market participants. The excess return change is recommended by market participants. The Authorized Participants and liquidity providers have indicated that market making in the excess return Funds, as currently reflecting the spot variant of the index, would require wider bid/offer spreads in comparison to using the excess return variant of the index.[32] That is, the current spot variant would require anticipatory hedging, rolls, and the management of the spot requirements (*e.g.,* contango and backwardation risk), while in contrast these spot requirements are not important with excess return because they are naturally embedded in the excess return variant.

The Exchange notes that in each instance of a distribution the Sponsor will post a notice of such event and its details on the Sponsor's Web site (*www.AccuShares.com*). The Sponsor has also represented to the Exchange that each Fund engaging in a Regular Distribution (or, for that matter, a special distribution, corrective distribution, or net income distribution) will provide at least three business days' advance notice (or longer advance notice as may be required by the Exchange) [33] of such an event.

The Exchange believes that, as discussed, more frequent resetting of the Share Index Factors will likewise be beneficial to market participants. The Exchange is proposing that the resetting of the Share Index Factors for the VIX Fund not have to wait for a Regular or special distribution but rather be done on a more frequent, weekly basis on each Tuesday. More frequent resets of the Share Index Factors for the VIX Fund will be beneficial to market participants that trade the fund because it will improve the arbitrage function of the fund's shares by aligning the setting of the Share Index Factors with the expiry of each weekly VIX futures contract, and because the Share Index Factor will reset with a frequency closer to the daily measurements of spot VIX. The weekly VIX futures are the preferred hedging futures with both higher correlations to spot VIX than the monthly contracts, and more timely responsiveness to changes in spot VIX. Changing the Share Index Factors to a weekly determination is expected to have several advantages for market participants: Narrower bid/offer spreads and increased trading volumes; fund shares more easily hedged with shorter VIX futures; and improved hedgeability that should bring the trading prices in closer alignment with fund share class values which are algorithmic and tied directly to changes in spot VIX.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. The Exchange does not believe that the proposed rule change will have any impact on competition. The proposed rule change will achieve better consistency for the Funds of the Trust as discussed regarding the timing of Regular Distributions. The proposed rule change will have certain indexes changed from the spot variant to the excess return variant of such indexes, and will rename two of the Funds to reflect that these excess return Funds will use the excess return variant of the index underlying the Funds rather the current index variant that is based on spot. The proposed rule change will increase the frequency of Share Index Factor resets for the VIX Fund to occur weekly on each Tuesday, and will make a corresponding change to monthly distribution dates to the third Tuesday of each month such that a monthly distribution coincides with a weekly Share Index Factor reset. The Exchange believes that while these changes may not directly impact competition, they will be helpful for market participants.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

Written comments were neither solicited nor received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Within 45 days of the date of publication of this notice in the **Federal Register** or within such longer period up to 90 days (i) as the Commission may designate if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the Exchange consents, the Commission shall: (a) By order approve or disapprove such proposed rule change, or (b) institute proceedings to determine whether the proposed rule change should be disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (*http://www.sec.gov/rules/sro.shtml);* or
- Send an email to *rule-comments@sec.gov.* Please include File Number SR–NASDAQ–2016–034 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–2016–034. 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 Web site (*http://www.sec.gov/rules/sro.shtml).* Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–NASDAQ–2016–034 and should be submitted on or before April 7, 2016.

[32] Market participants have indicated that their expected average holding and reassessment periods would be in the area of two to eight weeks, and that excess return Funds, with narrower bid/offer spreads—which are advantageous to market participants—would be preferred.

[33] The Exchange may determine that longer notice is advisable in some circumstances (*e.g.,* an extended market break).

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[34]

Lynn M. Powalski,

Deputy Secretary.

[FR Doc. 2016–05977 Filed 3–16–16; 8:45 am]

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[34] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

Sunshine Act Meeting

Notice is hereby given, pursuant to the provisions of the Government in the Sunshine Act, Public Law 94–409, that the Securities and Exchange Commission (''Commission'') will hold an Open Meeting on Monday, March 21, 2016, at 11:00 a.m., in the Auditorium (L–002) at the Commission's headquarters building, to hear oral argument in an appeal from an initial decision of an administrative law judge by respondents Edgar Page (''Page'') and PageOne Financial, Inc. (''PageOne'').

On March 10, 2015, after the Commission instituted proceedings, Page and PageOne submitted an offer of settlement, accepted by the Commission, pursuant to which they consented to entry of an order: finding that they violated the Investment Advisers Act of 1940 by failing to disclose a conflict of interest; imposing a censure and a cease-and-desist order; and ordering additional proceedings to determine what, if any, disgorgement, prejudgment interest, civil penalties, and other remedial action is in the public interest. In an initial decision issued June 25, 2015, the law judge barred Page from the securities industry, revoked PageOne's investment adviser registration, ordered Page and PageOne to disgorge $2,184,850.30, with prejudgment interest, jointly and severally, and declined to impose a civil penalty.

Page and PageOne appealed the sanctions imposed in the initial decision. The Commission's Division of Enforcement cross-appealed the initial decision's imposition of a time-limited industry bar, as opposed to a permanent industry bar with a right to reapply. The oral argument is likely to address what penalties, if any, are appropriate in the public interest. Also likely to be considered at oral argument is whether these administrative proceedings violate the U.S. Constitution.

For further information, please contact the Office of the Secretary at (202) 551–5400.

Dated: March 14, 2016.

Lynn M. Powalski,

Deputy Secretary.

[FR Doc. 2016–06130 Filed 3–15–16; 11:15 am]

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–77350; File No. SR–BX–2016–014]

Self-Regulatory Organizations; NASDAQ BX, Inc.; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Amend Exchange Rule 7018

March 11, 2016.

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 February 29, 2016, NASDAQ BX, Inc. (''BX'' 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 fee schedule under Exchange Rule 7018(a) with respect to execution and routing of orders in securities priced at $1 or more per share.

This filing is being made for immediate effectiveness and will become operative March 1, 2016.

The text of the proposed rule change is also available on the Exchange's Web site at *http://nasdaqomxbx.cchwallstreet.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 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 is proposing to amend the fee schedule under BX Rule 7018(a), relating to fees and credits provided for orders in securities priced and $1 or more per share that execute on BX.

Under BX Rule 7018(a), the Exchange provides credits to member firms that access liquidity on BX. The Exchange is proposing to eliminate two credit tiers, as well as to amend the criteria of two other credit tiers, each for orders that access liquidity (excluding orders with midpoint pegging and excluding orders that receive price improvement and execute against an order with midpoint pegging).

Specifically, the first eliminated credit tier is for a member that adds and accesses liquidity equal to or exceeding 0.50% of total consolidated volume (''TCV'') during a month to receive a credit of $0.0017 per share executed. The second eliminated credit tier is for a member that accesses liquidity equal to or exceeding 0.05% of TCV during a month to receive a credit of $0.0008 per share executed.

Members that previously would have qualified under the eliminated tiers may continue to qualify for and receive either an equal or higher credit. Specifically, members that previously qualified for the credit of $0.0017 per share executed for adding and accessing liquidity equal to or exceeding 0.50% of TCV during a month may still receive the same credit, but for meeting the lower TCV threshold and through solely accessing liquidity (no longer includes adding liquidity) equal to or exceeding 0.20% of TCV during a month. Otherwise, members may receive a lower credit. For [sic] members that previously qualified for the credit of $0.0008 per share executed for accessing liquidity equal to or exceeding 0.05% of TCV during a month will receive a higher credit of $0.0015 per share executed for meeting the same monthly threshold.

The first amended credit tier reduces the threshold to qualify for a credit of $0.0016 per share executed. The current threshold requires a member to access liquidity equal to or exceeding 0.15% of TCV during a month. The proposed rule change lowers this threshold for a member to access liquidity equal to or

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

exceeding 0.10% of TCV during a month.

The second amended credit tier reduces the threshold to qualify for a credit of $0.0015 per share executed. The current threshold requires a member to access liquidity equal to or exceeding 0.09% of TCV during a month. The proposed rule change lowers this threshold for a member to access liquidity equal to or exceeding 0.05% of TCV during a month.

Additionally, the Exchange is proposing to eliminate the fee of $0.0014 per share executed for displayed orders entered by a member that adds and accesses liquidity equal to or exceeding 0.50% of TCV during a month.

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 its facilities which the Exchange operates or controls, and is not designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

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.'' [5] Likewise, in *NetCoalition* v. *Securities and Exchange Commission* [6] (''NetCoalition'') the DC Circuit upheld the Commission's use of a market-based approach in evaluating the fairness of market data fees against a challenge claiming that Congress mandated a cost-based approach.[7] As the court emphasized, the Commission ''intended in Regulation NMS that 'market forces, rather than regulatory requirements' play a role in determining the market data . . . to be made available to investors and at what cost.'' [8]

Further, ''[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' . . . .'' [9]

The Exchange believes that the proposed rule change to eliminate two credit tiers, as well as to amend the criteria of two other credit tiers, each for orders that access liquidity (excluding orders with midpoint pegging and excluding orders that receive price improvement and execute against an order with midpoint pegging), are reasonable because they refine the opportunities for market participants to receive credits for participation on BX and are designed to incentivize changes in market participant behavior to the benefit of the market overall [sic].

Specifically, the proposed rule change eliminates the credit tier for a member that adds and accesses liquidity equal to or exceeding 0.50% of TCV during a month to receive a credit of $0.0017 per share executed. Additionally, the proposed rule change eliminates the credit tier for a member that accesses liquidity equal to or exceeding 0.05% of TCV during a month to receive a credit of $0.0008 per share executed.

The proposed rule change to the criteria for a member that accesses liquidity to receive a credit of $0.0016 per share executed, lowers the TCV threshold during a month from equal to or exceeding 0.15% to equal to or exceeding 0.10%. Similarly, the proposed rule change to the criteria for a member that accesses liquidity to receive a credit of $0.0015 per share executed, lowers the TCV threshold during a month from equal to or exceeding 0.09% to equal to or exceeding 0.05%. The Exchange believes that the proposed rule change to lower the threshold in each of these instances is reasonable since it makes it easier for a member to qualify for the respective credit and will provide the opportunity for more firms to attain the tier and further incentivize participation in the market.

The Exchange also believes that the proposed elimination of the two credit tiers, coupled with the amending of two other credit tiers as stated above, are [sic] reasonable because the overall effect is to improve market quality by providing better targeted incentives to market participants to access beneficial displayed liquidity. To achieve this, the Exchange must, from time to time, adjust the levels of credits and the related qualification requirements in reaction to market behavior. In the present case, the Exchange is proposing to eliminate two credit tiers and amend two other credit tiers. The Exchange believes that the proposed changes are reasonable because it is [sic] reflective of the Exchange's desire to make BX an attractive venue to any member organization that is willing to access displayed liquidity. BX wants to further incentivize member firms to participate in the Exchange by removing liquidity and believes these refinements are a means to that end.

The Exchange believes that the proposed elimination of the two credit tiers, coupled with the amending of the two other credit tiers as stated above, are consistent with an equitable allocation of fees and are not unfairly discriminatory because they apply to all members that access displayed liquidity through BX and meet the criteria of the credit tier [sic]. In addition, the Exchange believes the elimination of the two credit tiers is consistent with an equitable allocation of fees and are [sic] is not unfairly discriminatory because members that previously would have qualified under the eliminated tiers may continue to qualify for and receive either an equal or higher credit (although they may instead qualify for a lower credit as stated previously). Additionally, the Exchange will provide the same credits to all similarly situated members that achieve the level of TCV required by the amended tiers.

BX believes that elimination of the fee of $0.0014 per share executed for displayed orders entered by a member that adds and accesses liquidity equal to or exceeding 0.50% of TCV during a month is reasonable because eliminating the fee may still allow a member the opportunity to qualify for this same fee if the displayed order is entered by a Qualified Market Maker (''QMM'') (as described in BX Rule 7018(a)). Also, even if the member is not a QMM, the member remains eligible to receive other fees lower than the base fee rate of $0.0020 per share executed.

The Exchange also believes that this proposed rule change is an equitable allocation of fees and is not unfairly discriminatory because the removal of

[3] 15 U.S.C. 78f(b).

[4] 15 U.S.C. 78f(b)(4) and (5).

[5] Securities Exchange Act Release No. 34–51808 (June 9, 2005).

[6] *NetCoalition* v. *SEC* 615 F.3d 525 (D.C. Cir. 2010).

[7] *Id.* at 534–535.

[8] *Id.* at 537.

[9] *Id.* at 539 (quoting ArcaBook Order, 73 FR at 74782–74783).

this fee will help the Exchange offset the payment of credits to other members and maintain an overall balance between the payment of credits and collection of fees, all in an effort to encourage liquidity on the market and to the benefit of market participants. BX also believes this proposed rule change is an equitable allocation of fees and is not unfairly discriminatory because the Exchange will apply the elimination of this fee equally to all similarly situated members. Additionally, the elimination of this fee combined with the elimination and amending of the credit tiers are [sic] evidence that the current fee and credit combinations did not have the intended effect of increasing activity so the Exchange is pursuing other avenues of credit and fee combinations.

Finally, BX 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 credit opportunities available at other venues to be more favorable. In such an environment, BX must continually adjust its fees and credits to remain competitive with other exchanges and with alternative trading systems that have been exempted from compliance with the statutory standards applicable to exchanges. The changes reflect this environment because they are designed to incentivize changes in market participant behavior to the benefit of the market overall.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will result in a burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act, as amended.[10] 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 credit opportunities available at other venues to be more favorable. In such an environment, the Exchange must continually adjust its fees and credits 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 own fees and credits in response, and because market participants may readily adjust their order routing practices, the Exchange believes that the degree to which fee changes in this market may impose any burden on competition is extremely limited. In this instance, the proposed eliminated and amended credit tiers, as well as the eliminated fee, are subject to extensive competition both from other exchanges and from off-exchange venues.

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 changes 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 change has become effective pursuant to Section 19(b)(3)(A) of the Act [11] and paragraph (f) of Rule 19b–4 [12] 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 should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (*http://www.sec.gov/rules/sro.shtml*); or
- Send an email to *rule-comments@sec.gov.* Please include File Number SR–BX–2016–014 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–BX–2016–014. 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 Web site (*http://www.sec.gov/rules/sro.shtml*). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549 on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–BX–2016–014, and should be submitted on or before April 7, 2016.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[13]

Lynn M. Powalski,

Deputy Secretary.

[FR Doc. 2016–05974 Filed 3–16–16; 8:45 am]

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[10] 15 U.S.C. 78f(b)(8).

[11] 15 U.S.C. 78f(b)(3)(A).

[12] 17 CFR 140.19n–4(f).

[13] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–77355; File No. SR–NASDAQ–2016–031]

Self-Regulatory Organizations; The NASDAQ Stock Market LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change To Amend Fees Under Rule 7018(a)

March 11, 2016.

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 February 29, 2016, The NASDAQ Stock Market LLC (''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 Rule 7018(a), concerning the fees and credits provided for the use of the order execution and routing services of the Nasdaq Market Center by members for all securities priced at $1 or more that it trades. While these amendments are effective upon filing, the Exchange has designated the proposed amendments to be operative on March 1, 2016.

The text of the proposed rule change is available on the Exchange's Web site at *http://nasdaq.cchwallstreet.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 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 Rule 7018(a), concerning the fees and credits provided for the use of the order execution and routing services of the Nasdaq Market Center by members for all securities priced at $1 or more that it trades. The Exchange is proposing to: (i) Increase a credit provided to a member for displayed quotes/orders that provide liquidity; (ii) modify the criteria required to receive a credit; and (iii) eliminate the fees and credits provided for execution of Orders in Select Symbols, as described further below.

First Change

The Exchange is proposing to increase a credit that it provides to members for displayed liquidity under Rule 7018(a). Currently, the Exchange provides a credit of $0.0030 per share executed to a member for displayed quotes/orders (other than Supplemental Orders or Designated Retail Orders) that provide liquidity if the member has (i) shares of liquidity provided in all securities during the month representing at least 0.15% of Consolidated Volume during the month, through one or more of its Nasdaq Market Center MPIDs, and (ii) Adds [sic] NOM Market Maker liquidity in Penny Pilot Options and/or Non-Penny Pilot Options of 0.90% or more of total industry ADV in the customer clearing range for Equity and ETF option contracts per day in a month on the Nasdaq Options Market. The Exchange provides the credit with the same criteria to securities of all three Tapes[3] under Rule 7018(a)(1)–(3).

The Exchange is proposing to increase the credit provided from $0.0030 per share executed to $0.00305 per share executed applicable to securities of all three Tapes. The Exchange believes that increasing the credit will provide members with a greater incentive to increase their provision of liquidity on both the Exchange and the Nasdaq Options Market.

Second Change

The Exchange is proposing to modify the criteria required to receive a credit for providing non-displayed orders (other than Supplemental Orders) that provide liquidity. Currently, the Exchange provides a credit of $0.0005 per share executed for other non-displayed orders if the member provides an average daily volume of 1 million or more shares per day through midpoint orders or other non-displayed orders during the month in Tape C securities.

Similarly, the Exchange provides a credit of $0.0010 per share executed for other[4] non-displayed orders if the member provides an average daily volume of 1 million or more shares per day through midpoint orders or other non-displayed orders during the month in Tape A and B securities.

The Exchange is proposing to modify the qualification criteria for each of the credit tiers under Rule 7018(a)(1)–(3) to now require that a member provide 0.03% or more of Consolidated Volume[5] during the month through midpoint orders or other non-displayed orders in lieu of the current requirement that the member have an average daily volume of 1 million or more shares per day through midpoint orders or other non-displayed orders during the month.

The Exchange believes that the new criteria will more closely tie the amount [sic] midpoint orders and other non-displayed orders required to receive the credit with the overall market conditions in any given month.

The Exchange is also proposing to eliminate the credit it provides for all other non-displayed orders (other than Supplemental Orders) that provide liquidity in Tape A and B securities, which do not otherwise qualify for the higher tier discussed above. Currently, the Exchange provides a credit of $0.0005 per share executed for other non-displayed orders in Tape A and B securities that provide liquidity. The Exchange does not provide a credit and does not assess a fee for such orders in Tape C securities. The Exchange is proposing to harmonize the credit tiers for Tape A and B securities with [sic] credit tier for Tape C securities by eliminating the $0.0005 per share executed credit and not assessing a fee or credit for such orders.

Third Change

The Exchange is proposing to eliminate the credit provided for certain ''select symbols'' under Rule 7018(a)(4). Under the current rule, [sic] members receiving less than a $0.0029 per share executed credit in [sic] pursuant to Rule 7018(a)(1)–(3) for displayed quotes/orders (other than Supplemental Orders or Designated Retail Orders) that provide liquidity for the securities listed under the rule, the Exchange will provide a credit of $0.0029 per share executed instead of the lower credit to these members for those securities. Currently, the credit provided by the

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

[3] Tape C securities are those that are listed on the Exchange, Tape A securities are those that are listed on NYSE, and Tape B securities are those that are listed on exchanges other than Nasdaq or NYSE.

[4] The Exchange also provides credits for non-displayed mid-point orders that provide liquidity under the rule.

[5] Consolidated Volume is the total consolidated volume reported to all consolidated transaction reporting plans by all exchanges and trade reporting facilities during a month in equity securities, excluding executed orders with a size of less than one round lot. For purposes of calculating Consolidated Volume and the extent of a member's trading activity, expressed as a percentage of or ratio to Consolidated Volume, the date of the annual reconstitution of the Russell Investments Indexes shall be excluded from both total Consolidated Volume and the member's trading activity. *See* Rule 7018(a).

rule applies to the following securities, by ticker symbol: EEM, EWJ, GDX, IWM, NUGT, SPY, UWTI, VXX, XIV, and XLF. The Exchange did not observe an appreciable improvement in market quality in the select symbols on the Exchange, which was its goal in adopting the credit.[6] As a consequence, the Exchange is proposing to eliminate the credit [sic]

2. Statutory Basis

The Exchange believes that its proposal is consistent with Section 6(b) of the Act[7] in general, and furthers the objectives of Sections 6(b)(4) and 6(b)(5) of the Act[8] 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 or system which the Exchange operates or controls, and is not designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

First Change

The Exchange believes that the proposed increase to the credit it provides to members for displayed liquidity is reasonable because it is designed to further incentivize members to improve the market through the provision of shares of liquidity in all securities during the month, consistent with its efforts to draw additional order flow to the Exchange to improve market quality for all market participants. If effective, the Exchange believes that the increased incentive will improve overall market quality on both the Exchange and NOM. The Exchange believes that the proposed increased credit is an equitable allocation and is not unfairly discriminatory because the Exchange will provide the credit to all members that qualify for it under the rule.

Second Change

The Exchange believes that modifying the criteria required to receive the credit for providing non-displayed orders (other than Supplemental Orders) that provide liquidity is reasonable because the proposed change will more closely align the level of liquidity provided by the members in comparison to the market as a whole.

Specifically, the Exchange is tying the requirement to Consolidated Volume provided during the month through midpoint orders or other non-displayed orders in lieu of the current requirement that the member have an average daily volume of 1 million or more shares per day through midpoint orders or other non-displayed orders during the month.

The Exchange believes that the new criteria may potentially make achieving the credit more difficult to the extent Consolidated Volume is high in a given month and will likely represent a stricter criterion upon adoption. The Exchange believes it is a better metric to apply to measure a member's participation through midpoint orders or other non-displayed orders during the month in contrast to a static criteria average daily volume. The Exchange believes that the proposed modification of the criteria is equitably allocated [sic] and not unfairly discriminatory because the amended credit criteria applies uniformly to securities across all Tapes and all members that elect to meet the criteria of the credit tier will receive the credit.

The Exchange believes reducing the credit it provides for all other non-displayed orders (other than Supplemental Orders) that provide liquidity in Tape A and B securities that do not otherwise qualify for the higher tier is reasonable because the Exchange must periodically assess the effectiveness of the incentives it provides in the form of reduced fees and credits and, in certain cases, change or eliminate those fees and credits once they are no longer needed. By doing so, the Exchange is able to deploy incentives in other areas that the Exchange determines are in need of market improvement. The Exchange notes that it currently does not provide any credit for such orders in Tape C securities.

The Exchange believes that the proposed elimination of the credits is equitably allocated and not unfairly discriminatory because all members will neither receive a credit nor be assessed a fee under the tier, regardless of the listing venue of the security.

Third Change

The Exchange believes that eliminating the credit provided to members for transactions in ''select symbols'' under Rule 7018(a) is reasonable because the Exchange did not observe an appreciable improvement in market quality in the select symbols which, as explained, was the Exchange's goal in adopting the credit.

As noted above, the Exchange must periodically assess the effectiveness of the incentives it provides in the form of reduced fees and credits and, in the case of ineffective incentives, eliminate the incentive so that the Exchange may apply its resources to other, possibly more effective, incentives.

The Exchange believes that elimination of the credit is equitably allocated and not unfairly discriminatory because it will apply to all members equally. In this regard, the credit was available to any member that met the criteria and in the absence of the credit, members may now qualify for other, albeit lower, credits under Rule 7018(a).

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. 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 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 own fees in response, and because market participants may readily adjust their order routing practices, the Exchange believes that the degree to which fee changes in this market may impose any burden on competition is extremely limited.

In this instance, the proposed changes to the credits available to member firms for execution of securities of the three Tapes do not impose a burden on competition because the Exchange's execution services are completely voluntary and subject to extensive competition both from other exchanges and from off-exchange venues.

The proposed changes to the credits provided to members are reflective of a robust and competitive securities market, where trading venues must provide incentives to participants in the form of credits to attract order flow and adjust those incentives to make them more competitive or to allow the Exchange to provide other market-improving incentives elsewhere.

Moreover, trading venues are free to adjust their fees and credits in response to any changes that the Exchange makes to its fees and credits. If any of the changes proposed herein are [sic] unattractive to market participants, it is likely that the Exchange will lose

[6] *See* Securities Exchange Act Release No. 73967 [sic] (October 29, 2015), 80 FR 68377 (November 4, 2015) (SR–NASDAQ–2015–126).

[7] 15 U.S.C. 78f(b).

[8] 15 U.S.C. 78f(b)(4) and (5).

market share as a result. Accordingly, the Exchange does not believe that the proposed changes will impair the ability of members or competing order execution venues to maintain their competitive standing in the financial markets [sic].

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.[9]

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is: (i) Necessary or appropriate in the public interest; (ii) for the protection of investors; or (iii) otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (*http://www.sec.gov/rules/sro.shtml*); or
- Send an email to *rule-comments@sec.gov.* Please include File Number SR–NASDAQ–2016–031 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–2016–031. 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 Web site (*http://www.sec.gov/rules/sro.shtml*). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–NASDAQ–2016–031 and should be submitted on or before April 7, 2016.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[10]

Lynn M. Powalski,

Deputy Secretary.

[FR Doc. 2016–05989 Filed 3–16–16; 8:45 am]

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[9] 15 U.S.C. 78s(b)(3)(A)(ii).

[10] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–77349; File No. SR–NYSEArca–2016–43]

Self-Regulatory Organizations; NYSE Arca, Inc.; Notice of Filing and Immediate Effectiveness of Proposed Rule Change Amending Rules 7.31P(j) and 7.34P(c) To Allow Q Orders To Participate in the Early Trading Session and Late Trading Session

March 11, 2016.

Pursuant to Section 19(b)(1)[1] of the Securities Exchange Act of 1934 (the ''Act''),[2] and Rule 19b–4 thereunder,[3] notice is hereby given that on March 9, 2016, NYSE Arca, Inc. (the ''Exchange'' or ''NYSE Arca'') 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 amend Rules 7.31P(j) (Orders and Modifiers) and 7.34P(c) (Trading Sessions) to allow Q Orders to participate in the Early Trading Session and Late Trading Session. The proposed rule change is available on the Exchange's Web site 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 Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to amend Rules 7.31P(j) and 7.34P(c), which govern the operation of Q Orders on the Exchange's Pillar trading platform. A Q Order is a limit order submitted to the NYSE Arca Marketplace by a Market Maker, and designated by a Market Maker as a ''Q Order'' through such means as the Corporation shall specify.[4]

Rule 7.34(b)(1) describes the operation of Q orders on the current, or legacy, platform and states that Q Orders may be entered beginning at the start of the Core Trading Session or at such earlier time during the Opening Session as determined from time to time by the Corporation, and continuing until the end of the Core Trading Session. Further, Rule 7.34(d)(1), which describes which orders are permitted in

[1] 15 U.S.C. 78s(b)(1).

[2] 15 U.S.C. 78a.

[3] 17 CFR 240.19b–4.

[4] *See* Rule 7.31P(j). The term ''NYSE Arca Marketplace'' is defined in Rule 1.1(e) as the electronic securities communications and trading facility designated by the Board of Directors through which orders of Users are consolidated for execution and/or display. The term ''Market Maker'' is defined in Rule 1.1(v) as an ETP Holder that acts as a Market Maker pursuant to Rule 7, which includes Lead Market Makers. The term ''Corporation'' is defined in Rule 1.1(k) to mean NYSE Arca Equities.

the Opening Session at the Exchange on the current trading platform, does not restrict the entry of Q Orders during the Opening Session (the Early Trading Session in Pillar).[5] While Q Orders are not required for the Opening or Late Trading Session, on the current trading platform, Market Makers are permitted to enter such orders during those sessions.

As the Exchange described when it adopted Rule 7.31P(j)(2), Q Orders on the Pillar trading platform operate in a similar manner as they do on the trading platform that Pillar will replace.[6] However, for Pillar, Rule 7.34P provides that a Q Order is not eligible to participate in either the Early Trading Session or the Late Trading Session, and if a Q Order includes a designation for one of those sessions, it will be rejected.[7]

The Exchange understands that Market Makers registered on the Exchange currently enter Q Orders for participation in the Opening Session so that they may begin assessing pricing in Exchange-listed securities. To assist Market Makers with meeting their obligations to make two-sided markets in Exchange-listed securities, and to facilitate the price-discovery process and ability of Market Makers to price the security for the Core Trading Session, the Exchange proposes to amend the Pillar rules so that Q Orders can be entered during the Early Trading Session. With this change, Q Orders would function in Pillar no differently than they do on the current trading platform in terms of when they can be entered on the Exchange.

Additionally, while there is limited use for Market Makers to submit Q Orders during the Late Trading Session, the Exchange currently accepts Q Orders designated for the Late Trading Session, and proposes to continue to allow Market Makers to enter Q Orders designated for the Late Trading Session, to the extent they choose to do so, in order to ensure that the migration to Pillar is seamless and minimally disruptive for Market Makers. In addition, the Exchange believes that permitting Market Makers to include a designation for the Late Trading Session for Q Orders would promote the display of liquidity on the Exchange during all trading sessions, and not just when a Market Maker has obligations to display liquidity during the Core Trading Session.

To effect this change, the Exchange proposes to amend Rule 7.31P(j)(2) to delete the first sentence of that rule, which provides that Q Orders are only eligible to participate in the Core Trading Session. The Exchange also proposes to amend the third sentence of the current rule to provide that Market Makers are not obligated to but may enter Q Orders during the Early or Late Trading Session. The Exchange further proposes to amend Rules 7.34P(c)(1)(A) and (c)(3)(A) to remove any reference to Q Orders as not being eligible to participate in the Early Trading Session or Late Trading Session or that if a Q Orders is designated for either the Early or Late Trading Session, it will be rejected. The proposed amendments to current Rules 7.34P(c)(1)(A) and 7.34P(c)(3)(A) would make clear that Q Orders are eligible to participate in the Early Trading Session and the Late Trading Session, respectively, and if such orders are submitted with a designation for the Early Trading Session or the Late Trading Session, they would not be rejected.

2. Statutory Basis

The proposed rule change is consistent with Section 6(b) of the Securities Exchange Act of 1934 (the ''Act''),[8] in general, and furthers the objectives of Section 6(b)(5),[9] in particular, because 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.

Specifically, the Exchange believes that the proposed rule change would remove impediments to and perfect the mechanism of a free and open market and a national market system by assisting Market Makers in Exchange-listed securities to meet their obligation to make markets in their registered securities by using Q Orders during the Early Trading Session to gauge market interest in securities so that they may be priced appropriately for the Core Trading Session. In addition, the Exchange believes that permitting Market Makers to include a designation for the Late Trading Session for Q Orders would remove impediments to and perfect the mechanism of a free and open market and a national market system because it would promote the display of liquidity on the Exchange during all trading sessions, and not just when a Market Maker has obligations to display liquidity during the Core Trading Session. To this end, the proposed rule change would allow Pillar to operate no differently than the trading platform Pillar will replace, in terms of when Q Orders can be entered on the Exchange. Accordingly, the proposed rule change would provide that on Pillar, Market Makers would not be obligated to enter Q Orders in securities in which they are registered during the Early or Late Trading Sessions, but would be permitted to do so.

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 proposed change is not designed to address any competitive issue but rather to make amendments to Rules 7.31P and 7.34P relating to Q Orders so that they may be entered during the Early Trading Session and Late Trading Session.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

No written comments were solicited or received with respect to the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Because the proposed rule change does not (i) significantly affect the protection of investors or the public interest; (ii) impose any significant burden on competition; and (iii) become operative for 30 days from the date on which it was filed, or such shorter time as the Commission may designate, it has become effective pursuant to Section 19(b)(3)(A) of the Act[10] and Rule 19b–4(f)(6) thereunder.[11]

[5] Rule 7.34(d)(3)(A), however, provides that Orders eligible for the Display Order Process (other than Q Orders) and for the Working Order Process, including NOW Orders and PNP Orders, that have been designated as available for the Late Trading Session are eligible for entry into and execution on the NYSE Arca Markeplace [sic].

[6] *See* Securities Exchange Act Release Nos. 75497 (July 21, 2015), 80 FR 45022 (July 28, 2015) (Notice of Filing of SR–NYSEArca–2015–56); and 76267 (October 26, 2015), 80 FR 66951 (October 30, 2015) (Order Approving SR–NYSEArca–2015–56).

[7] *See* Rule 7.34P(c)(1)(A) and 7.34P(c)(3)(A).

[8] 15 U.S.C. 78f(b).

[9] 15 U.S.C. 78f(b)(5).

[10] 15 U.S.C. 78s(b)(3)(A).

[11] 17 CFR 240.19b–4(f)(6). As required under Rule 19b–4(f)(6)(iii), the Exchange provided the Commission with written notice of its intent to file the proposed rule change, along with a brief description and the text of the proposed rule change, at least five business days prior to the date

Continued

A proposed rule change filed pursuant to Rule 19b–4(f)(6) under the Act[12] normally does not become operative for 30 days after the date of its filing. However, Rule 19b–4(f)(6)(iii)[13] permits the Commission to designate a shorter time if such action is consistent with the protection of investors and the public interest. The Exchange has asked the Commission to waive the 30-day operative delay so that the proposal may become operative immediately upon filing. The Exchange stated that it intends to begin migrating symbols to the Pillar platform within thirty days from the date of this filing. According to the Exchange, waiver of the operative delay will allow Market Makers registered on the Exchange to enter Q Orders designated for the Early and Late Trading Sessions on the Pillar platform, which the Exchange believes will facilitate the price discovery process on the Exchange. The Commission believes the waiver of the operative delay is consistent with the protection of investors and the public interest. Therefore, the Commission hereby waives the operative delay and designates the proposal operative upon filing.[14]

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule change should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (*http://www.sec.gov/rules/sro.shtml*); or
- Send an email to *rule-comments@sec.gov.* Please include File Number SR–NYSEArca–2016–43 on the subject line.

Paper Comments

- Send paper comments in triplicate to Brent J. Fields, Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549–1090.

All submissions should refer to File Number SR–NYSEArca–2016–43. 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 Web site (*http://www.sec.gov/rules/sro.shtml*). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549 on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–NYSEArca–2016–43, and should be submitted on or before April 7, 2016.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[15]

Lynn M. Powalski,

Deputy Secretary.

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of filing of the proposed rule change, or such shorter time as designated by the Commission.

[12] 17 CFR 240.19b–4(f)(6).

[13] 17 CFR 240.19b–4(f)(6)(iii).

[14] For purposes only of waiving the 30-day operative delay, the Commission has also considered the proposed rule's impact on efficiency, competition, and capital formation. *See* 15 U.S.C. 78c(f).

[15] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–77354; File No. SR–NASDAQ–2016–032]

Self-Regulatory Organizations; The NASDAQ Stock Market LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change To Amend the Market Quality Incentive Programs Under Rule 7014

March 11, 2016.

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 March 1, 2016, The NASDAQ Stock Market LLC (''Nasdaq'' or ''Exchange'') filed with the Securities and Exchange Commission (''SEC'' or ''Commission'') the proposed rule change as described in Items I and II, below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to: (i) Change the qualification requirements of, and add an additional rebate to, the Qualified Market Maker Program; (ii) modify the maximum fee assessed for participation in the Exchange Opening and Closing Crosses, and extend the program to include participation in the Exchange Halt Cross, under the Lead Market Maker Program; and (iii) modify the requirements and rebates provided under the NBBO Program.

The text of the proposed rule change is available on the Exchange's Web site at *http://nasdaq.cchwallstreet.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 Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The purpose of the proposed rule change is to amend the Market Quality Incentive Programs under Rule 7014 to: (i) Change the qualification requirements of, and add an additional rebate to, the Qualified Market Maker Program; (ii) modify the maximum fee assessed for participation in the Exchange Opening and Closing Crosses, and extend the program to include participation in the Exchange Halt Cross, under the Lead Market Maker Program; and (iii) modify the requirements and rebates provided under the NBBO Program.

Qualified Market Maker Program Changes

The Exchange is proposing three changes to the Qualified Market Maker (''QMM'') Program: (1) Eliminate the requirement that only a Primary Nasdaq Market Center MPID (a ''QMM MPID'' for purposes of the QMM Program) [3] may be used to qualify as a QMM under Rule 7014(d); (2) eliminate the restriction that the per share executed rebates and fees provided by the program are limited to a QMM MPID under Rule 7014(e); and (3) offer new rebates under Rule 7014(e) of the program, which will be offered in Tape C securities.[4]

The QMM Program provides incentives to Exchange market makers to make a significant contribution to market quality by providing liquidity at the NBBO in a large number of stocks for a significant portion of the day. Under Rule 7014(d), members must meet certain criteria to qualify as a QMM, such as not imposing burdens on the Exchange and its market participants that may be associated with excessive rates of entry of orders away from the inside and/or order cancellation.[5]

Under Rule 7014(e), the Exchange provides a rebate per share executed with respect to all other displayed Orders (other than Designated Retail Orders as defined in Rule 7018) in securities priced at $1 or more per share that provide liquidity and that are entered through a QMM MPID and were for securities listed on NYSE (''Tape A QMM Incentive'') or securities listed on exchanges other than the Exchange and NYSE (''Tape B QMM Incentive'') (both incentives are collectively described as the ''QMM Incentives'').

The QMM Incentives have two tiers, Tier 1 and Tier 2, with Tier 2 having higher requirements and rebates than Tier 1. The requirements and rebates of the Tiers under both QMM Incentives are identical. To qualify under Tier 1, a QMM must execute shares of liquidity provided in all securities through one or more of its Nasdaq Market Center MPIDs that represent above 0.70% up to, and including, 0.90% of Consolidated Volume [6] during the month. If a QMM qualifies under Tier 1, it will receive a $0.0001 per share executed rebate in Tape A and Tape B securities, as described above. To qualify under Tier 2, a QMM must execute shares of liquidity provided in all securities through one or more of its Nasdaq Market Center MPIDs that represent above 0.90% of Consolidated Volume during the month. If a QMM qualifies under Tier 2, it will receive a $0.0002 per share executed rebate in Tape A and Tape B securities, as described above.

Under Rule 7014(d) [sic], the Exchange also charges a fee of $0.0030 per share executed for orders in Exchange-listed securities, and a fee of $0.00295 per share executed for orders in securities listed on exchanges other than the Exchange, priced at $1 or more per share that access liquidity on the Exchange and that are entered through a QMM MPID. To qualify for these fees, the QMM's volume of liquidity added through one or more of its MPIDs during the month (as a percentage Consolidated Volume) must not be less than 0.80%.

First, the Exchange is proposing to eliminate the requirement that only a Primary Nasdaq Market Center MPID may be used to qualify as a QMM under Rule 7014(d). By eliminating the requirement that a member may qualify only with its Primary Nasdaq Market Center MPID and allowing any MPID that the member may possesses to qualify under the QMM Program, the Exchange is significantly broadening potential eligibility for the program among members.

Second, the Exchange is proposing to eliminate the requirement that the rebates and fees applied to a member under the program apply only to orders sent through a QMM MPID. Currently, the Exchange limits the rebates and fees provided by the program to orders entered through a QMM MPID. As noted above, a QMM MPID is defined as a qualifying QMM's Primary Nasdaq Market Center MPID. By allowing all MPIDs to receive the rebates and fees of the QMM Program that a QMM qualifies for, the Exchange is increasing the incentive to members to provide Consolidated Volume sufficient to qualify under the tiers of the program.

Third, the Exchange is proposing to make Tape C securities eligible for rebates under the QMM Program. The Exchange is creating a new ''Tape C QMM Incentive,'' which will have a Tier 1 and Tier 2 that are identical to those of the Tape A and Tape B QMM Incentives, as described above. The Tape C QMM Incentive, like the other incentives under the QMM Program, is designed to reward QMMs, in the form of a rebate, for providing significant levels of Consolidated Volume. Extending such rewards, to a qualifying QMM's Tape C displayed orders (other than a Designated Retail Order, as defined in Rule 7018) in securities priced at $1 or more per share that provide liquidity may lead to greater participation in the program and, in turn, improve market quality for all market participants.

Lead Market Maker Program Changes

The Exchange is proposing to amend Rule 7014(f)(4): (1) To expand applicability under the Lead Market Maker Program (''LMM Program'') of a maximum fee on participation in the Exchange Opening Cross [7] and Closing Cross [8] to include participation in a Halt Cross,[9] and (2) to lower the maximum fee assessed for participation those [sic] Crosses.

The LMM Program is designed to provide incentive to market makers to make markets in certain exchange-traded products (''ETPs''). To achieve this, the Exchange provides credits and reduced fees to a designated LMM for execution of a Qualified Security. Under Rule 7014(f)(1), a security may be designated as a ''Qualified Security'' if: (A) it is an ETP listed on the Exchange pursuant to Exchange Rules 5705, 5710, 5720, 5735, or 5745; and (B) it has at least one LMM.

[3] *See* Rule 7014(d).

[4] Tape C securities are those that are listed on the Exchange, Tape A securities are those that are listed on NYSE, and Tape B securities are those that are listed on exchanges other than Nasdaq or NYSE.

[5] *See* Rule 7014(d)(1)–(3) for the QMM qualification requirements.

[6] Consolidated Volume is the total consolidated volume reported to all consolidated transaction reporting plans by all exchanges and trade reporting facilities during a month in equity securities, excluding executed orders with a size of less than one round lot. For purposes of calculating Consolidated Volume and the extent of a member's trading activity, expressed as a percentage of or ratio to Consolidated Volume, the date of the annual reconstitution of the Russell Investments Indexes shall be excluded from both total Consolidated Volume and the member's trading activity. *See* Rule 7018.

[7] *See* Rule 4752.

[8] *See* Rule 4753.

[9] *See* Rule 4754.

An LMM is a registered Exchange market maker for a Qualified Security that has committed to maintain minimum performance standards, which are based on certain percentages of time that the LMM is quoting at the national best bid and offer (''NBBO''). Currently, the Exchange has three performance criteria tiers based on the time that an LMM is quoting at the NBBO: (1) Above 15% to 20%; (2) above 20% to 50%; and (3) above 50%. For each tier, the Exchange provides rebates for displayed liquidity and a maximum fee for participation in the Opening and Closing Crosses.

First, the Exchange is proposing to include activity in the Exchange Halt Cross in the maximum fee provided by the program. Currently, the Exchange provides a maximum fee for participation in the Exchange's Opening and Closing Crosses. Under Rule 7018, a Participant,[10] including an LMM, is assessed a per share executed charge of $0.0015 to $0.0008 for participation in the Opening and Closing Crosses.[11] Under the LMM Program, the Exchange provides a maximum fee an LMM will pay for participation in the Opening and Closing Crosses of $0.0010 per executed share if the LMM is at the NBBO above 15% to 20% of the time.[12] If a LMM is at the NBBO in excess of 20% of the time, it is not assessed any per executed share fee for participation in the Opening and Closing Crosses.

The Exchange is proposing to extend the fee limits under the this [sic] tier to include participation in the Halt Cross, which currently has a fee of $0.0010 per executed share.[13]

Second, the Exchange is proposing to reduce the maximum fee provided for participation in the Crosses under Rule 7014(f)(4) if the LMM is at the NBBO above 15% to 20% of the time from $0.0010 per executed share to $0.0005 per executed share.

NBBO Program Changes

The Exchange is proposing to make three changes to the NBBO Program: (1) Eliminate the $0.0002 per share executed rebate tier provided under the program; (2) decrease the $0.0004 per share executed rebate tier and modify the criteria required to receive it; (3) modify the criteria of the $0.0001 per share executed rebate tier and increase the rebate to $0.0002 per share executed.

The NBBO program provides incentive to members to improve the quality of the market by rewarding members that provide significant market-improving order flow with a rebate.

The Exchange provides a $0.0004 per share executed rebate in securities listed on NYSE and a $0.0002 per share executed rebate in securities listed on exchanges other than the Exchange or NYSE, which are available to any member that provides shares of liquidity in all securities through one or more of its Nasdaq Market Center MPIDs that represent 0.50% or more of Consolidated Volume during the month; or (2) add NOM Market Maker liquidity, as defined in Chapter XV, Section 2 of the Nasdaq Options Market rules, in Penny Pilot Options and/or Non-Penny Pilot Options above 0.90% of total industry customer equity and ETF option ADV contracts per day in a month.

The Exchange also provides members that qualify for the NBBO Program a $0.0001 per share executed rebate[14] with respect to all other displayed orders (other than Designated Retail Orders, as defined in Rule 7018) in securities priced at $1 or more per share that provide liquidity if the member qualifies for the $0.0004 or $0.0002 per share executed rebate tiers, and has a ratio of at least 25% NBBO liquidity provided[15] to liquidity provided during the month.

First, the Exchange is proposing to no longer offer the $0.0002 per share executed rebate provided under the rule in Tape C securities. Second, the Exchange is proposing to reduce the remaining $0.0004 per share executed credit provided in Tape A and B securities to $0.0002 per share executed, delete the NOM Market Maker liquidity-based eligibility criteria requirement under the rebate tier, and modify the remaining Consolidated Volume-based criteria by increasing the level of Consolidated Volume provided during the month from 0.5% to 1.0%.

Third, the Exchange is proposing to modify the level of rebate provided and the qualification criteria of the $0.0001 per share executed rebate the Exchange provides to members that qualify for the NBBO Program, and have a ratio of at least 25% NBBO liquidity provided to liquidity provided during the month. The Exchange is also proposing to require that a member execute shares of liquidity provided in all securities through one or more of its Nasdaq Market Center MPIDs that represents 0.5% or more of Consolidated Volume during the month.

The Exchange notes that it has incorporated one of the qualifying criteria required to receive the $0.0004 and $0.0002 per share executed rebates, into this rebate tier. The Exchange is also proposing to increase the rebate from $0.0001 per share executed to $0.0002 per share executed

2. Statutory Basis

The Exchange believes that its proposal is consistent with Section 6(b) of the Act,[16] in general, and furthers the objectives of Sections 6(b)(4) and 6(b)(5) of the Act,[17] 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 or system which the Exchange operates or controls, and is not designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

Qualified Market Maker Program Changes

The Exchange believes that the proposed changes to the QMM Program are reasonable because they increase the incentives provided by the program. Eliminating the restriction that only Primary MPIDs be used to qualify for the program will provide greater opportunity to members to qualify and participate in the program.

Likewise, eliminating the restriction that the per share executed rebates provided by the program are limited to liquidity provided through a QMM MPID is reasonable because it will expand the number of MPIDs that receive the rebate. In turn, it will provide greater opportunity for improvements to market quality. Making Tape C securities eligible for rebates under the QMM Program is reasonable because it is reflective of the Exchange's desire to improve market quality on the Exchange generally through use of rebates. In this case, the Exchange is proposing to extend the rebates it provides under the program to include the securities of all three Tapes.

[10] As defined by Rule 4701(c).

[11] *See* Rule 7018(d) and (e).

[12] An LMM will be assessed the charge under Rules 7018(d) or (e) if it is lower than the maximum charge it qualifies for under Rule 7014(f)(4). For example, if an LMM was eligible to receive a maximum charge of $0.0010 per share executed under the first tier of Rule 7014(f)(4), but also qualified for a charge of $0.0008 per share executed in the closing cross under Tier A of Rule 7018(d)(2), the LMM would receive the lower charge under Rule 7018(d)(2).

[13] *See* Rule 7018(f).

[14] The rebate is provided in addition to any rebate or credit payable under Rule 7018(a) and the Investor Support, QMM, and NBBO Programs under Rule 7014.

[15] NBBO liquidity provided means liquidity provided from orders (other than Designated Retail Orders, as defined in Rule 7018) that establish the NBBO, and displayed a quantity of at least one round lot at the time of execution.

[16] 15 U.S.C. 78f(b).

[17] 15 U.S.C. 78f(b)(4) and (5).

As noted above, the QMM Program provides incentives to a member to make a significant contribution to market quality by providing liquidity at the NBBO in a large number of stocks for a significant portion of the day. The Exchange believes that expanding the program to include Tape C securities will make the program more attractive to members and promote its goal of improving market quality.

The Exchange also believes that eliminating the restriction that only Primary MPIDs be used to qualify for the program is an equitable allocation and is not unfairly discriminatory because it will allow more members the opportunity to qualify for the program. Furthermore, eliminating the restriction that the rebates provided by the QMM Program only apply to qualifying orders entered through a QMM MPID is an equitable allocation and is not unfairly discriminatory because it will apply to all members that qualify as QMMs under the program.

In addition, including Tape C securities as eligible for rebates under the QMM Program is an equitable allocation and is not unfairly discriminatory because the Exchange will apply the same fee to all similarly situated members. In this regard, the proposed change to the rule is an equitable allocation and is not unfairly discriminatory because the rebates are provided uniformly to all QMMs that qualify for the rebates and all QMMs have an equal opportunity to earn the discounted fee for accessing liquidity.

Moreover, the Exchange believes that providing qualifying QMMs rebates in Tape C securities is equitable and not unfairly discriminatory because, in return for the rebates, QMMs are providing a significant contribution to market quality by providing displayed liquidity, to the benefit of all market participants.

Lead Market Maker Program Changes

The Exchange believes that the proposed changes to the LMM Program are reasonable because it is reflective of the Exchange's desire to improve market quality through the use of reduced fees. As noted above, the LMM Program is designed to provide incentive to LMMs to make markets in certain ETPs.

The Exchange is proposing to provide further incentive to LMMs to quote at the NBBO a significant percentage of the time by extending the maximum fee for participation in the Opening and Closing Crosses to now include the Halt Cross.

Similarly, the Exchange is providing further incentive to LMMs to provide liquidity at the NBBO by decreasing the maximum fee the LMM will be assessed for participation in the Crosses under the lowest tier. Thus, the proposed changes are reflective of the Exchange's efforts to incentivize market participants to improve market quality.

The Exchange believes that the proposed changes to the LMM Program are an equitable allocation and are not unfairly discriminatory because the Exchange will apply the same fee to all similarly situated members. Specifically, the Exchange will provide the same maximum fee for participation in all of the Crosses, to the extent the LMM qualifies under one of the tiers. Last, the Exchange believes that providing LMMs a maximum fee in the Opening, Closing, and Halt Crosses is equitable and not unfairly discriminatory because, in return for the reduced fees, LMMs are providing beneficial displayed liquidity to the benefit of all market participants.

NBBO Program Changes

The Exchange believes that proposed changes to the NBBO Program are reasonable because they more narrowly focus the program, which the Exchange believes may increase participation in the program. As noted above, the NBBO program provides incentives to members to improve the quality of the market by rewarding members that provide significant market-improving order flow with a rebate.

Currently, to qualify for $0.0004 and $0.0002 per share executed NBBO rebates, members must execute shares in of [sic] liquidity through one or more of its MPIDs that represents 0.5% or more of Consolidated Volume during the month, or add NOM Market Maker liquidity in Penny Pilot Options and/or Non-Penny Pilot Options above 0.90% of total industry customer equity and ETF option ADV contracts per day in a month.

The Exchange believes it is reasonable to eliminate the Tape C rebate, decrease the $0.0004 per share executed rebate provided in Tape A and B securities to $0.0002 per share executed, and modify the qualification criteria because doing so will allow the Exchange to increase the other rebates under the program, which will better align the program with improving the NBBO.

The Exchange also believes that eliminating the NOM Market Maker liquidity-based eligibility criteria under the rule and modifying the remaining Consolidated Volume-based criteria by increasing the level of Consolidated Volume required to receive the rebate from 0.5% to 1.0% is reasonable because the Exchange is more narrowly focusing the requirement on overall participation in the markets in contrast to liquidity provided only on NOM. The NOM Market Maker liquidity-based eligibility criteria have not been effective at providing an incentive to members to participate in the program.

The Exchange believes that it is reasonable to include a requirement that a member must execute shares in of [sic] liquidity through one or more of its MPIDs that represents 0.5% or more of Consolidated Volume during the month in order to receive the $0.0002 per share executed rebate under the amended NBBO Program for all other displayed orders is reasonable because it is an existing requirement to receive the existing $0.0001 per share executed fee under the program.

Thus, members qualifying under the program must not only improve the NBBO significantly, but also provide improvement to the market overall by contributing a significant level of Consolidated Volume, which is consistent with the current requirements to receive the rebate under the NBBO Program. The Exchange believes that increasing the rebate from $0.0001 to $0.0002 per share executed will provide a greater incentive to members to participate in the program.

The Exchange believes the proposed changes to the NBBO Program are equitable and not unfairly discriminatory because the NBBO Program rebates and their qualification criteria will apply uniformly to all similarly situated members. Members that elect to provide the levels of Consolidated Volume required by the amended rule, and in the case of the proposed $0.0002 per share executed rebate establish the NBBO with a ratio of at least 25%, will receive the amended rebates.

Last, although elimination of the NOM Market Maker based criteria may impact members that are also market makers on NOM, the revised Consolidated Volume based criteria will apply to all members, not only those participating on NOM as market makers.

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. 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 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 own fees in response, and because market participants may readily adjust their order routing practices, the Exchange believes that the degree to which fee changes in this market may impose any burden on competition is extremely limited.

In this instance, the proposed changes to the fees and rebates provided to member firms under the market quality incentive programs of Rule 7014 do not impose a burden on competition because the Exchange's execution services are completely voluntary and subject to extensive competition both from other exchanges and from off-exchange venues.

Rather than placing a burden on competition, the proposed fees and rebates are reflective of the fierce competition among market venues to attract order flow, including displayed liquidity, to the benefit of all market participants. All of the proposed changes to the incentive programs under Rule 7014 are designed to improve their effectiveness in achieving their stated purposes. If any of 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 changes 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) of the Act and paragraph (f) of Rule 19b–4 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.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (*http://www.sec.gov/rules/sro.shtml*); or
- Send an email to *rule-comments@sec.gov.* Please include File Number SR–NASDAQ–2016–032 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–2016–032. 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 Web site (*http://www.sec.gov/rules/sro.shtml*). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–NASDAQ–2016–032 and should be submitted on or before April 7, 2016.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[18]

Lynn M. Powalski,

Deputy Secretary.

[FR Doc. 2016–05978 Filed 3–16–16; 8:45 am]

BILLING CODE 8011–01–P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–77348; File No. SR–NYSEMKT–2016–29]

Self-Regulatory Organizations; NYSE MKT LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change Amending Sections 401 and 402 of the NYSE MKT Company Guide To Harmonize the Exchange's Immediate Release and Trading Halt Policies

March 11, 2016.

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 February 29, 2016, NYSE MKT LLC (the ''Exchange'' or ''NYSE MKT'') filed with the Securities and Exchange Commission (''SEC'' or ''Commission'') the proposed rule change as described in Items I and II below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to amend Sections 401 and 402 of the NYSE MKT Company Guide (the ''Company Guide'') to harmonize the Exchange's immediate release and trading halt policies with recent changes made to the comparable policies of the New York Stock Exchange (''NYSE''). The proposed rule change is available on the Exchange's Web site 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

[18] 17 CFR 200.30–3(a)(12).

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

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 Sections 401 and 402 of the Company Guide to harmonize the Exchange's immediate release and trading halt policies with recent changes made to the comparable policies of the NYSE (referred to herein as the ''NYSE Amendment'').[3]

Consistent with the NYSE Amendment, the Exchange proposes to amend Sections 401 and 402 of the Company Guide to (i) expand the pre-market hours during which listed companies are required to notify the Exchange prior to disseminating material news, and (ii) provide the Exchange with authority to halt trading (a) during pre-market hours at the request of a listed company, (b) when the Exchange believes it is necessary to request certain information from listed companies, and (c) when an Exchange-listed security is also listed on another national or foreign securities exchange and such other exchange halts trading in such security for regulatory reasons. The Exchange also proposes to add commentary to Section 402 of the Company Guide to provide guidance related to the release of material news after the close of trading on the Exchange.

Sections 401 and 402 of the Company Guide give the Exchange authority to halt trading in a listed company's security under certain circumstances. Currently, the Exchange may impose a regulatory trading halt when a listed company announces material news[4] shortly before the opening of trading on the Exchange or during the Exchange trading session (currently 9:30 a.m. to 4:00 p.m.). When that happens, the Exchange will typically institute a regulatory halt in trading, which halts trading on all market centers, to ensure full dissemination of the news to investors. The Exchange proposes to expand the hours and circumstances under which it can declare a regulatory trading halt.

Currently, Sections 401 and 402 of the Company Guide require listed companies to notify the Exchange at least ten minutes in advance of releasing material news if such release will take place shortly before the opening of trading on the Exchange or during Exchange market hours (the ''Material News Policy''). The Exchange proposes to amend Sections 401 and 402 to require companies to comply with the Material News Policy between 7:00 a.m. and 4:00 p.m. Eastern Time. In the Exchange's experience, most companies release news related to corporate actions and other material events between 7:00 a.m. and 9:30 a.m. Although trading on the Exchange does not begin until 9:30 a.m., the Exchange believes that material news released between 7:00 a.m. and 9:30 a.m. has the potential to cause volatility in both price and volume during pre-market trading that occurs on other market centers as well as once trading opens on the Exchange. However, because there is a lower volume of trading in such pre-market hours, the Exchange believes that a listed company is most well positioned to determine whether a trading halt is appropriate given the news it intends to release. Therefore, to facilitate an orderly opening and ensure thorough dissemination of material news, the Exchange believes it is beneficial to require companies to comply with the Material News Policy and advise whether a trading halt is appropriate during pre-market hours.

As discussed above, when a listed company releases material news during the course of the trading day, the Exchange will typically halt trading temporarily to ensure full dissemination of the news. Under the proposed rules, between 7:00 a.m. and the opening of trading on the Exchange, the Exchange may implement a regulatory halt in circumstances where (i) the listed company has informed Exchange staff that it intends to make a public announcement of material news and (ii) the listed company requests that trading in its listed securities be halted pending dissemination of the public announcement (a ''Pre-Market Halt'').[5] While trading on the Exchange does not begin until 9:30 a.m. Eastern Time, trading (including trading in Exchange listed securities) begins on NYSE Arca Equities, Inc., the Nasdaq Stock Market and other national securities exchanges at 4:00 a.m. Eastern Time. When the Exchange implements a regulatory trading halt to allow for the release of material news, other national securities exchanges that trade Exchange-listed securities also halt trading in such security until the Exchange lifts the halt.[6]

The Exchange notes that the volume of trading in the hours before trading begins on the Exchange is generally lighter and conducted predominantly by professional investors. Because of this reduced trading volume and the fact that the Exchange itself is not yet open for trading during these hours, the Exchange believes it is appropriate to institute a Pre-Market Halt only at the request of a listed company. The Exchange notes that the NYSE Amendment contains a similar provision and Nasdaq Stock Market (''Nasdaq'') has adopted a comparable rule with respect to trading halts between the hours of 7:00 a.m. and 9:30 a.m.[7] Lastly, when a trading halt is implemented during Exchange market hours, Rule 123D—Equities specifies that a Floor Governor or two Floor Officials must approve the halt in trading. However, because a Pre-Market Halt will only be instituted at the request of a listed company and because Floor Governors and Floor Officials are not typically on the trading floor during pre-market hours, the Exchange proposes to include a statement that, notwithstanding anything to the contrary in Rule 123D(1)—Equities, the approval of the Floor Governors or Floor Officials is not required for a Pre-Market Halt.

The Exchange proposes to further amend Section 402 of the Company Guide to add proposed Commentary .02, which will set forth circumstances in which it may institute a regulatory halt while it awaits information requested from a listed company. Sections 401 and 402 currently limit the Exchange's authority to halt trading to situations when a listed company intends to release material news shortly before and during market hours. However, in the Exchange's experience there are other scenarios when it may be advisable to halt trading for the protection of investors. For example, if there is

[3] *See* Securities Exchange Release No. 75809 (September 2, 2015); 80 FR 54362 (September 9, 2015) (SR–NYSE–2015–38).

[4] The Exchange considers material news to be any news that is reasonably likely to have a material impact on the price or trading volume of a listed security.

[5] However, the proposed rule will state that if it appears that dissemination of material news will not be complete prior to the opening of trading on the Exchange at 9:30 a.m., the Exchange may temporarily halt trading in order to facilitate an orderly opening process. This is consistent with the Exchange's current practice.

[6] *See,* for example, NYSE Arca Equities Rule 7.18 and Nasdaq Stock Market Rule 4120(a)(2) for the authority to initiate a trading halt.

[7] *See* Section 202.06(B) of the NYSE Listed Company Manual and Nasdaq Stock Market Rule 4120(a)(1) (which applies between the hours of 4:00 a.m. and 9:30 a.m.).

uncertainty surrounding material news issued by a listed company or a company's compliance with the Exchange's continued listing standards, the Exchange believes it may be appropriate to halt trading while it gathers information to resolve such ambiguity. Accordingly, the Exchange proposes to add proposed Commentary .02 to Section 402 to state that if it is necessary to request information from a listed company relating to (i) material news, (ii) the listed company's compliance with Exchange continued listing requirements, or (iii) any other information which is necessary to protect investors and the public interest, the Exchange may halt trading in such listed company's security until it has received and evaluated the requested information.[8]

As discussed above, the Exchange believes that the release of material news immediately prior to the commencement of trading on the Exchange has the potential to cause significant volatility to the opening process. Similarly, material news released immediately after 4:00 p.m. Eastern Time can interfere with the closing process. Although trading on the Exchange stops at 4:00 p.m. Eastern Time, the order book for each listed security is manually closed by the security's Designated Market Maker (''DMM''), a process that can take several minutes before the closing auction is completed. Because trading continues after 4:00 p.m. Eastern Time on other exchanges, if a listed company releases material news immediately after 4:00 p.m. Eastern Time there can be significant price movement on other markets when compared to the last sale price on the Exchange. The result, therefore, is that a DMM can be executing trades at the Exchange closing price while the same security is simultaneously trading on other exchanges at a very different price. As this discrepancy can cause confusion to investors, the Exchange proposes to include advisory text as proposed new Commentary .03 to Section 402 of the Company Guide requesting that listed companies intending to release material news after the close of trading on the Exchange wait until the earlier of the publication of their security's official closing price on the Exchange or 15 minutes after the scheduled closing time on the Exchange.[9] The Exchange proposes to specify that trading on the Exchange typically closes at 4:00 p.m. Eastern Time, except that on certain days trading closes early at 1:00 p.m. Eastern Time.

Lastly, the Exchange proposes to include in proposed Commentary .02 to Section 402 a provision stating that it may halt trading in an American Depositary Receipt (''ADR'') or other security listed on the Exchange, when the Exchange-listed security (or the security underlying the ADR) is listed on or registered with another national securities exchange or foreign exchange or market and such other exchange (or regulatory authority overseeing such exchange) halts trading in such security for regulatory reasons.[10]

2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with Section 6(b)[11] of the Act, in general, and furthers the objectives of Section 6(b)(5) of the Act,[12] in particular in that it is designed 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 and is not designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

The Exchange believes that the proposed amendment is consistent with the investor protection objectives of section 6(b)(5) because it gives the Exchange greater flexibility to implement regulatory trading halts in a listed security when such halts may be necessary for the protection of investors. Specifically, the proposed rule change will alter the hours in which listed companies are required to comply with the Material News Policy such that the hours are from 7:00 a.m. to 4:00 p.m. Eastern Time (rather than just shortly before the opening of trading on the Exchange and during the Exchange trading session, as is currently the case). The proposed rule change will also enable the Exchange to (i) implement a Pre-Market Halt at the request of a listed company when the company intends to issue material news between 7:00 a.m. and 9.30 a.m. Eastern Time, (ii) halt trading when it believes it is necessary to request certain information from listed companies, and (iii) halt trading in an ADR or other Exchange-listed security when the Exchange-listed security or the security underlying the ADR is listed on or registered with another national securities exchange or foreign exchange or market and is halted on such other exchange or market for regulatory reasons. Additionally, the Exchange proposes to include advisory text in Section 402 of the Company Guide requesting that listed companies intending to release material news after the close of trading on the Exchange wait until the earlier of the publication of their security's official closing price on the Exchange or 15 minutes after the scheduled closing time on the Exchange. The Exchange believes this change will eliminate confusion to investors when a DMM is executing a trade at the Exchange closing price while the same security is simultaneously trading on other exchanges at a very different price.

The Exchange believes that each of the proposed changes enumerated above is consistent with the investor protection objectives of section 6(b)(5) because they provide the Exchange with additional authority to halt trading in circumstances where material news that may impact trading is to be released by listed companies or has not yet been fully disseminated. The Exchange believes that material news is highly relevant to investors when deciding to buy or sell securities and thus providing the Exchange with additional authority to halt trading while such news is released and disseminated is protective of investors. In addition, the Exchange believes the proposed rule change is consistent with the protection of investors because it will specify in Exchange rules the scenarios in which a trading halt may be necessary, thereby promoting transparency in Exchange rules and making them easier to navigate. In giving the Exchange authority to declare regulatory trading halts in situations described herein, the proposed rule change enables the Exchange to act in the best interest of protecting investors.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange believes that the proposed amendments to Sections 401 and 402 of the Company Guide do not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. As discussed herein, the Exchange's

[8] The proposed change in this regard mirrors Section 202.06(B) of the NYSE Listed Company Manual and Nasdaq Stock Market Rule 4120(a)(5).

[9] Although the Exchange typically closes at 4:00 p.m. Eastern Time, there are certain days each year when it closes at 1:00 p.m. Eastern Time. The phrase ''15 minutes after the scheduled closing time'' will account for these early closings.

[10] The Exchange notes that the NYSE follows this practice under Section 202.06(B) of the Listed Company Manual and Nasdaq does so under Nasdaq Stock Market Rule 4120(a)(4).

[11] 15 U.S.C. 78f(b).

[12] 15 U.S.C. 78f(b)(5).

proposed amendments to Sections 401 and 402 are designed to give the Exchange greater flexibility to halt trading in a particular listed security when the Exchange believes a halt is necessary or appropriate. Currently, Sections 401 and 402 only permit the Exchange to implement regulatory trading halts for the dissemination of material news. As currently drafted, the Exchange believes these rules are unnecessarily restrictive and do not cover the full spectrum of situations where a trading halt may be necessary for the protection of investors. In addition, the Exchange believes that its proposed changes are consistent with the NYSE and Nasdaq rules with respect to trading halts. For the foregoing reasons, therefore, the Exchange does not believe that such 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

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 foregoing proposed rule change does not: (i) Significantly affect the protection of investors or the public interest; (ii) impose any significant burden on competition; and (iii) become operative prior to 30 days from the date on which it was filed, or such shorter time as the Commission may designate, it has become effective pursuant to Section 19(b)(3)(A) of the Act [13] and Rule 19b–4(f)(6) [14] 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 under Section 19(b)(2)(B) of the Act [15] to determine whether the proposed rule change should be approved or disapproved.

[13] 15 U.S.C. 78s(b)(3)(A).

[14] 17 CFR 240.19b–4(f)(6).

[15] 15 U.S.C. 78s(b)(2)(B).

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (*http://www.sec.gov/rules/sro.shtml*); or
- Send an email to *rule-comments@sec.gov.* Please include File Number SR–NYSEMKT–2016–29 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–NYSEMKT–2016–29. 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 Web site (*http://www.sec.gov/rules/sro.shtml*). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549 on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–NYSEMKT–2016–29, and should be submitted on or before April 7, 2016.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[16]

Lynn M. Powalski,

Deputy Secretary.

[FR Doc. 2016–05972 Filed 3–16–16; 8:45 am]

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[16] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–77351; File No. SR–Phlx–2016–33]

Self-Regulatory Organizations; NASDAQ PHLX LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change to Rebates and Fees for Adding and Removing Liquidity in SPY

March 11, 2016.

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 February 29, 2016, NASDAQ PHLX LLC (''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 Pricing Schedule at Section I, entitled ''Rebates and Fees for Adding and Removing Liquidity in SPY.''

While changes to the Pricing Schedule pursuant to this proposal are effective upon filing, the Exchange has designated these changes to be operative on March 1, 2016.

The text of the proposed rule change is available on the Exchange's Web site at *http://nasdaqomxphlx.cchwallstreet.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 Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

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 Pricing Schedule at Section I, entitled ''Rebates and Fees for Adding and Removing Liquidity in SPY,'' to (i) amend the Specialist [3] and Market Maker [4] Rebate for Adding Liquidity in Simple Orders; and (ii) reduce all Fees for Removing Liquidity in Simple Orders. The amendments will be described in greater detail below.

Fees and rebates applicable to options overlying Standard and Poor's Depositary Receipts/SPDRs (''SPY'') [5] are located in Section I of the Exchange's Pricing Schedule. The Exchange specifies which fees and rebates apply to Simple Orders and Complex Orders.[6] This proposal specifically applies to Simple Order pricing in SPY in Part A. The Exchange is not amending the Complex Order pricing in SPY in Part B.

Simple Order—Rebate for Adding Liquidity

Today, the Exchange pays a SPY Simple Order Rebate for Adding Liquidity of $0.20 per contract to Specialists and Market Makers. All other market participants do not receive a SPY Simple Order Rebate for Adding Liquidity. The Exchange proposes to replace the $0.20 per contract SPY Simple Order Rebate for Adding Liquidity with tiered rebates.

The Exchange proposes to pay a $0.15 per contract Specialist and Market Maker SPY Simple Order Rebate for Adding Liquidity to participants that add 1 to 2,499 electronically executed Simple Order contracts per day in a month in SPY. The Exchange proposes to pay a $0.20 per contract Specialist and Market Maker SPY Simple Order Rebate for Adding Liquidity to participants that add 2,500 to 4,999 electronically executed Simple Order contracts per day in a month in SPY. The Exchange proposes to pay a $0.25 per contract Specialist and Market Maker SPY Simple Order Rebate for Adding Liquidity to participants that add 5,000 to 19,999 electronically executed Simple Order contracts per day in a month in SPY. Finally, the Exchange proposes to pay a $0.30 per contract Specialist and Market Maker SPY Simple Order Rebate for Adding Liquidity to participants that add greater than 20,000 electronically executed Simple Order contracts per day in a month in SPY. The Exchange believes that the proposed four tier rebate structure would incentive market participants to add more Specialist and Market Maker liquidity in SPY on the Exchange.

Today, if a SPY transaction originates from the Exchange floor, that transaction is subject to the Multiply Listed Options Fees.[7] However, if one side of the transaction originates on the Exchange floor and any other side of the trade was the result of an electronically submitted order or a quote, then the Section I fees apply to the transactions which originated on the Exchange floor and contracts that are executed electronically on all sides of the transaction.[8] The Exchange will continue to treat the one side of the transaction which originates on the Exchange floor in the same manner and will count the one side of the transaction which originates on the Exchange floor toward the number of contracts to qualify for the Simple Order Rebate for Adding Liquidity for Specialists and Market Makers in SPY.

Simple Order—Fee for Removing Liquidity

Today, the Exchange assesses a $0.44 per contract Customer [9] Simple Order Fee for Removing Liquidity in SPY and a $0.49 per contract Simple Order Fee for Removing Liquidity in SPY to Specialists, Market Makers, Firms,[10] Broker-Dealers [11] and Professionals.[12] The Exchange proposes to decrease the Simple Order Fees for Removing Liquidity and assess a $0.43 per contract Customer Simple Order Fee for Removing Liquidity in SPY and a $0.47 per contract Simple Order Fee for Removing Liquidity in SPY to Specialists, Market Makers, Firms, Broker-Dealers and Professionals. The Exchange believes that the reduction of the Simple Order Fees for Removing Liquidity in SPY will encourage participants to send additional order flow to the Exchange.

Cross-Reference and Marketing Fee

The Exchange proposes to correct a typographical error related to a cross reference in the beginning of this section by removing the reference to Section ''C'' and properly adding the Section ''I'' reference.

The Exchange proposes to replace the words ''Payment for Order Flow Fee'' with the words ''Marketing Fee'' to conform this term throughout the Pricing Schedule. The Exchange recently amended this term throughout the Pricing Schedule in a prior rule change and inadvertently did not mark this term to be amended as well.[13]

2. Statutory Basis

The Exchange believes that its proposal is consistent with Section 6(b) of the Act [14] in general, and furthers the

[3] The term ''Specialist'' applies to transactions for the account of a Specialist (as defined in Exchange Rule 1020(a)).

[4] The term ''Market Maker'' describes fees and rebates applicable to Registered Options Traders (''ROT''), Streaming Quote Traders (''SQT'') and Remote Streaming Quote Traders (''RSQT''). A ROT is defined in Exchange Rule 1014(b) as a regular member of the Exchange located on the trading floor who has received permission from the Exchange to trade in options for his own account. A ROT includes SQTs and RSQTs as well as on and off-floor ROTS. An SQT is defined in Exchange Rule 1014(b)(ii)(A) as an ROT who has received permission from the Exchange to generate and submit option quotations electronically in options to which such SQT is assigned. An RSQT is defined in Exchange Rule in 1014(b)(ii)(B) as an ROT that is a member affiliated with an RSQTO with no physical trading floor presence who has received permission from the Exchange to generate and submit option quotations electronically in options to which such RSQT has been assigned. A Remote Streaming Quote Trader Organization or ''RSQTO,'' which may also be referred to as a Remote Market Making Organization (''RMO''), is a member organization in good standing that satisfies the RSQTO readiness requirements in Rule 507(a).

[5] Options overlying Standard and Poor's Depositary Receipts/SPDRs (''SPY'') are based on the SPDR exchange-traded fund (''ETF''), which is designed to track the performance of the S&P 500 Index.

[6] A Complex Order is an order involving the simultaneous purchase and/or sale of two or more different options series in the same underlying security, priced as a net debit or credit based on the relative prices of the individual components, for the same account, for the purpose of executing a particular investment strategy.

[7] *See* Multiply Listed Options Fees in Section II of the Exchange's Pricing Schedule.

[8] *See* Part C of Section I of the Exchange's Pricing Schedule.

[9] The term ''Customer'' applies to any transaction that is identified by a member or member organization for clearing in the Customer range at The Options Clearing Corporation which is not for the account of a broker or dealer or for the account of a ''Professional'' (as that term is defined in Rule 1000(b)(14)).

[10] The term ''Firm'' applies to any transaction that is identified by a member or member organization for clearing in the Firm range at The Options Clearing Corporation.

[11] The term ''Broker-Dealer'' applies to any transaction which is not subject to any of the other transaction fees applicable within a particular category.

[12] The term ''Professional'' applies to transactions for the accounts of Professionals, as defined in Exchange Rule 1000(b)(14).

[13] *See* SR–Phlx–2016–30 (not yet published).

[14] 15 U.S.C. 78f(b).

objectives of Sections 6(b)(4) and 6(b)(5) of the Act [15] 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 or system which the Exchange operates or controls, and is not designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

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.'' [16] Likewise, in *NetCoalition* v. *Securities and Exchange Commission* [17] (''NetCoalition'') the DC Circuit upheld the Commission's use of a market-based approach in evaluating the fairness of market data fees against a challenge claiming that Congress mandated a cost-based approach.[18] As the court emphasized, the Commission ''intended in Regulation NMS that 'market forces, rather than regulatory requirements' play a role in determining the market data . . . to be made available to investors and at what cost.'' [19]

Further, ''[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'. . . . '' [20] Although the court and the SEC were discussing the cash equities markets, the Exchange believes that these views apply with equal force to the options markets.

The Exchange continues to offer pricing specific to SPY because these options are currently the most actively traded options class. Pricing by symbol is a common practice on many U.S. options exchanges as a means to incentive order flow to be sent to an exchange for execution.[21]

Simple Order—Rebate for Adding Liquidity

The Exchange's proposal to replace the $0.20 per contract SPY Simple Order Rebate for Adding Liquidity with tiered rebates is reasonable because the Exchange desires to incentivize market participants to transact a greater number of SPY options. All participants [sic] will continue to receive a SPY Simple Order Rebate for Adding Liquidity for Specialists and Market Makers provided they execute one electronic Simple Order SPY contract. In some cases, the rebate will be lower, if 2,499 or less electronic Simple Order SPY contracts are added, the SPY Simple Order Rebate for Adding Liquidity for Specialists and Market Makers will be $0.15 as compared to $0.20 per contract (today's rebate). Despite this decrease, the Exchange believes that participants will continue to be incentivized to add SPY order flow to the Exchange to receive the rebate. With this proposal, the Exchange is also offering the opportunity to earn higher rebates provided the participant adds at least 5,000 electronic Simple Order SPY contracts.[22] In some cases the rebate will remain the same.[23] The Exchange believes that the rebate will continue to encourage participants to direct SPY order flow to the Exchange.

The Exchange's proposal to replace the $0.20 per contract SPY Simple Order Rebate for Adding Liquidity for Specialists and Market Makers with tiered rebates is equitable and not unfairly discriminatory because Specialists and Market Makers have obligations to the market and regulatory requirements, which normally do not apply to other market participants.[24] They have obligations to make continuous markets, engage in a course of dealings reasonably calculated to contribute to the maintenance of a fair and orderly market, and not make bids or offers or enter into transactions that are inconsistent with a course of dealings. The differentiation as between Specialists and Market Makers and all other market participants recognizes the differing contributions made to the liquidity and trading environment on the Exchange by these market participants. An increase in the activity of these market participants in turn facilitates tighter spreads, which may cause an additional corresponding increase in order flow from other market participants.

The Exchange believes that continuing to pay the Simple Order Rebate for Adding Liquidity [sic] to all [sic] transactions executed within the Exchange's order book, including transactions where one side of the transaction originates on the Exchange floor and any other side of the trade was the result of an electronically submitted order or a quote, is reasonable because the Exchange's treatment of these orders is consistent with its treatment of all other orders executed in the order book as compared to a floor order executed on the Exchange's trading floor. Further, the Exchange believes it is reasonable to count the one side of the transaction which originates on the Exchange floor toward the number of contracts to qualify for the Simple Order Rebate for Adding Liquidity for Specialists and Market Makers in SPY because this treatment of the floor order which executes in the order book is consistent with the treatment of all other electronically executed orders which qualify for the Section I pricing.

The Exchange believes that continuing to pay the Simple Order Rebate for Adding Liquidity to all transactions executed within the Exchange's order book, including transactions where one side of the transaction originates on the Exchange floor and any other side of the trade was the result of an electronically submitted order or a quote, is equitable and not unfairly discriminatory because the Exchange is treating these orders similar to all other orders executed in the order book as compared to a floor order executed on the Exchange's trading floor. Further, the Exchange believes it is equitable and not unfairly discriminatory to count the one side of the transaction which originates on the Exchange floor toward the number of contracts to qualify for the Simple Order Rebate for Adding Liquidity for Specialists and Market Makers because today all electronically executed orders qualify for the Section I pricing. The transaction where one side of the transaction originates on the Exchange

[15] 15 U.S.C. 78f(b)(4) and (5).

[16] Securities Exchange Act Release No. 51808 at 37499 (June 9, 2005) (''Regulation NMS Adopting Release'').

[17] *NetCoalition* v. *SEC,* 615 F.3d 525 (D.C. Cir. 2010).

[18] *See NetCoalition,* at 534.

[19] *Id.* at 537.

[20] *Id.* at 539 (quoting ArcaBook Order, 73 FR at 74782–74783).

[21] *See* International Securities Exchange LLC's (''ISE'') Schedule of Fees.

[22] The Exchange will pay a $0.25 per contract rebate if participant adds 5,000 to 19,999 contracts per day in a month and a $0.30 per contract rebate if participant adds greater than 20,000 contracts per day in a month in SPY.

[23] The Exchange will continue to pay a $0.20 per contract rebate if participant adds 2,500 to 4,999 contracts per day in a month in SPY.

[24] *See* Rule 1014 titled ''Obligations and Restrictions Applicable to Specialists and Registered Options Traders.''

floor and any other side of the trade was the result of an electronically submitted order or a quote will be treated in the same manner as all other orders executed in the order book.

Simple Order—Fee for Removing Liquidity

The Exchange's proposal to decrease the Customer Simple Order Fee in SPY for Removing Liquidity from $0.44 to $0.43 per contract and all other Simple Order Fees for Removing Liquidity in SPY for Specialists, Market Makers, Firms, Broker-Dealers and Professionals from $0.49 to $0.47 per contract is reasonable because the reduction of these fees will encourage participants to send additional order flow to the Exchange.

The Exchange's proposal to decrease the Customer Simple Order Fee for Removing Liquidity in SPY from $0.44 to $0.43 per contract and all other Simple Order Fees for Removing Liquidity in SPY for Specialists, Market Makers, Firms, Broker-Dealers and Professionals from $0.49 to $0.47 per contract is equitable and not unfairly discriminatory because all participants will be assessed the same lower Simple Order Fee for Removing Liquidity in SPY of $0.47 per contract, except for Customers. The Exchange believes that assessing Customers a lower fee is equitable and not unfairly discriminatory because Customer orders bring valuable liquidity to the market, which liquidity benefits other market participants. Customer liquidity benefits all market participants by providing more trading opportunities, which attracts Specialists and Market Makers. An increase in the activity of these market participants in turn facilitates tighter spreads, which may cause an additional corresponding increase in order flow from other market participants.

Cross-Reference and Marketing Fee

The Exchange's proposal to correct a typographical error related to a cross reference is reasonable, equitable and not unfairly discriminatory because it will clarify the Pricing Schedule. This amendment is non-substantive.

The Exchange's proposal to replace the words ''Payment for Order Flow Fee'' with the words ''Marketing Fee'' is reasonable, equitable and not unfairly discriminatory because the proposal will conform the rule text to other parts of the Rulebook. The usage of the term Marketing Fee would be consistent throughout the Rulebook.

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. 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 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 own fees in response, and because market participants may readily adjust their order routing practices, the Exchange believes that the degree to which fee changes in this market may impose any burden on competition is extremely limited.

In terms of intra-market competition, the Exchange believes that its proposed rebates and fees continue to remain competitive in SPY, which is the most actively traded options class.[25] 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 changes will impair the ability of members or competing order execution venues to maintain their competitive standing in the financial markets.

Simple Order—Rebate for Adding Liquidity

The Exchange's proposal to replace the $0.20 per contract SPY Simple Order Rebate for Adding Liquidity with tiered rebates does not impose an undue burden on intra-market competition because Specialists and Market Makers have obligations to the market and regulatory requirements, which normally do not apply to other market participants.[26] The differentiation as between Specialists and Market Makers and other market participants recognizes the differing contributions made to the liquidity and trading environment on the Exchange by these market participants. An increase in the activity of these market participants in turn facilitates tighter spreads, which may cause an additional corresponding increase in order flow from other market participants.

The Exchange believes that continuing to pay the SPY Simple Order Rebate for Adding Liquidity to all transactions executed within the Exchange's order book, including transactions where one side of the transaction originates on the Exchange floor and any other side of the trade was the result of an electronically submitted order or a quote, does not impose an undue burden on intra-market competition because the Exchange is treating these orders similar to all other orders executed in the order book as compared to a floor order executed on the Exchange's trading floor. Further, the Exchange believes counting the one side of the transaction which originates on the Exchange floor toward the number of contracts to qualify for the SPY Simple Order Rebate for Adding Liquidity for Specialists and Market Makers does not impose an undue burden on intra-market competition because today all electronically executed orders qualify for the Section I pricing. The transaction where one side of the transaction originates on the Exchange floor and any other side of the trade was the result of an electronically submitted order or a quote will be treated in the same manner as all other orders executed in the order book.

Simple Order—Fee for Removing Liquidity

The Exchange's proposal to decrease the Customer Simple Order for Removing Liquidity in SPY from $0.44 to $0.43 per contract and all other Simple Order Fees for Removing Liquidity in SPY for Specialists, Market Makers, Firms, Broker-Dealers and Professionals from $0.49 to $0.47 per contract does not impose an undue burden on intra-market competition because all participants will be assessed

[25] The Exchange continues to incentive market participants to transact SPY by offering rebates in this Penny Pilot Option similar to ISE which pays rebates on Penny Pilot Options. *See* ISE's Fee Schedule. ISE Gemini, LLC (''ISE Gemini'') assesses a SPY tiered taker fee ranging from $0.44 to $0.45 for a priority customer and a tiered taker fee ranging from $0.48 to $0.49 per contract for all other market participants. *See* ISE Gemini's Fee Schedule. Also, the Exchange's Simple Order Fee for Removing Liquidity in SPY is lower as compared to pricing at C2 Options Exchange, Incorporated (''C2''). C2's penny pilot options pricing is $0.47 per contract for Priority [sic] Customers and $0.48 per contract for all other participants when removing liquidity. *See* C2's Fees Schedule.

[26] *See* note 24. Specialists and Market Makers have obligations to make continuous markets, engage in a course of dealings reasonably calculated to contribute to the maintenance of a fair and orderly market, and not make bids or offers or enter into transactions that are inconsistent with a course of dealings.

the same lower Simple Order Fee for Removing Liquidity in SPY of $0.47 per contract, except for Customers. Customer orders bring valuable liquidity to the market, which liquidity benefits other market participants. Customer liquidity benefits all market participants by providing more trading opportunities, which attracts Specialists and Market Makers. An increase in the activity of these market participants in turn facilitates tighter spreads, which may cause an additional corresponding increase in order flow from other market participants.

Cross-Reference and Marketing Fee

The Exchange's proposal to correct a typographical error related to a cross reference does not impose an undue burden on intra-market competition because the amendment is non-substantive.

The Exchange's proposal to replace the words ''Payment for Order Flow Fee'' with the words ''Marketing Fee'' does not impose an undue burden on intra-market competition because the proposal will conform the rule text to other parts of the Rulebook.

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.[27]

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is: (i) Necessary or appropriate in the public interest; (ii) for the protection of investors; or (iii) otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's Internet comment form (*http://www.sec.gov/rules/sro.shtml);* or
- Send an email to *rule-comments@sec.gov.* Please include File Number SR–Phlx–2016–33 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–Phlx–2016–33. 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 Web site (*http://www.sec.gov/rules/sro.shtml*). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for Web site viewing and printing in the Commission's Public Reference Room, 100 F Street NE., Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number *SR–Phlx–2016–33* and should be submitted on or before April 7, 2016.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[28]

Lynn M. Powalski,

Deputy Secretary.

[FR Doc. 2016–05975 Filed 3–16–16; 8:45 am]

BILLING CODE 8011–01–P

[27] 15 U.S.C. 78s(b)(3)(A)(ii).

[28] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–77352; SR–NYSEArca–2015–68]

Self-Regulatory Organizations; NYSE Arca, Inc.; Notice of Withdrawal of a Proposed Rule Change Relating To Implementation of a Fee on Securities Lending and Repurchase Transactions With Respect to Shares of the CurrencyShares® Euro Trust and the CurrencyShares® Japanese Yen Trust

March 11, 2016.

On July 30, 2015, NYSE Arca, Inc. (''Exchange'') filed with the Securities and Exchange Commission (''Commission''), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (''Act'') [1] and Rule 19b–4 thereunder,[2] a proposed rule change relating to implementation of a fee on securities lending and repurchase transactions with respect to shares of the CurrencyShares® Euro Trust and the CurrencyShares® Japanese Yen Trust, which are currently listed and trading on the Exchange under NYSE Arca Equities Rule 8.202. The proposed rule change was published for comment in the **Federal Register** on August 20, 2015.[3]

On September 18, 2015, 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 November 18, 2016, the Commission instituted proceedings under Section 19(b)(2)(B) of the Act [6] to determine whether to approve or disapprove the proposed rule change.[7] On February 12, 2016, pursuant to Section 19(b)(2) of the Act,[8] the Commission designated a longer period within which to take action on proceedings to determine whether to approve or disapprove the proposed

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

[3] *See* Securities Exchange Act Release No. 75698 (Aug. 14, 2015), 80 FR 50701.

[4] 15 U.S.C. 78s(b)(2).

[5] *See* Securities Exchange Act Release No. 75945, 80 FR 57645 (Sept. 24, 2015). The Commission designated a longer period within which to take action on the proposed rule change and designated November 18, 2015, as the date by which it should approve, disapprove, or institute proceedings to determine whether to disapprove the proposed rule change.

[6] 15 U.S.C. 78s(b)(2)(B).

[7] *See* Securities Exchange Act Release No. 76472, 80 FR 73258 (Nov. 24, 2015).

[8] 15 U.S.C. 78s(b)(2).

rule change.[9] The Commission received one comment on the proposal.[10]

On March 10, 2016, the Exchange withdrew the proposed rule change (SR–NYSEArca–2015–68).

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[11]

Lynn M. Powalski,

Deputy Secretary.

[FR Doc. 2016–05976 Filed 3–16–16; 8:45 am]

BILLING CODE 8011–01–P

[9] *See* Securities Exchange Act Release No. 77126, 81 FR 8551 (Feb. 19, 2016). The Commission designated a longer period within which to take action on the proposed rule change and designated April 15, 2016, as the date by which it should approve or disapprove the proposed rule change.

[10] *See* Letter from George Simon to the Commission (Feb. 23, 2016) (available at *http://www.sec.gov/comments/sr-nysearca-2015-68/nysearca201568-1.pdf*).

[11] 17 CFR 200.30–3(a)(57).

DEPARTMENT OF STATE

[Public Notice: 9486]

Shipping Coordinating Committee; Notice of Public Meeting

The Shipping Coordinating Committee (SHC) will conduct an open meeting at 9:00 a.m. on May 4, 2016, in Room 9–12 of the United States Department of Transportation building, 1200 New Jersey Ave SE., Washington, DC 20591. The primary purpose of the meeting is to prepare for the ninety sixth Session of the International Maritime Organization's (IMO) Maritime Safety Committee to be held at the IMO Headquarters, United Kingdom, May 11–20, 2016.

The agenda items to be considered include:

—Adoption of the agenda; report of credentials
—Decisions of other IMO bodies
—Consideration and adoption of amendments to mandatory instruments
—Measures to enhance maritime security
—Goal-based new ship construction standards
—Passenger ship safety
—Mandatory instrument and/or provisions addressing safety standards for the carriage of more than 12 industrial personnel on board vessels engaged on international voyages
—Ship systems and equipment (report of the second session and urgent matters emanating from the third session of the Sub-Committee)
—Implementation of IMO instruments (report of the second session of the Sub-Committee)
—Carriage of cargoes and containers (report of the second session of the Sub-Committee)
—Ship design and construction (report of the third session of the Sub-Committee)
—Human element, training and watchkeeping (report of the third session of the Sub-Committee)
—Pollution prevention and response (report of the third session of the Sub-Committee)
—Navigation, communications, search and rescue (urgent matters emanating from the third session of the Sub-Committee)
—Capacity building for the implementation of new measures
—Formal safety assessment, including general cargo ship safety
—Piracy and armed robbery against ships
—Unsafe mixed migration by sea
—Analysis and consideration of recommendations to reduce administrative burdens in IMO instruments including those identified by the SG–RAR
—Implementation of instruments and related matters
—Relations with other organizations
—Application of the Committee's Guidelines
—Work programme
—Any other business
—Consideration of the report of the Committee on its ninety-sixth session

Members of the public may attend this meeting up to the seating capacity of the room. To facilitate the building security process, and to request reasonable accommodation, those who plan to attend should contact the meeting coordinator, LCDR Tiffany Duffy, by email at *tiffany.a.duffy@uscg.mil,* by phone at (202) 372–1376, by fax at (202) 372–8382, or in writing at 2703 Martin Luther King Jr. Ave. SE., Stop 7509, Washington, DC 20593–7509 not later than April 27, 2016. Requests made after April 27, 2016 might not be able to be accommodated. Please note that due to security considerations, two valid, government issued photo identifications must be presented to gain entrance to the Department of Transportation building. The Department of Transportation building is accessible by taxi, privately owned conveyance, and public transportation. However, parking in the vicinity of the building is extremely limited. In the case of inclement weather in the Washington, DC area where the Federal Government is closed or delayed, a public meeting may be conducted virtually by calling (202) 475–4000 or 1–855–475–2447, Participant code: 887 809 72. The meeting coordinator will confirm whether the virtual public meeting will be utilized by posting an announcement at: *www.uscg.mil/imo/MSC/.* Members of the public can find out whether the Federal Government is delayed or closed by visiting *www.opm.gov/status/.* Additional information regarding this and other SHC public meetings may be found at: *www.uscg.mil/imo/.*

Dated: March 10, 2016.

Jonathan W. Burby,

Executive Secretary, Shipping Coordinating Committee, Department of State.

[FR Doc. 2016–06058 Filed 3–16–16; 8:45 am]

BILLING CODE 4710–09–P

DEPARTMENT OF STATE

[Public Notice: 9484]

Notice of Meeting of the International Telecommunication Advisory Committee

This notice announces a meeting of the United States International Telecommunication Advisory Committee (ITAC) to gather participants' perspectives on the dynamic and evolving international environment around the Internet of Things (IoT) and the application of that technology in Smart Cities, including relevant technical, commercial, and economic issues.

The Department of State seeks to determine where and how diplomacy can best support U.S. innovation and economic growth in this area. Attendees will be invited to share their thoughts on topics including the following:

- The most significant technical issues (*e.g.,* interoperability, security) at play in the international market;
- The impact of national and multilateral initiatives within and among various countries related to Smart Cities and IoT (*e.g.,* the EU Digital Agenda);
- International standards and standards bodies;
- The appropriateness of international regulation related to IoT;
- Privacy and security in the IoT environment.

Internet of Things issues are included in preparations for the upcoming Organization for Economic Cooperation and Development (OECD) ministerial. Over the last 6 months, the United States has participated in the International Telecommunications Union Standardization Sector Study Group 20 (SG20), which focuses on the development of standards related to IoT and Smart Cities. Attendees are invited

to share their perspectives on U.S. engagement in SG20. To inform the discussion, the head of the U.S. delegation to SG20 will describe the outcomes of the first two meetings of the study group.

The ITAC will meet on April 21st, 2016 at 2:00 p.m. EDT at: Verizon, Inc., 1300 I Street NW., Suite 400W, Washington, DC 20005.

Attendance at this meeting is open to the public as seating capacity allows. The public will have an opportunity to provide comments at this meeting at the invitation of the chair.

Further details on this ITAC meeting will be announced on the Department of State's email list, *ITAC@lmlist.state.gov.* Use of the ITAC list is limited to meeting announcements and confirmations, distribution of agendas and other relevant meeting documents. The Department welcomes any U.S. citizen or legal permanent resident to remain on or join the ITAC listserv by providing his or her name, email address, and the company, organization, or community that he or she is representing, if any.

Persons wishing to request reasonable accommodation for the meeting should contact *gadsdensf@state.gov* not later than April 13, 2016. Requests made after that time will be considered, but might not be able to be fulfilled.

FOR FURTHER INFORMATION CONTACT: Please contact Adriane LaPointe at (202) 647–0049, *lapointea@state.gov.*

Dated: March 11, 2016.

Julie Zoller,

Senior Deputy Coordinator, International Communications and Information Policy, U.S. State Department.

[FR Doc. 2016–06049 Filed 3–16–16; 8:45 am]

BILLING CODE 4710–AE–P

DEPARTMENT OF STATE

[Public Notice: 9485]

U.S. Department of State Advisory Committee on Private International Law: Public Meeting on Micro-, Small-, and Medium Sized Enterprises

The Office of the Assistant Legal Adviser for Private International Law, Department of State, hereby gives notice that the micro-, small-, and medium sized enterprises (MSMEs) study group of the Advisory Committee on Private International Law (ACPIL) will hold a public meeting. The ACPIL MSME Study Group will meet to discuss the next session of the UNCITRAL MSMEs Working Group, scheduled for April 4–8 in New York. This is not a meeting of the full Advisory Committee.

UNCITRAL has established a working group aimed at reducing the legal obstacles faced by MSMEs throughout their life cycle, and in particular those in developing countries. UNCITRAL further directed that the work should start with a focus on the legal issues surrounding the simplification of incorporation. At its upcoming session, the UNCITRAL MSME Working Group will consider draft recommendations on key principles on business registration (UN Doc. A/CN.9/WG.I/WP.93) and a draft model law on a simplified business entity (UN Doc. A/CN.9/WG.I/WP.89). The draft texts, along with the reports of earlier sessions of the Working Group are available at *http://www.uncitral.org/uncitral/en/index.html.*

Time and Place: The meeting of the ACPIL MSME Study Group will take place on Thursday March 31, from 10 a.m. to 12:00 p.m. EDT at the U.S. Department of State, Harry S. Truman Building, 2201 C. Street NW., Room 5426. Participants should arrive at the C Street entrance by 9:45 a.m. for visitor screening. Participants will be met at the C Street entrance and will be escorted to the conference room. Persons arriving later will need to make arrangements for entry using the contact information provided below. If you are unable to attend the public meeting and would like to participate from a remote location, teleconferencing will be available.

Public Participation: This meeting is open to the public, subject to the capacity of the meeting room. Access to the building is strictly controlled. For pre-clearance purposes, those planning to attend should email *pil@state.gov* providing full name, address, date of birth, citizenship, driver's license or passport number, and email address. This information will greatly facilitate entry into the building. A member of the public needing reasonable accommodation should email *pil@state.gov* not later than February 1. Requests made after that date will be considered, but might not be able to be fulfilled. If you would like to participate by telephone, please email *pil@state.gov* to obtain the call-in number and other information.

Data from the public is requested pursuant to Public Law 99–399 (Omnibus Diplomatic Security and Antiterrorism Act of 1986), as amended; Public Law 107–56 (USA PATRIOT Act); and Executive Order 13356. The purpose of the collection is to validate the identity of individuals who enter Department facilities.

The data will be entered into the Visitor Access Control System (VACS–D) database. Please see the Security Records System of Records Notice (State-36) at *https://foia.state.gov/_docs/SORN/State-36.pdf* for additional information.

Dated: March 9, 2016.

Michael J. Dennis,

Attorney-Adviser, Office of Private International Law, Office of the Legal Adviser, U.S. Department of State.

[FR Doc. 2016–06057 Filed 3–16–16; 8:45 am]

BILLING CODE 4710–08–P

DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

[Docket No. FRA–2000–7257, Notice No. 81]

Railroad Safety Advisory Committee; Notice of Meeting

AGENCY: Federal Railroad Administration (FRA), Department of Transportation.

ACTION: Notice of Railroad Safety Advisory Committee (RSAC) meeting.

SUMMARY: FRA announces the twentieth anniversary and fifty-fifth meeting of the Railroad Safety Advisory Committee (RSAC), a Federal Advisory Committee that develops railroad safety regulations through a consensus process. The RSAC meeting topics will include opening remarks from the FRA Administrator and the Associate Administrator for Railroad Safety and Chief Safety Officer. Status reports will be provided by the Remote Control Locomotive, Track Standards, Hazardous Materials Issues, and Rail Integrity Working Groups. A status report will also be provided by the Engineering Task Force. This agenda is subject to change, including the possible addition of further proposed tasks.

DATES: The RSAC meeting is scheduled to commence at 9:30 a.m. on Thursday, April 7, 2016, and will adjourn by 4:30 p.m.

ADDRESSES: The RSAC meeting will be held at the Grand Hyatt Hotel, located at 1000 H Street NW., Washington, DC 20001. The meeting is open to the public on a first-come, first-served basis, and is accessible to individuals with disabilities. Sign and oral interpretation can be made available if requested 10 calendar days before the meeting.

FOR FURTHER INFORMATION CONTACT: Larry Woolverton, RSAC Administrative Officer/Coordinator, FRA, 1200 New Jersey Avenue SE., Mailstop 25, Washington, DC 20590, (202) 493–6212; or Robert Lauby, Associate Administrator for Railroad Safety and

Chief Safety Officer, FRA, 1200 New Jersey Avenue SE., Mailstop 25, Washington, DC 20590, (202) 493–6474.

SUPPLEMENTARY INFORMATION: Pursuant to Section 10(a)(2) of the Federal Advisory Committee Act (Pub. L. 92–463), FRA is giving notice of a meeting of the RSAC. The RSAC was established to provide advice and recommendations to FRA on railroad safety matters. The RSAC is composed of 60 voting representatives from 39 member organizations, representing various rail industry perspectives. In addition, there are non-voting advisory representatives from the agencies with railroad safety regulatory responsibility in Canada and Mexico, the National Transportation Safety Board, and the Federal Transit Administration. The diversity of the Committee ensures the requisite range of views and expertise necessary to discharge its responsibilities. See the RSAC Web site for details on prior RSAC activities and pending tasks at *http://rsac.fra.dot.gov/*. Please refer to the notice published in the **Federal Register** on March 11, 1996 (61 FR 9740), for additional information about the RSAC.

Issued in Washington, DC, on March 8, 2016.

Robert C. Lauby,

Associate Administrator for Railroad Safety, Chief Safety Officer.

[FR Doc. 2016–05997 Filed 3–16–16; 8:45 am]

BILLING CODE 4910–06–P

DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

[Safety Advisory No. 2016–01]

Movement of Roadway Maintenance Machines Over Highway-Rail Grade Crossings

AGENCY: Federal Railroad Administration (FRA), Department of Transportation.

ACTION: Notice of Safety Advisory.

SUMMARY: FRA recently completed its investigation into a fatal accident that occurred when an on-track roadway maintenance machine traveling on main track collided with a motor vehicle at a highway-rail grade crossing. FRA is issuing this Safety Advisory 2016–01 to heighten rules compliance and situational awareness of railroads, railroad contractors, and their respective employees when operating roadway maintenance machines over highway-rail grade crossings. This Safety Advisory makes recommendations to railroads and railroad contractors regarding the need to review, update, and follow rules and procedures governing the safe movement of roadway maintenance equipment over highway-rail grade crossings.

FOR FURTHER INFORMATION CONTACT: Patrick T. Warren, Deputy Associate Administrator for Safety Compliance and Program Implementation, Office of Railroad Safety, FRA, 1200 New Jersey Avenue SE., Mail Stop 25, Washington, DC 20590, (202) 493–1366; or Joseph Riley, Track Specialist, Track Division, Office of Railroad Safety, FRA, 1200 New Jersey Avenue SE., Mail Stop 25, Washington, DC 20590, (202) 493–6357.

SUPPLEMENTARY INFORMATION: In January 2015, a fatal accident occurred when an on-track roadway maintenance machine, traveling as part of a large roadway work group (rail gang) over main track, collided with a private motor vehicle at a public highway-rail grade crossing in Gilroy, California (Gilroy). The driver of the motor vehicle died as a result of the collision.

While investigating this 2015 accident, FRA reviewed its accident data regarding other collisions at highway-rail grade crossings involving railroad maintenance-of-way equipment. FRA's review found that between January 2010 and November 2015, 187 accidents involving maintenance-of-way equipment and motor vehicles occurred at highway-rail grade crossings. The 187 accidents resulted in 2 fatalities to highway vehicle motorists, 62 injuries to motor vehicle occupants, and 6 injuries to railroad employees.

The January 2015 accident referenced here and FRA's review of accident data described above illustrate the safety risk to railroad and railroad contractor employees and the public when roadway maintenance machines travel over highway-rail grade crossings. This risk is heightened when roadway maintenance machines, including hi-rail vehicles, fail to activate grade crossing warning devices. To reduce this safety risk, FRA recommends that the railroad industry evaluate relevant railroad rules and emphasize compliance with those rules and any other procedures governing the safe movement of on-track equipment over highway-rail grade crossings.

Accident Summary

The accident description provided below is based on FRA's investigation of the January 2015 accident and serves to illustrate the risks associated with moving railroad roadway maintenance machines over highway-rail grade crossings. On January 9, 2015, near Gilroy, a Union Pacific Railroad Company (UP) system rail gang was in the process of changing job locations from a siding track to an industrial lead track approximately 12 miles away. The rail gang consisted of 62 pieces of roadway maintenance machinery moving over UP main track to a new job location under the authority of a train dispatcher. At approximately 1:05 p.m., a spiker/gager roadway maintenance machine (40th machine in the consist) was traveling approximately 12 miles per hour over the Masten Avenue highway-rail grade crossing in Gilroy and collided with a motor vehicle (pickup truck) as it proceeded westbound over the crossing. The driver was the sole occupant of the pickup truck and received fatal injuries.

The spiker/gager operator was operating in reverse and was not facing the direction of the machine's movement, relying on side mirrors to see in the direction of movement. Additionally, a semi-tractor trailer had stopped short of the crossing for a traffic light and may have blocked the spiker/gager operator's view of westbound vehicular traffic approaching the highway-rail grade crossing. Applicable UP rules require that ''[t]rack cars and on-track equipment must approach all grade crossings prepared to stop and must yield the right-of-way to vehicular traffic. If necessary, personnel will be deployed to flag the crossing to protect movement of a track car or other on-track equipment.'' UP's rules further specify:

> When approaching any grade crossing equipped with automatic warning devices and the automatic warning devices are not activated, all track cars and on-track equipment must stop short of the crossing and not proceed until safe to do so, unless the crossing has been closed or barricaded or is protected by properly equipped flaggers.

FRA's investigation indicates that the operator of the spiker/gager involved in the collision failed to follow applicable UP rules by not stopping short of the crossing and failing to yield the right-of-way to vehicle traffic. It appears that the spiker/gager had fallen several hundred feet behind the machine it was following and FRA's review of the downloaded grade crossing warning device data indicated the crossing gates had recovered (lifted) before the spiker/gager arrived at the crossing. Unlike trains, roadway maintenance machines do not always shunt or maintain shunt in track circuits to trigger activation of grade crossing warning device systems and, in most cases, roadway maintenance machines are not designed or built to shunt the track circuit.

FRA's investigation also indicates that before the rail gang equipment started its movement, a job briefing was held that identified the railroad's safety procedures to follow during the movement. The job briefing instructed the machine operators to ''bunch-up'' at grade crossings, allowing no more than 50 feet between equipment. The bunching-up of equipment is intended to allow the equipment to travel over highway-rail grade crossings in a safe and efficient manner, as well as to lessen the time the public is stopped at the crossing. The job briefing did not include instructions regarding theuse of flaggers to protect movements over highway-rail grade crossings.

Rules Compliance, Situational Awareness, and Grade Crossing Protection Measures

Generally, railroad rules govern the movement of roadway maintenance machines over highway-rail grade crossings.[1] Under most applicable railroad rules governing movement of on-track equipment over highway-rail grade crossings, roadway maintenance machines do not have the right-of-way over vehicular traffic. Industry practices typically require such equipment to approach every highway-rail grade crossing prepared to stop and not proceed until it is seen that the grade crossing is clear. For example, under the applicable UP rule in question, roadway maintenance machines are required to stop when approaching a grade crossing with automatic warning devices when such devices are not activated unless the crossing has been closed or barricaded or is protected by properly equipped flaggers. When grade crossing warning devices are activated, machine operators must still be prepared to stop.

Most of the 187 accidents described above occurred while on-track equipment was traveling over a highway-rail grade crossing and not when roadway work groups were performing work at a crossing. FRA's review of the data indicates that tampers and regulators were involved in the highest number of roadway maintenance machine/highway vehicle accidents. Further, when railroads operate roadway maintenance machines singly or in pairs, machines may not be readily visible to motorists. Railroads and railroad contractors should develop procedures for the safe movement of all configurations of roadway work group equipment and ensure that operators are trained and qualified to recognize crossing characteristics that present greater safety risks.

As mentioned above, roadway maintenance machines do not reliably shunt track circuits and may not always, or continually, activate highway-rail grade crossing warning devices. Operators may encounter a variety of challenging grade crossing characteristics, including: heavy vehicular traffic, long-angled four-lane crossings, right-turn-on-red locations, and highway traffic signals interconnected with the highway-rail grade crossing warning devices. Railroads should review their inventory of grade crossings and identify crossings that pose significant challenges to roadway maintenance machine operators. Railroads should also consider installing lockable wayside warning device activation equipment or other appropriate measures for use by operators of roadway maintenance machines at heavily trafficked four-lane crossings or long-angled crossings.

FRA also recommends that railroads emphasize compliance with rules governing the safe movement of roadway maintenance machines over highway-rail grade crossings in job safety briefings and employee training. Railroads and railroad contractors should monitor employee compliance with rules addressing equipment movement over highway-rail grade crossings. On certain railroads where rules governing the safe movement of machines over crossings are contained in the railroads' operating rules, Federal regulation requires that each railroad conduct operational tests to ensure its employees comply with the railroad's operating rules. *See* 49 CFR 217.9. As the description of the January 2015 accident indicates, compliance with railroad rules governing the movement of on-track equipment over highway-rail grade crossings is safety-critical. FRA recommends that railroads evaluate their current procedures for monitoring compliance with rules governing the movement of roadway maintenance machines over highway-rail grade crossings and determine whether their procedures are sufficient.

FRA is aware that some railroads have installed shunting devices on roadway maintenance machines, such as hi-rail vehicles, that can be switched on or off to activate grade crossing warning devices as a roadway maintenance machine approaches a crossing.[2] FRA strongly recommends that railroads utilizing such devices stress to operators that such shunts are not fail-safe and may lose shunt without warning. Railroads should emphasize that roadway maintenance machine shunting devices should be utilized only as a supplement to compliance with railroad rules that govern the movement of roadway maintenance machines over highway-rail grade crossings. Operators of roadway maintenance machines should approach every crossing prepared to stop and yield the right-of-way to vehicular traffic unless the crossing has been closed or barricaded or is protected by properly equipped flaggers.

Railroad rules often establish minimum spacing requirements when roadway maintenance machines are travelling. The number of machines in large equipment groupings, such as the one described in the January 2015 accident above, can make it very difficult for machine operators to maintain appropriate spacing. The combined length of a large production gang's equipment may not permit movement over a crossing in a single unit. To avoid the impacts from improper machine spacing and to prevent accidents, FRA recommends that railroads utilize appropriately equipped flaggers[3] to provide warning for motor vehicle traffic while large groups of roadway maintenance machines, such as the one in the accident described above, travel over a highway-rail grade crossing. Flag protection at highway-rail grade crossings reduces the risk of a collision.

Finally, it is imperative that roadway maintenance machine operators exercise vigilance and awareness with regard to railroad rule requirements, equipment spacing, speed, and the status of active warning devices when approaching and traveling over highway-rail grade crossings. For movements over extended distances, rail-bound machines with turntables should be turned to run forward or flag protection should be provided at all highway-grade crossings. FRA encourages railroad management to adopt and adhere to policies that promote the safest course of action in conducting on-track equipment movements over highway-rail grade

[1] FRA's grade crossing safety regulations in 49 CFR part 234 do not specifically address roadway maintenance machine movements over grade crossings. In addition, 49 CFR part 214, subpart C establishes protections to prevent roadway workers from being struck by rolling equipment, but does not mention, nor is it generally intended to address, movement of roadway maintenance machines in travel mode over highway-rail grade crossings under the authority of a train dispatcher. *See* 61 FR 65959, 65961 (Dec. 16, 1996). FRA conducted a post-accident inspection of the spiker/gager that was involved in the collision and found it was in compliance with applicable FRA regulations governing roadway maintenance machines at 49 CFR part 214, subpart D.

[2] Typically, railroads instruct machine operators to approach each crossing prepared to stop and not proceed into the crossing until the grade crossing is seen to be clear because a loss of shunt can occur in these situations.

[3] *See* 49 CFR 234.5.

crossings, particularly by taking into account the unique characteristics that exist at individual crossings. FRA also encourages the use of job briefings whenever work or job conditions change to heighten employees' situational awareness of relevant safety risks.

Recommendations

In light of the above discussion, and in an effort to improve situational awareness and rules compliance for roadway maintenance machine movements over highway-rail grade crossings, FRA recommends that railroads and railroad contractors:

1. Review with their roadway maintenance machine operators the circumstances of the fatal incident described in this Safety Advisory 2016–01 and these recommendations;
2. Review, and update as necessary, their rules and procedures governing the movement of roadway maintenance machines over highway-rail grade crossings and provide instruction on those rules and procedures to their employees;
3. Identify grade crossings that pose significant challenges to roadway maintenance machines traversing the crossings and consider installing lockable wayside warning-device activation equipment or other appropriate measures for use by roadway maintenance machine operators to ensure safe movement over such crossings;
4. Emphasize that their roadway maintenance machine operators must approach every highway-rail grade crossing prepared to stop and ensure that warning devices (where installed) are activated, the grade crossing is clear, and motor vehicle traffic has stopped (or is under the control of an appropriately equipped flagger) prior to entering a crossing;
5. Emphasize to their roadway maintenance machine operators that shunting devices are not fail-safe and may lose shunt without warning if railroad rules permit the use of roadway maintenance machine shunting devices (capable of being turned on or off to activate grade crossing warning devices). Railroads should also emphasize that roadway maintenance machine shunting devices should only be utilized as a supplement to compliance with rules requiring machine operators to approach crossings prepared to stop and to yield the right-of-way to vehicle traffic;
6. Emphasize the importance of job briefings to discuss applicable railroad rules governing operation of roadway maintenance machines movements over highway-rail grade crossing(s), including the identification of any higher-risk crossings and whether any crossings will be protected by appropriately equipped flaggers or signal personnel;
7. Ensure that when roadway maintenance machines are required to travel extended distances, their machine operators are able to operate this equipment while facing in the direction of the machine's movement; and
8. Review their current procedures for monitoring compliance with rules governing the movement of roadway maintenance machines over grade crossings and make necessary updates. Regularly conduct operational tests to ensure their employees comply with applicable rules governing movement over grade crossings.

FRA encourages railroads and railroad contractors to take action consistent with the preceding recommendations and to take other actions to help ensure the safety of the Nation's railroad employees and the travelling public. FRA may modify this Safety Advisory 2016–01, issue additional safety advisories, or take other appropriate actions necessary to ensure the highest level of safety on the Nation's railroads, including pursuing other corrective measures under its rail safety authority.

Robert C. Lauby,

Associate Administrator for Railroad Safety, Chief Safety Officer.

[FR Doc. 2016–05996 Filed 3–16–16; 8:45 am]

BILLING CODE 4910–06–P

DEPARTMENT OF TRANSPORTATION

Maritime Administration

[Docket No. MARAD–2016 2016–0028]

Requested Administrative Waiver of the Coastwise Trade Laws: Vessel INVESTAR; Invitation for Public Comments

AGENCY: Maritime Administration, Department of Transportation.

ACTION: Notice.

SUMMARY: As authorized by 46 U.S.C. 12121, the Secretary of Transportation, as represented by the Maritime Administration (MARAD), is authorized to grant waivers of the U.S.-build requirement of the coastwise laws under certain circumstances. A request for such a waiver has been received by MARAD. The vessel, and a brief description of the proposed service, is listed below.

DATES: Submit comments on or before April 18, 2016.

ADDRESSES: Comments should refer to docket number MARAD–2016–0028. Written comments may be submitted by hand or by mail to the Docket Clerk, U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590. You may also send comments electronically via the Internet at *http://www.regulations.gov.* All comments will become part of this docket and will be available for inspection and copying at the above address between 10 a.m. and 5 p.m., E.T., Monday through Friday, except federal holidays. An electronic version of this document and all documents entered into this docket is available on the World Wide Web at *http://www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT: Bianca Carr, U.S. Department of Transportation, Maritime Administration, 1200 New Jersey Avenue SE., Room W23–453, Washington, DC 20590. Telephone 202–366–9309, Email *Bianca.carr@dot.gov.*

SUPPLEMENTARY INFORMATION: As described by the applicant the intended service of the vessel INVESTAR is:

Intended Commercial Use of Vessel: Charter Fishing

Geographic Region: Florida, Georgia, South Carolina, North Carolina, Alabama, Louisiana

The complete application is given in DOT docket MARAD–2016–0028 at *http://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 issuance of the waiver will have an unduly adverse effect on a U.S.-vessel builder or a business that uses U.S.-flag vessels in that business, a waiver will not be granted. Comments should refer to the docket number of this notice and the vessel name in order for MARAD to properly consider the comments. Comments should also state the commenter's interest in the waiver application, and address the waiver criteria given in § 388.4 of MARAD's regulations at 46 CFR part 388.

Privacy Act

Anyone is able to search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act

Statement in the **Federal Register** published on April 11, 2000 (Volume 65, Number 70; Pages 19477–78).

By Order of the Maritime Administrator.

Dated: March 8, 2016.

T. Mitchell Hudson, Jr.,

Secretary, Maritime Administration.

[FR Doc. 2016–06099 Filed 3–16–16; 8:45 am]

BILLING CODE 4910–81–P

DEPARTMENT OF TRANSPORTATION

Pipeline and Hazardous Materials Safety Administration

Hazardous Materials: Notice of Application for Modification of Special Permit

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

ACTION: List of application for modification of special permits.

SUMMARY: In accordance with the procedures governing the application for, and the processing of, special permits from the Department of Transportation's Hazardous Material Regulations (49 CFR part 107, subpart B), notice is hereby given that the Office of Hazardous Materials Safety has received the applications described herein. This notice is abbreviated to expedite docketing and public notice. Because the sections affected, modes of transportation, and the nature of application have been shown in earlier **Federal Register** publications, they are not repeated here. Requests for modification of special permits (*e.g.* to provide for additional hazardous materials, packaging design changes, additional mode of transportation, etc.) are described in footnotes to the application number. Application numbers with the suffix ''M'' denote a modification request. These applications have been separated from the new application for special permits to facilitate processing.

DATES: Comments must be received on or before April 1, 2016.

ADDRESSES: *Address Comments To:* Record Center, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, Washington, DC 20590.

Comments should refer to the application number and be submitted in triplicate. If confirmation of receipt of comments is desired, include a self-addressed stamped postcard showing the special permit number.

FOR FURTHER INFORMATION CONTACT: Copies of the applications are available for inspection in the Records Center, East Building, PHH–30, 1200 New Jersey Avenue Southeast, Washington, DC or at *http://regulations.gov*.

This notice of receipt of applications for modification of special permit is published in accordance with Part 107 of the Federal hazardous materials transportation law (49 U.S.C. 5117(b); 49 CFR I.53(b)).

Issued in Washington, DC, February 16, 2016.

Don Burger,

Chief, General Approvals and Permits.

MODIFICATION SPECIAL PERMITS

Application No.	Docket No.	Applicant	Regulation(s) affected	Nature of special permit thereof
11378–M		National Aeronautics and Space Administration (NASA), Washington, DC.	49 CFR 173.201; 173.226; 173.227; 178.61–5; 178.61–20; 173.40.	To modify the special permit to authorize an additional hazardous material.
12818–M		Shoreline Marine Inc., D.B.A. Safetech, Humble, TX.	49 CFR 173.301(i); 173.302	To modify the special permit to authorize two additional foreign non-DOT specification steel cylinders and to clarify certain packaging and operational requirements.
13213–M		Washington State Ferrie, Seattle, WA.	49 CFR 172.101(10a)	To modify the special permit to increase the quantity of Petroleum gases, liquefied or Liquefied Petroleum Gas from 100 lbs to 143 lbs.
14372–M		Shoreline Marine Inc., dba Safetech, Humble, TX.	49 CFR 173.301(a)(1); 173.304.	To modify the special permit to authorize three additional foreign non-DOT specification steel cylinders and clarify certain packaging and operational requirements.
14751–M		Univation Technologies, LLC, Houston, TX.	49 CFR 173.242	To modify the special permit to authorize adding additional drawings.
15691–M		Department of Defense, Scotts AFB, IL.	49 CFR 180.209	To modify the special permit to authorize clarifying the requirements for the purpose and limitation and safety control measures.
16391–M		Halliburton Energy Services, Inc., Carrollton, TX.	49 CFR 173.201, 173.301(f), 173.302, 173.304a.	To modify the special permit to increase the restriction of the service pressure to 16,000 psi.
16469–M		ACS UE Testing LLC, Denver, CO.	49 CFR 172.203(a), 172.301(c), 180.205.	To modify the special permit to authorize the UE system to perform a 3 pass scan.
16555–M		Advance Research Chemicals, Inc., Catoosa, OK.	49 CFR 173.227(b)(2)(iii)	To modify the special permit originally issued on an emergency basis to authorize an additional two years and identify Advance Research Chemicals, Inc. as an offeror of hazardous materials.
16566–M		Sunset Helicopters, Inc., Aurora, OR.	49 CFR 172.220(b)(1), 172.200, 172.300, 172.400, 173.27, 175.30, 175.33, 175.75, Part 173.	To modify the special permit originally issued on an emergency basis to authorize an additional two years.
16572–M		Samsung Austin Semiconductor, LLC, Austin, TX.	49 CFR 173.158(b), 173.158(e), 173.158(f).	To modify the special permit to authorize removing unnecessary restrictions contained in paragraph 7.b. safety control measures.

MODIFICATION SPECIAL PERMITS—Continued

Application No.	Docket No.	Applicant	Regulation(s) affected	Nature of special permit thereof
16624–M	.....	AREVA Inc., Richland, WA ...	49 CFR 173.301(a)(1)	To modify the special permit originally issued on an emergency basis to authorize an additional two years and clarify certain requirements contained in paragraph 7. safety control measures.

[FR Doc. 2016–05698 Filed 3–16–16; 8:45 am]

BILLING CODE 4909–60–M

DEPARTMENT OF TRANSPORTATION

Pipeline and Hazardous Materials Safety Administration

Hazardous Materials: Notice of Application for Special Permits

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

ACTION: List of Applications for Special Permits.

SUMMARY: In accordance with the procedures governing the application for, and the processing of, special permits from the Department of Transportation's Hazardous Material Regulations (49 CFR part 107, subpart B), notice is hereby given that the Office of Hazardous Materials Safety has received the application described herein. Each mode of transportation for which a particular special permit is requested is indicated by a number in the ''Nature of Application'' portion of the table below as follows: 1—Motor vehicle, 2—Rail freight, 3—Cargo vessel, 4—Cargo aircraft only, 5—Passenger-carrying aircraft.

DATES: Comments must be received on or before April 18, 2016.

Address Comments to Record Center, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, Washington, DC 20590.

Comments should refer to the application number and be submitted in triplicate. If confirmation of receipt of comments is desired, include a self-addressed stamped postcard showing the special permit number.

FOR FURTHER INFORMATION CONTACT: Ryan Paquet, Director, Office of Hazardous Materials Approvals and Permits Division, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, East Building, PHH–30, 1200 New Jersey Avenue Southeast, Washington, DC 20590–0001, (202) 366–4535.

Copies of the applications are available for inspection in the Records Center, East Building, PHH–30, 1200 New Jersey Avenue Southeast, Washington, DC or at *http://regulations.gov.*

This notice of receipt of applications for special permit is published in accordance with Part 107 of the Federal hazardous materials transportation law (49 U.S.C. 5117(6); 49 CFR 1.53(b)).

Issued in Washington, DC, on February 16, 2016.

Don Burger,

Chief, General Approvals and Permits.

SPECIAL PERMITS DATA

Application No.	Docket No.	Applicant	Regulation(s) affected	Nature of the special permits thereof
20085–N	.....	EQ INDUSTRIAL SERVICES, INC..	173.308(a)(3), 173.308(a)(4), 173.21(h)(2)(i).	To authorize the transportation in commerce of untested and unapproved lighters for the purpose of disposal. (mode 1).
20118–N	.....	AMERICASE, INC.	172.500, 172.200, 172.300, 172.600, 172.700(a), 173.185(f), 172.400.	To authorize the manufacture, mark, sale and use of specially-designed packaging used for the transportation in commerce of damaged or recalled lithium ion cells, batteries, and lithium cells and batteries. (mode 1, 3).
20157–N	.....	KIMBER MFG., INC.	Parts 171–180	To authorize the transportation in commerce of certain pyrotechnic articles as not subject to the requirements of the Hazardous Materials Regulations. (modes 1, 4).
20158–N	.....	PALL CORPORATION	173.202, 173.242	To authorize the transportation in commerce of an isopropanol solution in non-specification packaging. (modes 1, 4).
20159–N	.....	ELKHORN AVIATION, INC..	175.30(a)(1), 172.101 Column (9B), 172.200, 172.300, 173.1, 173.27(b)(2).	To authorize the transportation in commerce of certain hazardous materials by 14 CFR part 133 Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft, in remote areas of the U.S. only, without being subject to certain hazard communication requirements, quantity limitations and certain loading and stowage requirements. (mode 4).
20181–N	.....	QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC..	173.302a	To authorize the manufacture, mark, sale and use of a non-DOT specification fully wrapped fiber reinforced composite gas cylinder with a non-load sharing plastic liner that meets ISO 11119–3: 2013, except as specified. (mode 1).

SPECIAL PERMITS DATA—Continued

Application No.	Docket No.	Applicant	Regulation(s) affected	Nature of the special permits thereof
20182–N		A123 SYSTEMS LLC	173.185(a)(1)	To authorize the transportation in commerce of lithium batteries tested in accordance with the UN Manual of Tests and Criteria Sixth Revision. (modes 1,2,3,4,5).
20209–N		BREN-TRONICS, INC.	172.102(c)(2), Special Provision A54, 173.185(b)(5).	To authorize the transportation in commerce of lithium ion batteries in strong outer packagings and with a net weight of greater than 35 kg when Transported aboard cargo aircraft. (mode 4).

[FR Doc. 2016–05689 Filed 3–16–16; 8:45 am]
BILLING CODE 4909–60–M

DEPARTMENT OF TRANSPORTATION

Pipeline and Hazardous Materials Safety Administration

Hazardous Materials: Actions on Special Permit Applications

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

ACTION: Notice of actions on special permit applications.

SUMMARY: In accordance with the procedures governing the application for, and the processing of, special permits from the Department of Transportation's Hazardous Material Regulations (49 CFR part 107, subpart B), notice is hereby given of the actions on special permits applications in (October to October 2014). The mode of transportation involved are identified by a number in the ''Nature of Application'' portion of the table below as follows: 1—Motor vehicle, 2—Rail freight, 3—Cargo vessel, 4—Cargo aircraft only, 5—Passenger-carrying aircraft. Application numbers prefixed by the letters EE represent applications for Emergency Special Permits. It should be noted that some of the sections cited were those in effect at the time certain special permits were issued.

Issued in Washington, DC, on February 16, 2016.

Don Burger,

Chief, General Approvals and Permits.

MODIFICATION SPECIAL PERMIT GRANTED

S.P No.	Applicant	Regulation(s)	Nature of special permit thereof
15972–M	EnTrans International, LLC, Athens, TN.	49 CFR 178.345–2, 178.346–2, 178.347–2, 178.348–2, and 178.345–3.	To modify the special permit to authorize additional various DOT 400 series cargo tanks and company name change.
14833–M	Takata AG Aschaffenburg	49 CFR 173.301(a), 173.302a, 175.3 and 178.65(f)(2).	To modify the special permit by removing the restriction on cylinder diameters and water capacities, modify the shipping description for UN3268 and add the description Safety devices, pyrotechnic, Division I.4G, UN0503.
14692–M	Airgas USA, LLC, Tulsa, OK	49 CFR 180.209	To modify the special permit to increase the maximum cycling (fillings) of each cylinder in a 10 year period to 600 from 300 cycles (fillings).
11624–M	Belshire Transportation Services, Inc., Foothill Ranch, CA.	49 CFR 173.173(b)(2)	To modify the special permit to authorize Class 8, PG II and PG III hazardous materials.
8178–M	National Aeronautics & Space Administration (NASA), Washington, DC.	49 CFR 173.302(a); 173.34(d); 175.3.	To modify the special permit by extending the service life of the cylinder from 32 years to 43 years.
16337–N	Volkswagen Group of America (VWGoA), Herndon, VA.	49 CFR 172.102(c)(2), Special Provision A54, ICAO TI Special Provision A99.	To authorize the transportation in commerce of certain lithium ion batteries each with weight greater than 35 kg by cargo aircraft only. (mode 4)
16371–N	Volkswagen Group of America (VWGoA), Herndon, VA.	49 CFR 172.102(c)(2), Special Provision A54, 173.185(b), ICAO TI Packing Instruction 965, Section IA.2, paragraph 3, ICAO TI Special Provision A99.	To authorize the transportation in commerce of lithium ion batteries each exceeding 35 kg net weight when transported aboard cargo aircraft. (mode 4)
16516–N	Exosent Engineering, LLC, College Station, TX.	49 CFR 178.315	To authorize the manufacture, mark, sale and use of non-DOT specification cargo tanks manufactured to ASME Section XII stamped with a ''T'' Stamp instead of the ''U'' stamp. (mode 1)
16532–N	Kinsbursky Brothers Supply Inc., Anaheim, CA.	49 CFR 173.185(f)	To authorize the transportation in commerce of certain damaged or defective lithium ion cells and batteries in alternative packaging. (modes 1, 2)
16563–N	Call2Recycle, Inc., Atlanta, GA	49 CFR Subparts C through H of Part 172, 173.185(f).	To authorize the manufacture, mark, sale and use of UN specification packaging for the transportation in commerce of damaged, defective, or recalled lithium ion cells and batteries and lithium metal cells and batteries and these cells or batteries contained in equipment. (modes 1, 2, 3)

MODIFICATION SPECIAL PERMIT GRANTED—Continued

S.P No.	Applicant	Regulation(s)	Nature of special permit thereof
16596–N	Great Slave Helicopters Ltd., Yellowknife, Canada, NT.	49 CFR 172.101 Hazardous Materials Table Column (9B), Subpart C of Part 172, 172.301(c), 175.30, Part 173.	To authorize transportation in commerce in the U.S. only of certain hazardous materials by Rotorcraft External Load Operations transporting hazardous materials attached to or suspended from an aircraft without being subject to certain hazard communication requirements, quantity limitations, packaging and loading and storage requirements. (mode 4)
16592–N	Stericycle Specialty Waste Solutions, Inc., Minneapolis, MN.	49 CFR Subparts A, B, D, and E of Part 173.	To authorize the transportation in commerce of certain Drug Enforcement Administration (DEA) controlled substances transported for the purpose of disposal. (mode 1)
16461–N	Coastal Hydrotesting LLC, Baltimore, MD.	49 CFR 172.203(a), 172.301(c), 173.302a(b), 180.205.	To authorize the use of certain Specification DOT cylinders 3A, 3AA, 3AL, and DOT special permit cylinders DOT–SP 9001, DOT–SP 9370, DOT–SP 9421, DOT–SP 9706, DOT–SP 9791, DOT–SP 9909, DOT–SP 10047, DOT–SP 10869, DOT–SP 11692, and DOT–SP 12440 used for the transportation in commerce of certain compressed gases, when retested by a 100% ultrasonic examination in lieu of the internal visual and the hydrostatic retest required in 49 CFR 180.205. (modes 1, 2, 3, 4, 5)
16469–N	ACS UE Testing LLC, Denver, CO.	49 CFR 172.203(a), 172.301(c), 180.205.	To authorize the use of certain Specification DOT cylinders DOT 3A, 3AA, 3AL, and DOT special permit cylinders DOT–SP 9001, DOT–SP 9370, DOT–SP 9421, DOT–SP 9706, DOT–SP 9791, DOT–SP 9909, DOT–SP 10047, DOT–SP 10869, DOT–SP 11692, and DOT–SP 12440 used for the transportation in commerce of certain compressed gases, when retested by a 100% ultrasonic examination in lieu of the internal visual and the hydrostatic retest required in 49 CFR 180.205. (modes 1,2,3,4,5)
16624–N	AREVA Inc., Richland, WA	49 CFR 173.301(a)(1)	To authorize the transportation in commerce of helium, compressed, in non-DOT specification pressure containers. (mode 1)
16625–N	Pelican Products, Inc., Torrance, CA.	49 CFR 173.185(f)	To authorize the transportation in commerce of lithium batteries in non-DOT specification packaging. (mode 1)
16627–N	Korean Air, Los Angeles, CA ..	49 CFR 172.101 Column (9B), 172.204(c)(3), 173.27, and 175.30(a)(1).	To authorize the one-time transportation in commerce of certain explosives that are forbidden for transportation by cargo only aircraft. (mode 4)
16623–N	Kalitta Air, LLC, Ypsilanti, MI ..	49 CFR 172.101 Hazardous Materials Table Column (9B), 173.27(b)(2), 175.30(a)(1).	To authorize the transportation in commerce of certain explosives that are forbidden for transportation by cargo only aircraft. (mode 4)
16542–N	Retriev Technologies, Inc., Lancaster, OH.	49 CFR 173.185(f)	To authorize the transportation in commerce of certain damaged lithium ion cells and batteries and lithium metal cells and batteries in alternative packaging. (modes 1, 2)
16567–N	Factory Mutual Insurance Company dba FM Global Research Campus, Gloucester, RI.	49 CFR 173.185(f)	To authorize the transportation in commerce of certain damaged or defective lithium ion cells and batteries in alternative. packaging. (mode 1)

[FR Doc. 2016–05692 Filed 3–16–16; 8:45 am]
BILLING CODE 4909–60–M

DEPARTMENT OF TRANSPORTATION

Pipeline and Hazardous Materials Safety Administration

Hazardous Materials: Notice of Application for Modification of Special Permit

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

ACTION: List of application for modification of special permits.

SUMMARY: In accordance with the procedures governing the application for, and the processing of, special permits from the Department of Transportation's Hazardous Material Regulations (49 CFR part 107, subpart B), notice is hereby given that the Office of Hazardous Materials Safety has received the applications described herein. This notice is abbreviated to expedite docketing and public notice. Because the sections affected, modes of transportation, and the nature of application have been shown in earlier **Federal Register** publications, they are not repeated here. Requests for modification of special permits (*e.g.* to provide for additional hazardous materials, packaging design changes, additional mode of transportation, etc.) are described in footnotes to the application number. Application numbers with the suffix ''M'' denote a modification request. These applications have been separated from the new application for special permits to facilitate processing.

DATES: Comments must be received on or before April 1, 2016.

ADDRESSES: *Address Comments To:* Record Center, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, Washington, DC 20590.

Comments should refer to the application number and be submitted in triplicate. If confirmation of receipt of comments is desired, include a self-addressed stamped postcard showing the special permit number.

FOR FURTHER INFORMATION CONTACT: Copies of the applications are available

for inspection in the Records Center, East Building, PHH–30, 1200 New Jersey Avenue Southeast, Washington, DC or at *http://regulations.gov.*

This notice of receipt of applications for modification of special permit is published in accordance with Part 107 of the Federal hazardous materials transportation law (49 U.S.C. 5117(b); 49 CFR 1.53(b)).

Issued in Washington, DC, January 28, 2016.

Don Burger,

Chief, General Approvals and Permits.

Application No.	Docket No.	Applicant	Regulation(s) affected	Nature of special permit thereof
		MODIFICATION SPECIAL PERMITS		
7573–M		U.S. Department of Defense, Scott AFB, IL.	49 CFR Part 107, Subpart B; Part 172; Part 175.	To modify the special permit to identify the DOD as an offeror of hazardous materials and to clarify the authorized airports and update the loading and stowage requirements.
9232–M		U.S. Department of Defense, Scott AFB, IL.	49 CFR Part 107, Subpart B; Part 172; Subparts C, D except 172.312.	To modify the special permit to identify the DOD as an offeror of hazardous materials and to clarify certain operational requirements by replacing AFR 71–4 with AFMAN 24–204 PREPARING HAZARDOUS MATERIALS FOR MILITARY AIR SHIPMENTS.
13173–M		Luxfer Canada Limited, Calgary, AB.	49 CFR 173.302a	To modify the special permit to authorize additional Division 2.1, 2.2, and 2.3 materials, to clarify the requirements for tensile stress at burst, to authorize hydraulic proof pressure testing and to modify the design requirements for the cylinder mounting frames.
14429–M		Bayer Healthcare, LLC, Cleveland, TN.	40 CFR 173.306(a)(3)(v)	To modify the special permit to authorize an additional DOT specification 2P aluminum nonrefillable inside container, add an additional Division 2.2 material, update ''Consumer Commodity'' to ''Limited Quantity'', change the capacity from volumetric ''ounces'' to ''Net Weight Ounces'' and update the drawing numbers of the inside containers.
14453–M		FIBA Technologies, Inc., Milbury, MA.	49 CFR 180.209	To modify the special permit to authorize an additional Division 2.2 material.
16146–M		U.S. Department of Defense, Scott AFB, IL.	49 CFR 171.22(e), 172.101 Hazardous Materials Table, Column (9B), International Civil Aviation Organization's Technical Instructions Part 3, Chapter 2, Table 3–1, Columns 12 and 13.	To modify the special permit to authorize Division 1.4 explosives and add optional packaging requirements AFMAN 24–204 PREPARING HAZARDOUS MATERIALS FOR MILITARY SHIPMENTS.
16510–M		Apple, Inc., Cupertino, CA.	49 CFR Subparts C through H of Part 172, 173.185(f).	To modify the special permit originally issued on an emergency basis to authorize an additional two years.
16531–M		NVIDIA Corporation, Santa Clara, CA.	49 CFR 173.185(c)(3); 173.185(f)	To modify the special permit originally issued on an emergency basis to authorize an additional two years.
16572–M		Samsung Austin Semiconductor, LLC, Austin, TX.	49 CFR 173.158(b), 173.158(e), 173.158 (f).	To modify the special permit originally issued on an emergency basis to authorize an additional two years and to authorize drums to be emptied no more than 26 weeks after the initial date of filling instead of the current 6 months.

[FR Doc. 2016–05696 Filed 3–16–16; 8:45 am]

BILLING CODE 4909–60–M

DEPARTMENT OF TRANSPORTATION

Pipeline and Hazardous Materials Safety Administration

Hazardous Materials: Delayed Applications

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

ACTION: List of application delayed more than 180 days.

SUMMARY: In accordance with the requirements of 49 U.S.C. 5117(c), PHMSA is publishing the following list of special permit applications that have been in process for 180 days or more. The reason(s) for delay and the expected completion date for action on each application is provided in association with each identified application.

FOR FURTHER INFORMATION CONTACT: Ryan Paquet, Director, Office of Hazardous Materials Special Permits and Approvals, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, East Building, PHH–30, 1200 New Jersey Avenue Southeast, Washington, DC 20590–0001, (202) 366–4535.

Key to ''Reason for Delay''

1. Awaiting additional information from applicant
2. Extensive public comment under review
3. Application is technically complex and is of significant impact or

precedent-setting and requires extensive analysis

4. Staff review delayed by other priority issues or volume of special permit applications

Meaning of Application Number Suffixes

N—New application
M—Modification request
R—Renewal Request
P—Party To Exemption Request

Issued in Washington, DC, on March 10, 2016.

Donald Burger,

Chief, General Approvals and Permits.

MODIFICATION TO SPECIAL PERMITS

Application No.	Applicant	Reason for delay	Estimated date of completion
16412–M	Nantong CMC Tank Equipment Co. Ltd. Jiangsu, Province	4	03–31–2016
15628–M	Chemours Company FC, LLC Wilmington, DE	4	03–31–2016
15610–M	TechKnowServ Corp. State College, PA	4	03–31–2016
15537–M	Alaska Pacific Powder Company Watkins, CO	4	04–15–2016
7607–M	Thermo Fisher Scientific Franklin, MA	4	03–31–2016
16035–M	LCF Systems, Inc. Scottsdale, AZ	4	04–30–2016
14437–M	Columbiana Boiler Company (CBCo), LLCColumbiana, OH	4	02–15–2016

NEW SPECIAL PERMIT APPLICATIONS

Application No.	Applicant	Reason for delay	Estimated date of completion
15767–N	Union Pacific Railroad Company Omaha, NE	3	02–29–2016
16001–N	VELTEK ASSOCIATES, INC. Malvern, PA	3	03–31–2016
16477–N	Hydroid, Inc. Pocasset, MA	4	03–15–2016
16495–N	TransRail Innovation, Inc. Calgary	4	03–31–2016
16524–N	Quantum Fuel Systems Technologies Worldwide, Inc. Lake Forest, CA	4	03–15–2016
16463–N	Salco Products Lemont, IL	3	03–31–2016
16571–N	Chevron USA Inc. San Ramon, CA	4	04–15–2016
16559–N	HTEC Hydrogen Technology & Energy Corporation North Vancouver, BC; Canada	4	04–30–2016
16560–N	LightSail Energy, Inc. Berkeley, CA	4	04–30–2016

PARTY TO SPECIAL PERMITS APPLICATION

Application No.	Applicant	Reason for delay	Estimated date of completion
16279–P	AEG Environmental Products & Services, Inc.; Westminster, MD	4	03–31–2016

[FR Doc. 2016–06054 Filed 3–16–16; 8:45 am]

BILLING CODE 4910–60–M

DEPARTMENT OF TRANSPORTATION

Office of the Secretary

Contracting Initiative

AGENCY: Office of the Secretary (OST), Department of Transportation (DOT).

ACTION: Notice.

SUMMARY: The DOT has extended the contracting initiative pilot program for a period of 1 year until March 6, 2017.

DATES: This pilot program became effective on March 6, 2015.

FOR FURTHER INFORMATION CONTACT: For technical information: Mr. Michael Harkins, Deputy Assistant General Counsel for General Law, Office, U.S. Department of Transportation, 1200 New Jersey Avenue SE., Washington, DC 20590, 202–366–0590 (telephone), *Michael.Harkins@dot.gov* (email).

SUPPLEMENTARY INFORMATION:

Electronic Access

An electronic copy of this document may also be downloaded from the Office of the Federal Register's home page at *http://www.archives.gov/federal_register* and the Government Printing Office's Web page at *http://www.gpoaccess.gov.*

Background

On March 6, 2015, DOT published a notice in the **Federal Register** (80 FR 12257) establishing a contracting initiative pilot program under which, Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) recipients and subrecipients could utilize various contracting requirements that generally have been disallowed due to concerns about adverse impacts on competition. The purpose of the pilot program is to determine whether the use of such requirements ''unduly limit competition,'' as provided in an August 23, 2013, opinion from the Department of Justice's Office of Legal Counsel (OLC). DOT established the pilot program for a period of 1 year unless extended. DOT has decided to extend this pilot program for a period of 1 additional year until March 6, 2017. The extension of this pilot program will provide FHWA and FTA recipients and subrecipients flexibility to continue operating under the pilot program while DOT conducts its evaluation as well as provide DOT with additional projects to consider in evaluating the impacts on competition. The Department extended the pilot program on March 4, 2016. A notice of extension was posted on the Department's Web site at *https://www.transportation.gov/regulations/whats-new.*

Please note that Section 415 of the Consolidated Appropriations Act, 2016,

Public Law 114–113 (FY 2016 Appropriations Act), continues the restriction on the Federal Transit Administration (FTA) from using FY 2016 funds to implement, administer or enforce 49 CFR 18.36(c)(2) for construction hiring. Accordingly, FTA recipients and subrecipients do not need to submit applications for participation in the pilot program for contracts awarded or advertised on or before September 30, 2016.

Additionally, we note that Section 192 of the FY 2016 Appropriations Act expressly authorizes DOT-assisted contracts under titles 49 and 23 of the United States Code utilizing geographic, economic, or other hiring preferences not otherwise authorized by law if the grant recipient certifies the following:

(1) That except with respect to apprentices or trainees, a pool of readily available but unemployed individuals possessing the knowledge, skill, and ability to perform the work that the contract requires resides in the jurisdiction;

(2) That the grant recipient will include appropriate provisions in its bid document ensuring that the contractor does not displace any of its existing employees in order to satisfy such hiring preference; and

(3) That any increase in the cost of labor, training, or delays resulting from the use of such hiring preference does not delay or displace any transportation project in the applicable Statewide Transportation Improvement Program or Transportation Improvement Program.

Accordingly, recipients and subrecipients should follow the application process described in the March 6, 2015, **Federal Register** notice (80 FR 12257) except that recipients and subrecipients must also include the required certifications from Section 192 of the FY 2016 Appropriations Act as discussed above.

Issued in Washington, DC, on March 8, 2016.

Anthony R. Foxx,

Secretary of Transportation.

[FR Doc. 2016–06012 Filed 3–16–16; 8:45 am]

BILLING CODE 4910–9X–P

DEPARTMENT OF VETERANS AFFAIRS

Geriatrics and Gerontology Advisory Committee; Notice of Meeting—Correction (81 FR 10370)

The Department of Veterans Affairs (VA) gives notice under the Federal Advisory Committee Act, 5 U.S.C. App. 2, that a meeting of the Geriatrics and Gerontology Advisory Committee will be held on April 19–20, 2016, in Conference Room 730 at the Department of Veterans Affairs, 810 Vermont Avenue NW., Washington, DC. The Notice of Meeting appeared in the **Federal Register** on February 29, 2016 (81 FR 10370) on page 10370. The Notice of Meeting should have read: On April 19, the session will begin at 8:30 a.m. and end at 5:00 p.m. On April 20, the session will begin at 8:00 a.m. and end at noon. This meeting is open to the public.

Interested parties should contact Mrs. Marcia Holt-Delaney, Program Analyst, Geriatrics and Extended Care Services (10P4G), Department of Veterans Affairs, 810 Vermont Avenue NW., Washington, DC 20420, or via email at *Marcia.Holt-Delaney@va.gov.* Individuals who wish to attend the meeting should contact Mrs. Holt-Delaney at (202) 461–6769.

Dated: March 14, 2016.

Jelessa Burney,

Federal Advisory Committee Management Officer.

[FR Doc. 2016–06007 Filed 3–16–16; 8:45 am]

BILLING CODE P

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Part II

Department of Energy

10 CFR Parts 429 and 430

Energy Conservation Program: Energy Conservation Standards for General Service Lamps; Proposed Rule

DEPARTMENT OF ENERGY

10 CFR Parts 429 and 430

[Docket Number EERE–2013–BT–STD–0051]

RIN 1904–AD09

Energy Conservation Program: Energy Conservation Standards for General Service Lamps

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

ACTION: Notice of proposed rulemaking (NOPR) and announcement of public meeting.

SUMMARY: The Energy Policy and Conservation Act of 1975 (EPCA), as amended, prescribes energy conservation standards for various consumer products and certain commercial and industrial equipment, including general service lamps (GSLs). EPCA also requires the U.S. Department of Energy (DOE) to periodically determine whether more-stringent, amended standards would be technologically feasible and economically justified, and would save a significant amount of energy. In this notice, DOE proposes amended energy conservation standards for GSLs, and also announces a public meeting to receive comment on these proposed standards and associated analyses and results.

DATES: *Meeting:* DOE will hold a public meeting on Wednesday, April 20, 2016, from 9:00 a.m. to 4:00 p.m., in Washington, DC. The meeting will also be broadcast as a webinar. See section VIII, ''Public Participation,'' for webinar registration information, participant instructions, and information about the capabilities available to webinar participants.

Comments: DOE will accept comments, data, and information regarding this NOPR before and after the public meeting, but no later than May 16, 2016. See section VIII, ''Public Participation,'' for details.

Comments regarding the likely competitive impact of the proposed standard should be sent to the Department of Justice contact listed in the **ADDRESSES** section before April 18, 2016.

ADDRESSES: The public meeting will be held at the U.S. Department of Energy, Forrestal Building, Room 6E–069, 1000 Independence Avenue SW., Washington, DC 20585. Any foreign national wishing to participate in the meeting should advise DOE as soon as possible by contacting *regina.washington@ee.doe.gov* to initiate the necessary procedures. Please also note that any person wishing to bring a laptop into the Forrestal Building will be required to obtain a property pass. Visitors should avoid bringing laptops, or allow an extra 45 minutes. Persons may also attend the public meeting via webinar.

Instructions: Any comments submitted must identify the NOPR on Energy Conservation Standards for GSLs, and provide docket number EERE–2013–BT–STD–0051 and/or regulatory information number (RIN) 1904–AD09. Comments may be submitted using any of the following methods:

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

2. *Email: GSL2013STD0051@ee.doe.gov*. Include the docket number and/or RIN in the subject line of the message. Submit electronic comments in WordPerfect, Microsoft Word, PDF, or ASCII file format, and avoid the use of special characters or any form of encryption.

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

4. *Hand Delivery/Courier:* Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Office, 950 L'Enfant Plaza SW., Suite 600, Washington, DC 20024. Telephone: (202) 586–2945. If possible, please submit all items on a CD, in which case it is not necessary to include printed copies.

Written comments regarding the burden-hour estimates or other aspects of the collection-of-information requirements contained in this proposed rule may be submitted to Office of Energy Efficiency and Renewable Energy through the methods listed above and by email to *chad_s_whiteman@omb.eop.gov*.

EPCA requires the Attorney General to provide DOE a written determination of whether the proposed standard is likely to lessen competition. The U.S. Department of Justice Antitrust Division invites input from market participants and other interested persons with views on the likely competitive impact of the proposed standard. Interested persons may contact the Division at *energy.standards@usdoj.gov* before April 18, 2016. Please indicate in the ''Subject'' line of your email the title and Docket Number of this rulemaking notice.

No telefacsimilies (faxes) will be accepted. For detailed instructions on submitting comments and additional information on the rulemaking process, see section VIII of this document (''Public Participation'').

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

A link to the docket Web page can be found at: *http://www1.eere.energy.gov/buildings/appliance_standards/rulemaking.aspx?ruleid=83*. This Web page contains a link to the docket for this notice on the *www.regulations.gov* site. The *www.regulations.gov* Web page contains simple instructions on how to access all documents, including public comments, in the docket. See section VIII, ''Public Participation,'' for further information on how to submit comments through *www.regulations.gov*.

FOR FURTHER INFORMATION CONTACT: Ms. Lucy deButts, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Office, EE–5B, 1000 Independence Avenue SW., Washington, DC 20585–0121. Telephone: (202) 287–1604. Email: *gsl@ee.doe.gov*.

Ms. Celia Sher, U.S. Department of Energy, Office of the General Counsel, GC–33, 1000 Independence Avenue SW., Washington, DC 20585–0121. Telephone: (202) 287–6122. Email: *celia.sher@hq.doe.gov*.

For further information on how to submit a comment, review other public comments and the docket, or participate in the public meeting, contact Ms. Brenda Edwards at (202) 586–2945 or by email: *brenda.edwards@ee.doe.gov*.

SUPPLEMENTARY INFORMATION: DOE intends to incorporate by reference the following industry standard into 10 CFR part 430:

Underwriter Laboratories 1598C–2014 (''UL 1598C''), Standard for Light-Emitting Diode Retrofit Luminaire Conversion Kits, First Edition, dated January 16, 2014.

Copies of Underwriter Laboratories' Standard for Light-Emitting Diode Retrofit Luminaire Conversion Kits are available from *http://*

ulstandards.ul.com/standards-catalog/ or can be reviewed in person at U.S. Department of Energy, Building Technologies Program, 950 L'Enfant Plaza SW., Suite 600, Washington, DC 20024. See section VII.M for a further discussion of this standard.

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I. Synopsis of the Proposed Rule

Title III, Part B [1] of the Energy Policy and Conservation Act of 1975 (EPCA or the Act), Public Law 94–163 (42 U.S.C. 6291–6309, as codified), established the Energy Conservation Program for Consumer Products Other Than Automobiles.[2] These products include general service lamps (GSLs), the subject of this document.

Pursuant to EPCA, any new or amended energy conservation standard must be designed to achieve the maximum improvement in energy efficiency that is technologically feasible and economically justified. (42 U.S.C. 6295(o)(2)(A)) Furthermore, the new or amended standard must result in a significant conservation of energy. (42 U.S.C. 6295(o)(3)(B)) EPCA also provides that not later than 6 years after issuance of any final rule establishing or amending a standard, DOE must publish either a notice of determination that standards for the product do not need to be amended, or a notice of proposed rulemaking (NOPR) including new proposed energy conservation standards. (42 U.S.C. 6295(m)(1))

In accordance with these and other statutory provisions discussed in this document, DOE proposes new and amended energy conservation standards for GSLs. The proposed standards, which are expressed in minimum lumen (lm) output per watt (W) of a lamp, are shown in Table I–1. These proposed standards, if adopted, would apply to all GSLs listed in Table I–1 and manufactured in, or imported into, the United States on and after the date three years after the publication of the final rule for this rulemaking. Table I–1 shows the efficacy levels proposed for the Integrated Low-Lumen, Integrated Low-Lumen Standby-Mode Functionality, Integrated High-Lumen, Integrated High-Lumen Standby-Mode Functionality, and Non-Integrated product classes.

TABLE I–1—PROPOSED ENERGY CONSERVATION STANDARDS FOR GENERAL SERVICE LAMPS

Product class	Trial standard level	DOE proposed efficacy level	Efficacy * (lm/W)	
			No standby mode	Capable of operating in standby mode
Integrated ** Low-Lumen (310 ≤ Initial Lumen Output <2,000).	TSL 3	EL 3	101.6 − 29.42 * 0.9983^Initial Lumen Output.	96.0 − 29.42 * 0.9983^Initial Lumen Output.
Integrated ** High-Lumen (2,000 ≤ Initial Lumen Output ≤2,600).	TSL 3	EL 2	73.4 − 29.42 * 0.9983^Initial Lumen Output.	70.5 − 29.42 * 0.9983^Initial Lumen Output.
Non-Integrated † (310 ≤ Initial Lumen Output ≤2,600 lumens).	TSL 3	EL 0	N/A	N/A.

* See chapter 5 of the NOPR technical support document for plots of the efficacy curves.
** Integrated lamp means a lamp that contains all components necessary for the starting and stable operation of the lamp, does not include any replaceable or interchangeable parts, and is connected directly to a branch circuit through an ANSI base and corresponding ANSI standard lamp-holder (socket).
† Non-integrated lamp means a lamp that is not an integrated lamp.

A. Benefits and Costs to Consumers

Table I–2 presents DOE's evaluation of the economic impacts of the proposed standards on consumers of GSLs, as measured by the average life-cycle cost (LCC) savings and the simple payback period (PBP).[3] The average LCC savings are positive for all product classes at all TSL levels analyzed.

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

[2] All references to EPCA in this document refer to the statute as amended through the the Energy Efficiency Improvement Act of 2015, Public Law 114–11 (Apr. 30, 2015).

[3] The average LCC savings are measured relative to the efficacy distribution in the no-new-standards case, which depicts the market in the compliance year in the absence of standards (see section IV.F.9). The simple PBP, which is designed to compare specific ELs, is measured relative to the baseline model (see section IV.C.1.a).

TABLE I–2—IMPACTS OF PROPOSED ENERGY CONSERVATION STANDARDS ON CONSUMERS OF GENERAL SERVICE LAMPS (TSL 3)

Product class	Average LCC savings (2014$)	Simple payback period (years)
Residential Sector		
Integrated Low-Lumen	0.75	2.14
Integrated High-Lumen	0.96	3.86
Commercial Sector		
Integrated Low-Lumen	1.32	0.70
Integrated High-Lumen	2.02	1.23
Non-Integrated	0	—

DOE's analysis of the impacts of the proposed standards on consumers is described in section V.F of this proposed rule.

B. Impact on Manufacturers

The industry net present value (INPV) is the sum of the discounted cash flows to the industry from the reference year through the end of the analysis period (2015 to 2049). Using a real discount rate of 6.1 percent, DOE estimates that the INPV for manufacturers of GSLs in the case without new and amended standards is $911.0 million in 2014$. Under the proposed standards, DOE expects that manufacturers may lose up to 24.3 percent of this INPV, which is approximately $221.0 million. Additionally, based on DOE's interviews with the manufacturers of GSLs, DOE does not expect significant impacts on manufacturing capacity or loss of employment for the industry as a whole to result from the proposed standards for GSLs.

DOE's analysis of the impacts of the proposed standards on manufacturers is described in section V.J of this document.

C. National Benefits and Costs [4]

DOE's analyses indicate that the proposed energy conservation standards for GSLs would save a significant amount of energy. Relative to the case where no new or amended energy conservation standard is set (hereinafter referred to as the ''no-new-standards case''), the lifetime energy savings for GSLs purchased in the 30-year period that begins in the anticipated year of compliance with the new or amended standards (2020–2049) amount to 0.85 quadrillion Btu (quads).[5] This represents a savings of 16 percent relative to the energy use of these products in the no-new-standards case.

The cumulative net present value (NPV) of total consumer costs and savings of the proposed standards for GSLs ranges from $4.4 billion (at a 7-percent discount rate) to $9.1 billion (at a 3-percent discount rate). This NPV expresses the estimated total value of future operating-cost savings minus the estimated increased product and installation costs (only for the commercial sector) for GSLs purchased in 2020–2049.

In addition, the proposed standards for GSLs would have significant environmental benefits. DOE estimates that the proposed standards would result in cumulative emission reductions (over the same period as for energy savings) of 52 million metric tons (Mt) [6] of carbon dioxide (CO_2), 31 thousand tons of sulfur dioxide (SO_2), 91.5 thousand tons of nitrogen oxides (NO_X), 215 thousand tons of methane (CH_4), 0.64 thousand tons of nitrous oxide (N_2O), and 0.11 tons of mercury (Hg).[7] The cumulative reduction in CO_2 emissions through 2030 amounts to 14.5 Mt, which is equivalent to the emissions resulting from the annual electricity use of 1.3 million homes.

The value of the CO_2 reductions is calculated using a range of values per metric ton of CO_2 (otherwise known as the social cost of carbon, or SCC) developed by a recent federal interagency process.[8] The derivation of the SCC values is discussed in section V.L. Using discount rates appropriate for each set of SCC values (see Table I–3), DOE estimates the present monetary value of the CO_2 emissions reduction (not including CO_2 equivalent emissions of other gases with global warming potential) is between $0.362 billion and $5 billion, with a value of $1.6 billion using the central SCC case represented by $40.0/t in 2015. DOE also estimates the present monetary value of the NO_X emissions reduction to be $0.1 billion at a 7-percent discount rate and $0.3 billion at a 3-percent discount rate.[9]

[4] All monetary values in this section are expressed in 2014 dollars and, where appropriate, are discounted to 2015 unless explicitly stated otherwise. Energy savings in this section refer to the full-fuel-cycle savings (see section IV.H for discussion).

[5] A quad is equal to 10^{15} British thermal units (Btu). The quantity refers to full-fuel-cycle (FFC) energy savings. FFC energy savings includes the energy consumed in extracting, processing, and transporting primary fuels (*i.e.,* coal, natural gas, petroleum fuels), and, thus, presents a more complete picture of the impacts of energy efficiency standards. For more information on the FFC metric, see section V.H.1.

[6] A metric ton is equivalent to 1.1 short tons. Results for emissions other than CO_2 are presented in short tons.

[7] DOE calculated emissions reductions relative to the no-new-standards case, which reflects key assumptions in the *Annual Energy Outlook 2015* (*AEO 2015*) Reference case. *AEO 2015* generally represents current legislation and environmental regulations for which implementing regulations were available as of October 31, 2014.

[8] *Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866,* Interagency Working Group on Social Cost of Carbon, United States Government (May 2013; May 2013; revised July 2015) (Available at: *https://www.whitehouse.gov/sites/default/files/omb/inforeg/scc-tsd-final-july-2015.pdf.*

[9] DOE estimated the monetized value of NO_X emissions reductions using benefit per ton estimates from the Regulatory Impact Analysis titled, ''Proposed Carbon Pollution Guidelines for Existing Power Plants and Emission Standards for Modified and Reconstructed Power Plants,'' published in June 2014 by EPA's Office of Air Quality Planning and Standards. (Available at: *http://www3.epa.gov/ttnecas1/regdata/RIAs/111dproposalRIAfinal0602.pdf.*) See section V.L.2 for further discussion. Note that the agency is presenting a national benefit-per-ton estimate for particulate matter emitted from the Electricity Generating Unit sector based on an estimate of premature mortality derived from the ACS study (Krewski et al., 2009). If the benefit-per-ton estimates were based on the Six Cities study (Lepuele et al., 2011), the values would be nearly two-and-a-half times larger. Because of the sensitivity of the benefit-per-ton estimate to the geographical considerations of sources and receptors of emissions, DOE intends to investigate refinements to the agency's current approach of one national estimate by assessing the regional

Continued

Table I–3 summarizes the national economic benefits and costs expected to result from the proposed standards for GSLs.

TABLE I–3—SUMMARY OF NATIONAL ECONOMIC BENEFITS AND COSTS OF PROPOSED ENERGY CONSERVATION STANDARDS FOR GENERAL SERVICE LAMPS (TSL 3) *

Category	Present value (Billion 2014$)	Discount rate (%)
Benefits		
Consumer Operating-Cost Savings	3.5	7
	7.6	3
CO_2 Reduction Monetized Value ($12.2/t case) **	0.4	5
CO_2 Reduction Monetized Value ($40.0/t case) **	1.6	3
CO_2 Reduction Monetized Value ($62.3/t case) **	2.6	2.5
CO_2 Reduction Monetized Value ($117/t case) **	5.0	3
NO_X Reduction Monetized Value †	0.1	7
	0.3	3
Total Benefits ††	5.3	7
	9.6	3
Costs		
Consumer Incremental Installed Costs ‡	−0.9	7
	−1.4	3
Total Net Benefits		
Including CO_2 and NO_X Reduction Monetized Value ††	6.2	7
	11.0	3

* This table presents the costs and benefits associated with GSLs shipped in 2020–2049. These results include benefits to consumers which accrue after 2049 from the products purchased in 2020–2049. The costs account for the incremental variable and fixed costs incurred by manufacturers due to the standard, some of which may be incurred in preparation for the rule.

** The CO_2 values represent global monetized values of the SCC, in 2014$, in 2015 under several scenarios of the updated SCC values. The first three cases use the averages of SCC distributions calculated using 5-percent, 3-percent, and 2.5-percent discount rates, respectively. The fourth case represents the 95th percentile of the SCC distribution calculated using a 3-percent discount rate. The SCC time series incorporate an escalation factor. The value for NO_X is the average of high and low values found in the literature.

† The $/ton values used for NO_X are described in section V.L. DOE estimated the monetized value of NO_X emissions reductions using benefit per ton estimates from the Regulatory Impact Analysis titled, ''Proposed Carbon Pollution Guidelines for Existing Power Plants and Emission Standards for Modified and Reconstructed Power Plants,'' published in June 2014 by EPA's Office of Air Quality Planning and Standards. (Available at: *http://www3.epa.gov/ttnecas1/regdata/RIAs/111dproposalRIAfinal0602.pdf.)* See section V.L.2 for further discussion. Note that the agency is presenting a national benefit-per-ton estimate for particulate matter emitted from the Electric Generating Unit sector based on an estimate of premature mortality derived from the ACS study (Krewski et al., 2009). If the benefit-per-ton estimates were based on the Six Cities study (Lepuele et al., 2011), the values would be nearly two-and-a-half times larger. Because of the sensitivity of the benefit-per-ton estimate to the geographical considerations of sources and receptors of emissions, DOE intends to investigate refinements to the agency's current approach of one national estimate by assessing the regional approach taken by EPA's Regulatory Impact Analysis for the Clean Power Plan Final Rule.

†† Total Benefits for both the 3-percent and 7-percent cases are derived using the series corresponding to average SCC with 3-percent discount rate ($40.0/t case).

‡ This reduction in product costs occurs because (1) more efficacious lamps have longer average lifetimes than less efficacious lamps, resulting in fewer replacement purchases, (2) the purchase price of more efficacious LED lamps is lower than the price of less efficacious LED lamps, and (3) the purchase price of LED lamps declines faster than the price of CFLs during the analysis period, resulting in LED lamps becoming less expensive than CFLs.

The benefits and costs of the proposed standards, for GSLs sold in 2020–2049, can also be expressed in terms of annualized values. The monetary values for the total annualized net benefits are the sum of: (1) The national economic value of the benefits in reduced operating costs, minus (2) the increase in product purchase prices and installation costs, plus (3) the value of the benefits of CO_2 and NO_X emission reductions, all annualized.[10]

Although DOE believes that the values of operating-cost savings and CO_2 emission reductions are both important, two issues are relevant. First, the national operating savings are domestic U.S. consumer monetary savings that occur as a result of market transactions, whereas the value of CO_2 reductions is based on a global value. Second, the assessments of operating-cost savings and CO_2 savings are performed with different methods that use different time frames for analysis. The national operating-cost savings is measured for the lifetime of GSLs shipped in 2020–2049. Because CO_2 emissions have a very long residence time in the atmosphere,[11] the SCC values in future years reflect future CO_2-emissions impacts that continue beyond 2100.

Estimates of annualized benefits and costs of the proposed standards are

approach taken by EPA's Regulatory Impact Analysis for the Clean Power Plan Final Rule. Note that DOE is currently investigating valuation of avoided SO_2 and Hg emissions.

[10] To convert the time-series of costs and benefits into annualized values, DOE calculated a present value in 2015, the year used for discounting the NPV of total consumer costs and savings. For the benefits, DOE calculated a present value associated with each year's shipments in the year in which the shipments occur (*e.g.,* 2020 or 2030), and then discounted the present value from each year to 2015. The calculation uses discount rates of 3 and 7 percent for all costs and benefits except for the value of CO_2 reductions, for which DOE used case-specific discount rates, as shown in Table I–3. Using the present value, DOE then calculated the fixed annual payment over a 30-year period, starting in the compliance year, that yields the same present value.

[11] The atmospheric lifetime of CO_2 is estimated of the order of 30–95 years. Jacobson, MZ (2005), ''Correction to 'Control of fossil-fuel particulate black carbon and organic matter, possibly the most effective method of slowing global warming,' '' *J. Geophys. Res.* 110. pp. D14105.

shown in Table I–4. The results under the primary estimate are as follows. Using a 7-percent discount rate for benefits and costs other than CO_2 reduction (for which DOE used a 3-percent discount rate along with the average SCC series that has a value of $40.0/t in 2015),[12] the estimated cost of the standards proposed in this rule is $ − 93 million per year in increased equipment costs, while the estimated annual benefits are $373 million in reduced equipment operating costs, $95 million in CO_2 reductions, and $13.6 million in reduced NO_X emissions. In this case, the net benefit amounts to $574 million per year. Using a 3-percent discount rate for all benefits and costs and the average SCC series that has a value of $40.0/t in 2015, the estimated cost of the proposed standards is $ − 82 million per year in increased equipment costs, while the estimated annual benefits are $438 million in reduced operating costs, $95 million in CO_2 reductions, and $17.2 million in reduced NO_X emissions. In this case, the net benefit amounts to $632 million per year.

TABLE I–4—ANNUALIZED BENEFITS AND COSTS OF PROPOSED ENERGY CONSERVATION STANDARDS FOR GENERAL SERVICE LAMPS (TSL 3)

	Discount rate	(Million 2014$/year)		
		Primary estimate *	Low net benefits estimate *	High net benefits estimate *
Benefits				
Consumer Operating-Cost Savings	7%	373	334	404.
	3%	438	386	481.
CO_2 Reduction Value ($12.2/t case) **	5%	29	26	31.
CO_2 Reduction Value ($40.0/t case) **	3%	95	86	101.
CO_2 Reduction Value ($62.3/t case) **	2.5%	138	125	148.
CO_2 Reduction Value ($117/t case) **	3%	287	262	308.
NO_X Reduction Monetized Value†	7%	13.6	12.6	32.2.
	3%	17.2	15.8	41.1.
Total Benefits ††	7% plus CO_2 range	415 to 674	373 to 608	467 to 744.
	7%	481	433	537.
	3% plus CO_2 range	483 to 742	428 to 663	552 to 829.
	3%	549	488	623.
Costs				
Consumer Incremental Installed Product Costs ‡	7%	−93	−81	−105.
	3%	−82	−70	−95.
Net Benefits				
Total ††	7% plus CO_2 range	508 to 767	453 to 689	571 to 849.
	7%	574	513	642.
	3% plus CO_2 range	566 to 824	498 to 733	647 to 924.
	3%	632	558	718.

* This table presents the annualized costs and benefits associated with GSLs shipped in 2020–2049. These results include benefits to consumers which accrue after 2049 from the products purchased in 2020–2049. The results account for the incremental variable and fixed costs incurred by manufacturers due to the standard, some of which may be incurred in preparation for the rule. The primary estimate assumes the reference case electricity prices and floorspace growth projections from the *Annual Energy Outlook (AEO) 2015* and decreasing product prices for both compact fluorescent lamps (CFLs) and LED GSLs, due to price learning. The Low Benefits Estimate uses the Low Economic Growth electricity prices and floorspace growth from *AEO 2015* and a faster decrease in product prices for LED GSLs. The High Benefits Estimate uses the High Economic Growth electricity prices and floorspace growth from *AEO 2015* and a slower decrease in product prices for LED GSLs. The methods used to derive projected price trends are explained in section V.G.1.b.

** The CO_2 values represent global monetized values of the SCC, in 2014$, in 2015 under several scenarios of the updated SCC values. The first three cases use the averages of SCC distributions calculated using 5-percent, 3-percent, and 2.5-percent discount rates, respectively. The fourth case represents the 95th percentile of the SCC distribution calculated using a 3-percent discount rate. The SCC time series incorporate an escalation factor.

† The $/ton values used for NO_X are described in section V.L. DOE estimated the monetized value of NO_X emissions reductions using benefit per ton estimates from the Regulatory Impact Analysis titled, ''Proposed Carbon Pollution Guidelines for Existing Power Plants and Emission Standards for Modified and Reconstructed Power Plants,'' published in June 2014 by EPA's Office of Air Quality Planning and Standards. (Available at: *http://www3.epa.gov/ttnecas1/regdata/RIAs/111dproposalRIAfinal0602.pdf.*) See section V.L.2 for further discussion. For DOE's Primary Estimate and Low Net Benefits Estimate, the agency is presenting a national benefit-per-ton estimate for particulate matter emitted from the Electric Generating Unit sector based on an estimate of premature mortality derived from the ACS study (Krewski et al., 2009). For DOE's High Net Benefits Estimate, the benefit-per-ton estimates were based on the Six Cities study (Lepuele et al., 2011), which are nearly two-and-a-half times larger than those from the ACS study. Because of the sensitivity of the benefit-per-ton estimate to the geographical considerations of sources and receptors of emission, DOE intends to investigate refinements to the agency's current approach of one national estimate by assessing the regional approach taken by EPA's Regulatory Impact Analysis for the Clean Power Plan Final Rule.

†† Total Benefits for both the 3-percent and 7-percent cases are derived using the series corresponding to the average SCC with a 3-percent discount rate ($40.0/t case). In the rows labeled ''7% plus CO_2 range'' and ''3% plus CO_2 range,'' the operating cost and NO_X benefits are calculated using the labeled discount rate, and those values are added to the full range of CO_2 values.

‡ This reduction in product costs occurs because (1) more efficacious lamps have longer average lifetimes than less efficacious lamps, resulting in fewer replacement purchases, (2) the purchase price of more efficacious LED lamps is lower than the price of less efficacious LED lamps, and (3) the purchase price of LED lamps declines faster than the price of CFLs during the analysis period, resulting in LED lamps becoming less expensive than CFLs.

[12] DOE used a 3-percent discount rate because the SCC values for the series used in the calculation were derived using a 3-percent discount rate (see section V.L.).

DOE's analysis of the national impacts of the proposed standards is described in sections V.H, V.J.1 and V.L of this NOPR. In addition to the national impacts described previously in this section, lamps that meet the expanded GSL definition proposed in this rulemaking would be subject to the 45 lm/W efficacy level starting in 2020 as specified by the EISA 2007 backstop provision. It is estimated that the impact of the EISA 2007 backstop on such lamps, excluding those included in the scope of coverage of this rulemaking, would bring about energy savings of approximately 3 quads for lamps sold in 2020–2049 and a carbon reduction of approximately 200 million metric tons by 2030.[13]

D. Conclusion

DOE has tentatively concluded that the proposed standards represent the maximum improvement in energy efficiency that is technologically feasible and economically justified, and would result in the significant conservation of energy. DOE further notes that products achieving these standard levels are already commercially available for all product classes covered by this proposal. Based on the analyses described above, DOE has tentatively concluded that the benefits of the proposed standards to the Nation (energy savings, positive NPV of consumer benefits, consumer LCC savings, and emission reductions) would outweigh the burdens (loss of INPV for manufacturers and LCC increases for some consumers).

DOE also considered more-stringent and less-stringent energy efficacy levels as potential standards, and is still considering them in this rulemaking. However, DOE has tentatively concluded that the potential burdens of the more-stringent energy efficacy levels would outweigh the projected benefits. Based on consideration of the public comments DOE receives in response to this notice and related information collected and analyzed during the course of this rulemaking effort, DOE may adopt energy efficacy levels presented in this notice that are either higher or lower than the proposed standards, or some combination of level(s) that incorporate the proposed standards in part.

[13] Meyers, S., A. Williams, P. Chan, and S. Price. *Energy and Economic Impacts of U.S. Federal Energy and Water Conservation Standards Adopted From 1987 Through 2014.* 2015. Lawrence Berkeley National Laboratory: Berkeley, CA. Report No. LBNL–6964E. (Last accessed January 20, 2016.) *http://eetd.lbl.gov/sites/all/files/lbnl-6964e.pdf.*

II. Introduction

The following section briefly discusses the statutory authority underlying this proposed rule, as well as some of the relevant historical background related to the establishment of standards for GSLs.

A. Authority

Title III, Part B of EPCA established the Energy Conservation Program for Consumer Products Other Than Automobiles, a program covering most major household appliances.[14] Subsequent amendments expanded Title III of EPCA to include additional consumer products, including GSLs—the products that are the focus of this NOPR. In particular, amendments to EPCA in the Energy Independence and Security Act of 2007 (EISA) directed DOE to conduct two rulemaking cycles to evaluate energy conservation standards for GSLs. (42 U.S.C. 6295(i)(6)(A)-(B))

For the first rulemaking cycle, EPCA, as amended by EISA, directs DOE to initiate a rulemaking no later than January 1, 2014, to evaluate standards for GSLs and determine whether exemptions for certain incandescent lamps should be maintained or discontinued. (42 U.S.C. 6295(i)(6)(A)(i)) The scope of the rulemaking is not limited to incandescent lamp technologies. (42 U.S.C. 6295(i)(6)(A)(ii)) Further, for this first cycle of rulemaking, the EISA amendments provide that DOE must consider a minimum standard of 45 lumens per watt (lm/W). (42 U.S.C. 6295(i)(6)(A)(ii)) If DOE fails to meet the requirements of 42 U.S.C. 6295(i)(6)(A)(i)-(iv) or the final rule from the first rulemaking cycle does not produce savings greater than or equal to the savings from a minimum efficacy standard of 45 lm/W, sales of GSLs that do not meet the minimum 45 lm/W standard beginning on January 1, 2020, will be prohibited. (42 U.S.C. 6295(i)(6)(A)(v))

The EISA-prescribed amendments further directed DOE to initiate a second rulemaking cycle by January 1, 2020, to determine whether standards in effect for general service incandescent lamps (GSILs) should be amended with more-stringent requirements and if the exemptions for certain incandescent lamps should be maintained or discontinued. (42 U.S.C. 6295(i)(6)(B)(i)) For this second review of energy conservation standards, the scope is not limited to incandescent lamp technologies. (42 U.S.C. 6295(i)(6)(B)(ii))

[14] Part B was re-designated Part A on codification in the U.S. Code for editorial reasons.

Pursuant to EPCA, DOE's energy conservation program for covered products consists essentially of four parts: (1) Testing; (2) labeling; (3) the establishment of federal energy conservation standards; and (4) certification and enforcement procedures. The Federal Trade Commission (FTC) is primarily responsible for labeling, and DOE implements the remainder of the program. Subject to certain criteria and conditions, DOE is required to develop test procedures to measure the energy efficiency, energy use, or estimated annual operating cost of each covered product. (42 U.S.C. 6295(o)(3)(A) and (r)) Manufacturers of covered products must use the prescribed DOE test procedure as the basis for certifying to DOE that their products comply with the applicable energy conservation standards adopted under EPCA and when making representations to the public regarding the energy use or efficiency of those products. (42 U.S.C. 6293(c) and 6295(s)) Similarly, DOE must use these test procedures to determine whether the products comply with standards adopted pursuant to EPCA. (42 U.S.C. 6295(s)) The DOE test procedures for GSILs are set forth at title 10 of the Code of Federal Regulations (CFR), part 430, subpart B, appendix R, and test procedures for medium base compact fluorescent lamps (MBCFLs) are set forth at 10 CFR part 430, subpart B, appendix W. The term GSL includes these lamps and others including, compact fluorescent lamps (CFLs), general service light-emitting diode (LED) lamps, organic light-emitting diode (OLED) lamps, and any other lamps that the Secretary determines are used to satisfy lighting applications traditionally served by GSILs. 10 CFR 430.2 DOE has initiated test procedures for integrated LED lamps and compact fluorescent lamps, which includes integrated and non-integrated CFLs. EPCA sets forth generally applicable criteria and procedures for DOE's adoption and amendment of test procedures. (42 U.S.C. 6293)

DOE must follow specific statutory criteria for prescribing new or amended standards for covered products, including GSLs. Any new or amended standard for a covered product must be designed to achieve the maximum improvement in energy efficiency that is technologically feasible and economically justified. (42 U.S.C. 6295(o)(2)(A) and (3)(B)) Furthermore, DOE may not adopt any standard that would not result in the significant conservation of energy. (42 U.S.C. 6295(o)(3)) Moreover, DOE may not

prescribe a standard: (1) For certain products, including GSLs, if no test procedure has been established for the product, or (2) if DOE determines by rule that the standard is not technologically feasible or economically justified. (42 U.S.C. 6295(o)(3)(A)–(B)) In deciding whether a proposed standard is economically justified, DOE must determine whether the benefits of the standard exceed its burdens. (42 U.S.C. 6295(o)(2)(B)(i)) DOE must make this determination after receiving comments on the proposed standard, and by considering, to the greatest extent practicable, the following seven statutory factors:

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

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

(3) The total projected amount of energy (or as applicable, water) savings likely to result directly from the standard;

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

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

(6) The need for national energy and water conservation; and

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

(42 U.S.C. 6295(o)(2)(B)(i)(I)–(VII))

Further, EPCA, as codified, establishes a rebuttable presumption that a standard is economically justified if the Secretary finds that the additional cost to the consumer of purchasing a product complying with an energy conservation standard level will be less than three times the value of the energy savings during the first year that the consumer will receive as a result of the standard, as calculated under the applicable test procedure. (42 U.S.C. 6295(o)(2)(B)(iii))

EPCA, as codified, also contains what is known as an ''anti-backsliding'' provision, which prevents the Secretary from prescribing any amended standard that either increases the maximum allowable energy use or decreases the minimum required energy efficiency of a covered product. (42 U.S.C. 6295(o)(1)) Also, the Secretary may not prescribe an amended or new standard if interested persons have established by a preponderance of the evidence that the standard is likely to result in the unavailability in the United States in any covered product type (or class) of performance characteristics (including reliability), features, sizes, capacities, and volumes that are substantially the same as those generally available in the United States. (42 U.S.C. 6295(o)(4))

Additionally, 42 U.S.C. 6295(q)(1) specifies requirements when promulgating an energy conservation standard for a covered product that has two or more subcategories. DOE must specify a different standard level for a type or class of product that has the same function or intended use, if DOE determines that products within such group: (A) Consume a different kind of energy from that consumed by other covered products within such type (or class); or (B) have a capacity or other performance-related feature which other products within such type (or class) do not have and such feature justifies a higher or lower standard. (42 U.S.C. 6295(q)(1)) In determining whether a performance-related feature justifies a different standard for a group of products, DOE must consider such factors as the utility to the consumer of the feature and other factors DOE deems appropriate. Id. Any rule prescribing such a standard must include an explanation of the basis on which such higher or lower level was established. (42 U.S.C. 6295(q)(2))

Federal energy conservation requirements generally supersede state laws or regulations concerning energy conservation testing, labeling, and standards. (42 U.S.C. 6297(a)–(c)) DOE may, however, grant waivers of federal preemption for particular state laws or regulations, in accordance with the procedures and other provisions set forth under 42 U.S.C. 6297(d)).

Finally, pursuant to the amendments contained in EISA 2007, any final rule for new or amended energy conservation standards promulgated after July 1, 2010, is required to address standby-mode and off-mode energy use. (42 U.S.C. 6295(gg)(3)) Specifically, when DOE adopts a standard for a covered product after that date, it must, if justified by the criteria for adoption of standards under EPCA (42 U.S.C. 6295(o)), incorporate standby-mode and off-mode energy use into a single standard, or, if that is not feasible, adopt a separate standard for such energy use for that product. (42 U.S.C. 6295(gg)(3)(A)–(B)) DOE determined that it is not possible for GSLs included in the scope of this rulemaking to meet the off-mode criteria because there is no condition in which a GSL connected to main power is not already in a mode accounted for in either active or standby mode. DOE notes the existence of a small number of commercially available GSLs that operate in standby mode. DOE discusses GSLs that operate in standby mode in further detail in sections III.B.1 and V.A.1. DOE's test procedures under development for LED lamps and CFLs address standby mode energy use. In this rulemaking, DOE intends to incorporate such energy use into any amended energy conservation standards it adopts in the final rule.

The Natural Resource Defense Council, Appliance Standards Awareness Project, American Council for an Energy-Efficient Economy, Alliance to Save Energy, Consumer Federation of America, National Consumer Law Center, Northeast Energy Efficiency Partnerships, Northwest Energy Efficiency Alliance, and Northwest Power and Conservation Council (hereafter the ''Energy Efficiency Advocates'' or the ''EEAs'') jointly commented that initial test results by DOE's Commercially Available LED Product Evaluation and Reporting (CALiPER) testing program showed instances where manufacturers were exaggerating equivalency claims when making comparisons between more efficacious technologies and conventional incandescent lamps. In order to help consumers make well informed purchasing decisions, EEAs recommended DOE work closely with the FTC to establish minimum equivalency levels in this rulemaking in which manufacturers who claim that a 10 W LED lamp replaces a 60 W incandescent lamp should be required to comply with the corresponding lumen output levels contained in a table established by FTC and DOE. They recommended DOE consider ENERGY STAR®'s lumen equivalency table in its Lamps Specification as a starting point. (EEAs, No. 32 at pp. 13–14) [15] DOE notes that for these consumer products, the FTC is responsible for implementing and enforcing labeling requirements. (*See* 42 U.S.C. 6294) Such requirements are outside the scope of this rulemaking. However, DOE understands concerns regarding potentially incorrect lumen equivalency claims of covered products, and DOE will continue to work with FTC on labeling issues.

[15] A notation in this form provides a reference for information that is in the docket of DOE's rulemaking to develop energy conservation standards for GSLs (Docket No. EERE–2013–BT–STD–0051), which is maintained at *www.regulations.gov*. This notation indicates that the statement preceding the reference was made by EEAs, is from document number 32 in the docket, and appears at pages 13–14 of that document.

B. Background

1. Current Standards

This is the first cycle of energy conservation standards rulemakings for GSLs. Of the lamps covered by this rulemaking, only GSILs, modified spectrum GSILs, intermediate base incandescent lamp, candelabra base incandescent lamp, and MBCFLs have existing standards.

The Consolidated and Further Continuing Appropriations Act, 2015 (Publ. L. 113–235, Dec. 16, 2014; hereafter referred to as the ''Appropriations Rider''), in relevant part, restricts the use of appropriated funds in connection with several aspects of DOE's incandescent lamps energy conservation standards program. Specifically, section 313 states that none of the funds made available by the Act may be used to implement or enforce standards for GSILs, intermediate base incandescent lamps, and candelabra base incandescent lamps.[16]

The current standards for GSILs are summarized in Table II–1. In addition GSILs are required to have a coloring redering index (CRI) greater than or equal to 80. 10 CFR 430.32(x)(1). These standards for GSILs are currently subject to the Appropriations Rider.

TABLE II–1—EXISTING EFFICACY STANDARDS FOR GSILS

Rated lumen ranges	Maximum rate wattage	Minimum rate lifetime (hrs)	Effective date
1490–2600	72	1,000	1/1/2012
1050–1489	53	1,000	1/1/2013
750–1049	43	1,000	1/1/2014
310–749	29	1,000	1/1/2014

The current standards for modified spectrum GSILs are shown in Table II–2. In addition, modified spectrum GSILs are required to have a color rendering index greater than or equal to 75. 10 CFR 430.32(x)(1) These standards for modified spectrum GSILs are currently subject to the Appropriations Rider.

TABLE II–2—EXISTING EFFICACY STANDARDS FOR MODIFIED SPECTRUM GSILS

Rated lumen ranges	Maximum rate wattage	Minimum rate lifetime (hrs)	Effective date
1118–1950	72	1,000	1/1/2012
788–1117	53	1,000	1/1/2013
563–787	43	1,000	1/1/2014
232–562	29	1,000	1/1/2014

Current standards require that candelabra base incandescent lamps not exceed 60 rated watts and intermediate base incandescent lamps not exceed 40 rated watts. 10 CFR 430.32(x)(2)–(3) These standards for candelabra base incandescent lamp and intermediate base incandescent lamp are subject to the Appropriations Rider.

The current standards for MBCFLs are summarized in Table II–3. 10 CFR 430.32(u)

TABLE II–3—EXISTING EFFICACY STANDARDS FOR MBCFLS

Lamp configuration	Lamp power (W)	Minimum efficacy (lm/W)
Bare lamp	Lamp power <15	45.0.
	Lamp power ≥15	60.0.
Covered lamp, no reflector	Lamp power <15	40.0.
	15 ≥ lamp power <19	48.0.
	19 ≥ lamp power <25	50.0.
	Lamp power ≥25	55.0.
Lumen Maintenance at 1,000 Hours.	The average of at least 5 lamps must be a minimum 90% of initial (100-hour) lumen output at 1,000 hours of rated life.	
Lumen Maintenance at 40% of Rated Lifetime.	80% of initial (100-hour) rating (per ANSI C78.5 Clause 4.10).	
Rapid Cycle Stress Test	Per ANSI C78.5 and IESNA LM65 (clauses 2,3,5, and 6) exception: cycle times must be 5 minutes on, 5 minutes off. Lamp will be cycled once for every two hours of rated life. At least 5 lamps must meet or exceed the minimum number of cycles.	
Lamp Life	≥6,000 hours as declared by the manufacturer on packaging. ≤50% of the tested lamps failed at rated lifetime. At 80% of rated life, statistical methods may be used to confirm lifetime claims based on sample performance.	

[16] Public Law 113–235, Section 313 provides: ''None of the funds made available in this Act may be used—(1) to implement or enforce section 430.32(x) of title 10, Code of Federal Regulations; or (2) to implement or enforce the standards established by the tables contained in section 325(i)(1)(B) of the Energy Policy and Conservation Act (42 U.S.C. 6295(i)(1)(B)) with respect to BPAR incandescent reflector lamps, BR incandescent reflector lamps, and ER incandescent reflector lamps.

2. History of Standards Rulemaking for GSLs

DOE published notices in the **Federal Register** announcing the availability of the framework document and preliminary analysis, respectively. 78 FR 73737 (Dec. 9, 2013); 79 FR 73503 (Dec. 11, 2014). This NOPR is the next step of DOE's first cycle of review to evaluate standards for GSLs and whether the standards should apply to additional GSL types. (42 U.S.C. 6295(i)(A)) Additionally, this rulemaking satisfies the requirements under 42 U.S.C 6295(m)(1) for DOE to review the existing standards for MBCFLs, as CFLs are included in the definition of GSL. It also addresses 42 U.S.C. 6295(gg)(3) in which DOE is directed to incorporate standby-mode and off-mode energy use in any amended (or new) standard adopted after July 1, 2010, pursuant to 42 U.S.C. 6295(o).

Additionally, DOE is conducting a rulemaking setting energy conservation standards for ceiling fan light kits (hereafter the ''CFLK rulemaking''). The rulemaking published a NOPR proposing an efficacy standard for the lamps packaged with CFLKs. 80 FR 48624 (August 13, 2015). The California Energy Commission (CEC) asked DOE to consider incorporating CFLK standards in this GSL rulemaking because current CFLKs standards are strongly related to GSLs. (CEC, No. 31 at p. 2). While DOE acknowledges that certain GSLs are packaged with CFLKs, EPCA addresses CFLKs as a separate covered product. Moreover, CFLK standards apply to light kits packaged with lamps and GSL standards apply to individual lamps. Because of the statutory treatment of CFLKs and the difference in product type, market structure, and manufacturers, DOE declines to combine the CFLK and GSL rulemakings in this proposal.

III. General Discussion

DOE developed this proposal after considering verbal and written comments, data, and information from interested parties that represent a variety of interests. The following discussion addresses issues raised by these commenters.

A. Product Classes and Scope of Coverage

The term, general service lamp, includes GSILs, CFLs, general service LED lamps, OLED lamps, and any other lamps that the Secretary determines are used to satisfy lighting applications traditionally served by GSILs; however, this definition does not apply to any lighting application or bulb shape excluded from the ''general service incandescent lamp'' definition, or any general service fluorescent lamp or incandescent reflector lamp. (*See* 42 U.S.C. 6291(30)(BB)) section IV covers the comments and discussion on each part of this definition to clearly define the scope of this rulemaking.

When evaluating and establishing energy conservation standards, DOE divides covered products into product classes by the type of energy used or by capacity or other performance-related features that justify differing standards. In making a determination whether a performance-related feature justifies a different standard, DOE must consider such factors as the utility of the feature to the consumer and other factors DOE determines are appropriate. (42 U.S.C. 6295(q)) For further details on product classes, see section V.A.1 and chapter 3 of the NOPR technical support document (TSD).

B. Test Procedure

EPCA sets forth generally applicable criteria and procedures for DOE's adoption and amendment of test procedures. (42 U.S.C. 6293) Manufacturers of covered products must use these test procedures to certify to DOE that their product complies with EPCA energy conservation standards and to quantify the efficiency of their product. DOE is developing and amending test procedures for products included in the definition of GSLs. The term GSL includes GSILs, CFLs, general service LED lamps, OLED lamps, and any other lamps that the Secretary determines are used to satisfy lighting applications traditionally served by general service incandescent lamps. 10 CFR 430.2

DOE's test procedures for GSILs are set forth at 10 CFR part 430, subpart B, appendix R. These test procedures provide instructions for measuring GSIL performance largely by incorporating industry standards. These test procedures were updated in a final rule published in January 2012. 77 FR 4203 (January 27, 2012). The rule updated citations and references to the industry standards currently referenced in DOE's test procedures for GSILs and established a new test procedure for determining the rated lifetime of GSILs.

In the preliminary analysis of the general service fluorescent lamp (GSFL) and incandescent reflector lamp (IRL) energy conservation standards rulemaking (hereafter the ''GSFL and IRL standards rulemaking''), DOE determined that the term ''compact fluorescent lamps'' includes both pin base and medium base CFLs.[17] DOE's current test procedures for MBCFLs are set forth at 10 CFR part 430, subpart B, appendix W. These test procedures provide instructions for measuring MBCFL performance by referencing the August 9, 2001, ENERGY STAR® Program Requirements for CFLs Version 2.0. Currently there is no DOE test procedure for non-integrated CFLs (also referred to as pin base CFLs); however, DOE has initiated a CFL test procedure rulemaking to amend existing test procedures for MBCFLs at appendix W and to include test procedures for additional CFL metrics and CFL types, including non-integrated CFLs (hereafter the ''CFL test procedure rulemaking'').[18]

DOE is also currently completing a rulemaking to develop test procedures for LED lamps (hereafter the ''LED TP rulemaking''). DOE published a supplemental notice of proposed rulemaking (SNOPR) on July 9, 2015, to propose test procedures for integrated LED lamps. 80 FR 39644.

DOE is not considering establishing one test procedure for all GSLs. While DOE is maintaining a technology-neutral approach to this rulemaking, there are inherent mechanical and electrical differences between lamp types that require separate testing methods. Additionally, DOE test procedures frequently incorporate references to industry-approved test methods. The Illuminating Engineering Society of North America (IES) has developed separate standards for solid-state lighting (SSL) products (*i.e.,* LEDs and OLEDs) and CFLs. However, DOE intends to coordinate the test procedures in development for CFLs and integrated LED lamps and prescribe consistent testing methodologies when possible.

DOE is proposing changes to 10 CFR parts 429 and 430 of subpart B in support of any standards adopted in this GSL rulemaking. In 10 CFR part 429 subpart B, DOE is proposing to add GSLs to the annual certification filing requirements in section 429.12 and to remove the lamp types that are GSLs (*i.e.,* MBCFLs, GSILs, intermediate base incandescent lamps, and candelabra base incandescent lamps) from the filing requirements in § 429.12. As discussed in the proposed test procedure for certain categories of general service lamps published elsewhere in this issue of the **Federal Register**, in 10 CFR part

[17] The preliminary analysis technical support document for the GSFL and IRL Standards Rulemaking is available at *www.regulations.gov/#!documentDetail;D=EERE-2011-BT-STD-0006-0022.*

[18] *See* 80 FR 45724 (July 31, 2015).

430 subpart B DOE is proposing to add a new paragraph to § 430.23 for test procedures for GSLs.

1. Standby- and Off-Mode Energy Consumption

EPCA requires energy conservation standards adopted for a covered product after July 1, 2010, to address standby-mode and off-mode energy use. (42 U.S.C. 6295(gg)(3)) EPCA defines active mode as the condition in which an energy-using piece of equipment is connected to a main power source, has been activated, and provides one or more main functions. (42 U.S.C. 6295(gg)(1)(A)) Standby mode is defined as the condition in which an energy-using piece of equipment is connected to a main power source and offers one or more of the following user-oriented or protective functions: Facilitating the activation or deactivation of other functions (including active mode) by remote switch (including remote control), internal sensor, or timer; or providing continuous functions, including information or status displays (including clocks) or sensor-based functions. Id. Off mode is defined as the condition in which an energy-using piece of equipment is connected to a main power source, and is not providing any standby or active mode function. *Id.*

To satisfy the statutory definition of off mode (42 U.S.C. 6295(gg)(1)), the lamp must not be providing any active mode function (*i.e.,* emitting light) or standby mode function. DOE determined that it is not possible for GSLs included in the scope of this rulemaking to meet the off-mode criteria because there is no condition in which a GSL is connected to main power and is not already in a mode accounted for in either active or standby mode. DOE notes the existence of a small number of commercially available GSLs that operate in standby mode. DOE discusses GSLs that operate in standby mode in further detail in section V.A.1.

C. Technological Feasibility

1. General

In each energy conservation standards rulemaking, DOE conducts a screening analysis based on information gathered on all current technology options and prototype designs that could improve the efficiency of the products or equipment that are the subject of the rulemaking. As the first step in such an analysis, DOE develops a list of technology options for consideration in consultation with manufacturers, design engineers, and other interested parties. DOE then determines which of those means for improving efficiency are technologically feasible. DOE considers technologies incorporated in commercially available products or in working prototypes to be technologically feasible. 10 CFR part 430, subpart C, appendix A, section 4(a)(4)(i).

After DOE has determined that particular technology options are technologically feasible, it further evaluates each technology option in light of the following additional screening criteria: (1) Practicability to manufacture, install, and service; (2) adverse impacts on product utility or availability; and (3) adverse impacts on health or safety. 10 CFR part 430, subpart C, appendix A, section 4(a)(4)(ii)–(iv). Additionally, it is DOE policy not to include in its analysis any proprietary technology that is a unique pathway to achieving a certain efficacy level. Section V.B of this NOPR discusses the results of the screening analysis for GSLs, particularly the designs DOE considered, those it screened out, and those that are the basis for the standards considered in this rulemaking. For further details on the screening analysis for this rulemaking, see chapter 4 of the NOPR TSD.

2. Maximum Technologically Feasible Levels

When DOE proposes to adopt an amended standard for a type or class of covered product, it must determine the maximum improvement in energy efficiency or maximum reduction in energy use that is technologically feasible for such product. (42 U.S.C. 6295(p)(1)) Accordingly, in the engineering analysis, DOE determined the maximum technologically feasible (''max-tech'') improvements in energy efficiency for GSLs, using the design parameters for the most efficient products available on the market or in working prototypes. The max-tech levels that DOE determined for this rulemaking are described in section V.C.5 of this proposed rule.

D. Energy Savings

1. Determination of Savings

For each trial standard level (TSL), DOE projected energy savings from application of the TSL to GSLs purchased in the 30-year period that begins in the year of compliance with the proposed standards (2020–2049).[19] The savings are measured over the entire lifetime of GSLs purchased in the above 30-year period. DOE quantified the energy savings attributable to each TSL as the difference in energy consumption between each standards case and the no-new-standards case. The no-new-standards case represents a projection of energy consumption that reflects how the market for a product would likely evolve in the absence of new or amended energy conservation standards.

DOE used its national impact analysis (NIA) spreadsheet model to estimate energy savings from potential new or amended standards for GSLs. The NIA spreadsheet model (described in section V.H of this proposed rule) calculates savings in site energy, which is the energy directly consumed by products at the locations where they are used. Based on the site energy, DOE calculates national energy savings (NES) in terms of primary energy savings at the site or at power plants, and also in terms of full-fuel-cycle (FFC) energy savings. The FFC metric includes the energy consumed in extracting, processing, and transporting primary fuels (*i.e.,* coal, natural gas, petroleum fuels), and thus presents a more complete picture of the impacts of energy conservation standards.[20] DOE's approach is based on the calculation of an FFC multiplier for each of the energy types used by covered products or equipment. For more information on FFC energy savings, see section V.H.1 of this proposed rule.

2. Significance of Savings

To adopt any new or amended standards for a covered product, DOE must determine that such action would result in ''significant'' energy savings. (42 U.S.C. 6295(o)(3)(B)) Although the term ''significant'' is not defined in the Act, the U.S. Court of Appeals for the District of Columbia Circuit, in *Natural Resources Defense Council (NRDC)* v. *Herrington,* 768 F.2d 1355, 1373 (D.C. Cir. 1985), opined that Congress intended ''significant'' energy savings in the context of EPCA to be savings that were not ''genuinely trivial.'' The energy savings for all of the TSLs considered in this rulemaking, including the proposed standards (presented in section VI.B), are nontrivial, and, therefore, DOE considers them ''significant'' within the meaning of section 325 of EPCA.

[19] Each TSL is comprised of specific efficacy levels for each product class. The TSLs considered for this NOPR are described in section VI.A. DOE conducted a sensitivity analysis that considers impacts for products shipped in a 9-year period.

[20] The FFC metric is discussed in DOE's statement of policy and notice of policy amendment. 76 FR 51282 (Aug. 18, 2011), as amended at 77 FR 49701 (Aug. 17, 2012).

E. Economic Justification

1. Specific Criteria

As noted above, EPCA provides seven factors to be evaluated in determining whether a potential energy conservation standard is economically justified. (42 U.S.C. 6295(o)(2)(B)(i)(I)–(VII)) The following sections discuss how DOE has addressed each of those seven factors in this rulemaking.

a. Economic Impact on Manufacturers and Consumers

In determining the impacts of a potential amended standard on manufacturers, DOE conducts a manufacturer impact analysis (MIA), as discussed in section V.J. DOE first uses an annual cash-flow approach to determine the quantitative impacts. This step includes both a short-term assessment—based on the cost and capital requirements during the period between when a regulation is issued and when entities must comply with the regulation—and a long-term assessment over a 30-year period. The industry-wide impacts analyzed include: (1) INPV, which values the industry on the basis of expected future cash flows; (2) cash flows by year; (3) changes in revenue and income; and (4) other measures of impact, as appropriate. Second, DOE analyzes and reports the impacts on different types of manufacturers, including impacts on small manufacturers. Third, DOE considers the impact of standards on domestic manufacturer employment and manufacturing capacity, as well as the potential for standards to result in plant closures and loss of capital investment. Finally, DOE takes into account cumulative impacts of various DOE regulations and other regulatory requirements on manufacturers.

For individual consumers, measures of economic impact include the changes in LCC and payback period (PBP) associated with new or amended standards. These measures are discussed further in the following section. For consumers in the aggregate, DOE also calculates the national NPV (and annualed national NPV) of the consumer costs and benefits expected to result from particular standards. DOE also evaluates the impacts of potential standards on identifiable subgroups of consumers that may be affected disproportionately by a standard.

b. Savings in Operating Costs Compared to Increase in Price (LCC and PBP)

EPCA requires DOE to consider the savings in operating costs throughout the estimated average life of the covered product in the type (or class) compared to any increase in the price of, or in the initial charges for, or maintenance expenses of, the covered product that are likely to result from a standard. (42 U.S.C. 6295(o)(2)(B)(i)(II)) DOE conducts this comparison in its LCC and PBP analysis.

The LCC is the sum of the purchase price of a product (including its installation) and the operating expense (including energy, maintenance, and repair expenditures) discounted over the lifetime of the product. The LCC analysis requires a variety of inputs, such as product prices, product energy consumption, energy prices, maintenance and repair costs, product lifetime, and discount rates appropriate for consumers. To account for uncertainty and variability in specific inputs, such as product lifetime and discount rate, DOE uses a distribution of values, with probabilities assigned to each value.

The PBP is the estimated amount of time (in years) it takes consumers to recover the increased purchase cost (including installation) of a more-efficient product through lower operating costs. DOE calculates the PBP by dividing the change in purchase cost due to a more-stringent standard by the change in annual operating cost for the year that standards are assumed to take effect.

For its LCC and PBP analysis, DOE assumes that consumers will purchase the covered products in the first year of compliance with new or amended standards. The LCC savings for the considered efficacy levels (ELs) are calculated relative to the case that reflects projected market trends in the absence of amended standards. DOE's LCC and PBP analysis is discussed in further detail in section V.F.

c. Energy Savings

Although significant conservation of energy is a separate statutory requirement for adopting an energy conservation standard, EPCA requires DOE, in determining the economic justification of a standard, to consider the total projected energy savings that are expected to result directly from the standard. (42 U.S.C. 6295(o)(2)(B)(i)(III)) As discussed in section III.D.1, DOE uses the NIA spreadsheet models to project NES.

d. Lessening of Utility or Performance of Products

In establishing product classes and in evaluating design options and the impact of potential standard levels, DOE evaluates potential standards that would not lessen the utility or performance of the considered products. (42 U.S.C. 6295(o)(2)(B)(i)(IV)) Based on data available to DOE, the standards proposed in this document would not reduce the utility or performance of the products under consideration in this rulemaking.

e. Impact of Any Lessening of Competition

EPCA directs DOE to consider the impact of any lessening of competition, as determined in writing by the Attorney General, that is likely to result from a proposed standard. (42 U.S.C. 6295(o)(2)(B)(i)(V)) It also directs the Attorney General to determine the impact, if any, of any lessening of competition likely to result from a proposed standard and to transmit such determination to the Secretary within 60 days of the publication of a proposed rule, together with an analysis of the nature and extent of the impact. (42 U.S.C. 6295(o)(2)(B)(ii)) DOE will transmit a copy of this proposed rule to the Attorney General with a request that the Department of Justice (DOJ) provide its determination on this issue. DOE will publish and respond to the Attorney General's determination in the final rule.

f. Need for National Energy Conservation

DOE also considers the need for national energy conservation in determining whether a new or amended standard is economically justified. (42 U.S.C. 6295(o)(2)(B)(i)(VI)) The energy savings from the proposed standards are likely to provide improvements to the security and reliability of the nation's energy system. Reductions in the demand for electricity also may result in reduced costs for maintaining the reliability of the nation's electricity system. DOE conducts a utility impact analysis to estimate how standards may affect the nation's needed power generation capacity, as discussed in section V.M.

The proposed standards also are likely to result in environmental benefits in the form of reduced emissions of air pollutants and greenhouse gases (GHG) associated with energy production and use. DOE conducts an emissions analysis to estimate how potential standards may affect these emissions, as discussed in section V.K; the emissions impacts are reported in section VI.B.6 of this NOPR. DOE also estimates the economic value of emissions reductions resulting from the considered TSLs, as discussed in section V.L.

g. Other Factors

EPCA allows the Secretary of Energy, in determining whether a standard is economically justified, to consider any other factors that the Secretary deems to be relevant. (42 U.S.C. 6295(o)(2)(B)(i)(VII)) To the extent interested parties submit any relevant information regarding economic justification that does not fit into the other categories described above, DOE could consider such information under ''other factors.''

2. Rebuttable Presumption

As set forth in 42 U.S.C. 6295(o)(2)(B)(iii), EPCA creates a rebuttable presumption that an energy conservation standard is economically justified if the additional cost to the consumer of a product that meets the standard is less than three times the value of the first year's energy savings resulting from the standard, as calculated under the applicable DOE test procedure. DOE's LCC and PBP analyses generate values used to calculate the effects that proposed energy conservation standards would have on the payback period for consumers. These analyses include, but are not limited to, the 3-year payback period contemplated under the rebuttable-presumption test. In addition, DOE routinely conducts an economic analysis that considers the full range of impacts to consumers, manufacturers, the nation, and the environment, as required under 42 U.S.C. 6295(o)(2)(B)(i). The results of this analysis serve as the basis for DOE's evaluation of the economic justification for a potential standard level (thereby supporting or rebutting the results of any preliminary determination of economic justification). The rebuttable-presumption payback calculation is discussed in section V.F of this proposed rule.

IV. Issues Affecting Scope of Coverage

This section examines the various issues affecting the scope of coverage of this rulemaking. These issues include: Restrictions of the Appropriations Rider; clarifications to the GSL definition; additional proposed definitions supporting the GSL definition; and lamps that DOE is proposing to exempt from the GSL definition. Additionally, DOE addresses the GSLs for which it is proposing standards. Finally, DOE discusses the proposed scope of metrics in the rulemaking. DOE received many comments on these issues in response to the preliminary analysis and responds to these comments below.

A. Appropriations Rider

GSILs are included in the definition of GSL. Although 42 U.S.C. 6295(i)(6) authorizes DOE to evaluate energy conservation standards for GSLs which, by definition, includes GSILs, the Appropriations Rider, in relevant part, restricts the use of appropriated funds in connection with several aspects of DOE's incandescent lamps energy conservation standards program. Specifically, section 313 of Public Law 113–235 prohibits expenditure of funds appropriated by that law to implement or enforce: (1) 10 CFR 430.32(x), which includes maximum wattage and minimum rated lifetime requirements for GSILs and maximum wattage requirements for candelabra base incandescent lamps and intermediate base incandescent lamps; and (2) standards set forth in section 325(i)(1)(B) of EPCA (42 U.S.C. 6295(i)(1)(B)), which sets minimum lamp efficiency ratings for IRLs. Because of the applicability of the Appropriations Rider to these lamps, DOE is not analyzing GSILs, intermediate-base incandescent lamps, or candelabra base incandescent lamps in this rulemaking. DOE is also directed by 42 U.S.C. 6295(i)(6)(A)(i)(II) to determine whether the exemptions for certain incandescent lamps should be maintained or discontinued based, in part, on exempted lamp sales collected from manufacturers. However, as stated, DOE is prohibited from using appropriated funds to implement or enforce standards for GSILs and thus cannot re-evaluate the existing exemptions for GSILs in the rulemaking. DOE received several comments on the inclusion of GSILs in the scope of this rulemaking.

Earthjustice commented that section 325(i)(6)(A)(i) of EPCA requires DOE to initiate a rulemaking proceeding no later than January 1, 2014, to determine whether the standards in effect for GSLs should be strengthened and whether ''the exemptions for certain incandescent lamps should be maintained or discontinued.'' To meet these obligations, Earthjustice asserted, DOE must, among other things, analyze standards for GSILs and lamps that have been exempted from the requirements applicable to GSILs. Earthjustice stated that DOE has failed to address these lamps, and is now in violation of its statutory duty to initiate a rulemaking that meets the requirements of section 325(i)(6)(A)(i) no later than January 1, 2014. (Earthjustice, No. 30 at p. 1)

DOE confirms that as the Appropriations Rider contains a congressional directive disallowing the use of appropriated funds to implement or enforce standards on any products in 10 CFR 430.32(x), such lamps are not included in this statutorily prescribed rulemaking at this time. Under 42 U.S.C. 6295(i)(6)(A)(v), if DOE fails to (1) complete a rulemaking in accordance with clauses (i) through (iv), which includes determining whether the exemptions for certain incandescent lamps should be maintained or discontinued, or (2) publish a final rule that will meet or exceed the energy savings associated with the EISA 2007 45 lm/W backstop, then the backstop will be triggered beginning January 1, 2020. Due to the Appropriations Rider, DOE is unable to perform the analysis required in clause (i) of 42 U.S.C. 6295(i)(6)(A). As a result, the backstop in 6296(i)(6)(A)(v) is automatically triggered.

Earthjustice stated that their comments on the previous stages of this rulemaking also explained that the plain language of the Appropriations Rider that currently prohibits DOE from using appropriated funds ''to implement or enforce section 430.32(x) of title 10, Code of Federal Regulations,'' does not prevent DOE from amending the standards for the lamp types exempted from the GSIL definition. Based on the preliminary TSD's discussion of the Appropriations Rider, Earthjustice stated that DOE may be misinterpreting the status of those 22 types of incandescent lamps exempted from EPCA's definition of ''general service incandescent lamp.'' The preliminary TSD states that DOE believes it is prohibited by the Appropriations Rider from modifying the existing exemptions for GSILs in this rulemaking. Earthjustice disagreed that the broad interpretation DOE gives the Appropriations Rider is reasonable and urged DOE to reconsider its interpretation. Additionally, if that interpretation remains unchanged, Earthjustice asked DOE to explain how the prohibition in the text of the Appropriations Rider applies to the exempted lamp types. (Earthjustice, No. 30 at pp. 1–2) The Pacific Gas and Electric Company, Southern California Gas Company, San Diego Gas and Electric, and Southern California Edison (hereafter, the ''California investor-owned utilities or the ''CA IOUs'') agreed in a joint comment that DOE has taken an overly restrictive interpretation of the Appropriations Rider, which specifically prohibits DOE from using appropriated funds ''to implement or enforce'' 10 CFR 430.32(x), but does not prevent DOE from amending standards for any incandescent lamp. CA IOUs

thought the interpretation of the Appropriations Rider should allow room to close loophole opportunities that allowed inexpensive incandescent general service products to be sold as exempted products. (CA IOUs, No. 33 at pp. 1–2) Earthjustice further specified that nothing in EPCA suggests discontinuing the exemptions for these lamps would make them GSILs. The exemption that DOE must decide whether to maintain or discontinue is an exemption from the GSL standards, not an exemption from the statute's definition of the term ''general service incandescent lamp.'' Therefore, Earthjustice concluded that while DOE cannot use appropriated funds to implement or enforce standards for GSILs, there is no prohibition on applying standards to any of the 22 types of lamps exempted in EPCA's definition of ''general service incandescent lamp.'' If DOE regulated the exempted lamps outside the GSIL rubric, the Appropriations Rider does not block the path to energy conservation standards. For example, the preliminary TSD suggests that DOE believes it would be authorized to regulate the subset of exempted incandescent lamps that are subject to tracking requirements under section 325(l). DOE has continued meeting its obligation to collect and analyze shipment data for these lamps, notwithstanding the Appropriations Rider. 79 FR 15058 (Mar. 18, 2014). If the distinction DOE has drawn, that enables the implementation of standards for these lamps, is that they are not GSILs if regulated under section 325(l), DOE needs to consider that they would also not be GSILs if DOE adopts standards for them under section 325(i)(6)(A). (Earthjustice, No. 30 at p. 2)

By definition, GSL does not apply to any lighting application or bulb shape excluded from the ''general service incandescent lamp'' definition. (42 U.S.C. 6291(30)(BB)) Therefore, based on the GSL definition, the 22 incandescent lamps that are excluded in EPCA from the definition of GSIL would not be GSLs. It is the case, however, that DOE could determine under the authority in 42 U.S.C. 6295(i)(6)(A)(i)(II) to discontinue the exemption for the 22 types of lamps exempted from EPCA's definition of GSIL. If DOE were to do so and agreed with Earthjustice and the CA IOUs that discontinuing the exemptions would not make any of those lamps GSILs, it would be the case that those formerly exempted lamps would also not be GSLs for which DOE could establish standards in the current rulemaking. Rather, the formerly exempted lamp types would have to be considered GSILs in order for DOE to regulate the lamps under its authority to promulgate standards for GSLs. Since the Appropriations Rider prohibits the expenditure of funds to implement or enforce standards for GSILs, DOE would not be able to establish or amend energy conservation standards for any of these lamps. As a result, making a determination about discontinuing the exemption from the GSIL definition for any of the 22 types of lamps would make no difference in the GSL rulemaking, and DOE declines to address the exemptions at the present time.

The National Electrical Manufacturers Association (NEMA) and NRDC commented that they understand the rulemaking is complicated by the existence of the Appropriations Rider. NEMA acknowledged that they appreciated the explanation provided by DOE that the Appropriations Rider (and similar predecessor legislation) makes it difficult to consider the real baseline in this rulemaking and other issues; however, they fundamentally disagreed with DOE's approach to product classes in this rulemaking and the proposal for technology-neutral energy conservation standards. NEMA stated that the Appropriations Rider has influenced DOE's selection of this approach in a manner not intended by Congress in EISA 2007. (NEMA, No. 34 at p. 2; NRDC, Public Meeting Transcript, No. 29 at p. 42)

DOE notes that the definition of general service lamps includes lamps of various technologies including CFLs, LED lamps, and OLED lamps in addition to GSILs, and section 325(i)(6)(A)(ii)(I) explicitly states that the GSL rulemaking is not limited to incandescent lamp technologies. Therefore, as further discussed in section V.A.1, DOE is evaluating standards in a technology-neutral approach in this rulemaking in order to carry out the more expansive analysis of lamps that serve general service lighting applications intended by EPCA. While the Appropriations Rider has vast impacts on the analyses of this rulemaking, such limitations precipitate from the prohibition placed on the implementation or enforcement of standards on GSILs, the Appropriations Rider has not influenced DOE's proposed product class structure. While DOE may not analyze GSILs in this rulemaking, DOE has taken a broad interpretation for what can be considered a GSL, analyzing non-GSIL lamps intended to serve in general lighting applications. See section V.A.1 for the resulting product classes.

B. Clarification of General Service Lamp Definition

The term, general service lamp, includes GSILs, CFLs, general service LEDs, OLEDs, and any other lamps that the Secretary determines are used to satisfy lighting applications traditionally served by GSILs; however, this definition does not apply to any lighting application or bulb shape excluded from the ''general service incandescent lamp'' definition, or any general service fluorescent lamp or incandescent reflector lamp. (42 U.S.C. 6291(30)(BB)) Pursuant to the definition of GSL, DOE has the authority to consider additional lamps that it determines are used to satisfy lighting applications traditionally served by GSILs. In the preliminary analysis, DOE took a broad interpretation of what lamps can be considered GSLs. DOE determined GSLs are lamps intended to serve in general lighting applications (as defined in 10 CFR 430.2) by providing an interior or exterior area with overall illumination. Thus, DOE considered GSLs as lamps which have a lumen output of 310 lumens or greater, have an ANSI base,[21] are not a light fixture, operate on any voltage, are not designed and labeled for use in non-general applications, and are not or could not be considered in another rulemaking proceeding. DOE received several comments on this approach.[22]

Some stakeholders supported DOE's broad interpretation of GSLs. EEAs commented that DOE should include all lamps that provide light between 310 and 2,600 lumens in the GSL standards scope, regardless of the shape of the lamp's cover, or the size of the lamp's base. They urged DOE to limit exemptions to lamps that cannot provide general service illumination due to technical, definable characteristics. For example, limiting covered lamps to a list of conventional shapes creates an incentive for manufacturers to evade the standards by making a slight modification to the shape of the lamp, which does not provide any additional functionality. Therefore, EEAs requested that DOE broaden the scope of coverage to eliminate such loopholes. (EEAs, No. 32 at p. 5) Overall, CA IOUs agreed that some lamps previously excluded from the definition of GSIL can be used to provide general illumination and as replacements for GSLs. They supported DOE's findings that lamps with other

[21] A lamp base standardized by the American National Standards Institute.

[22] GSL preliminary analysis at 2–25.

ANSI bases (non-E26 [23] screw bases), directional lamps, high-lumen lamps (>2,600 lumens), and lamps with operating voltage outside the range of 110–130 V could be considered GSLs. (CA IOUs, No. 33 at p. 2)

However, some stakeholders disagreed with DOE's interpretation of GSLs. GE stated that DOE is applying an extremely broad scope and should limit it to large potential for energy savings and lamp use. GE determined that the intent of this rulemaking is to look at lamps that provide the highest volume and therefore highest potential for energy savings; namely, the medium screw base lamps that are between 310 and 2,600 lumens where the bulk of the general lighting applications occur. (GE, Public Meeting Transcript, No. 29 at pp. 26–27) Southern Company also agreed that the intent of the legislation was for standard consumer lighting products, and that a scope that is too broad may result in unintended consequences for specialized industrial applications. They also cautioned against setting standards too high on CFLs and LED lamps with the potential of encouraging more people to use incandescent technology. (Southern Company, Public Meeting Transcript, No. 29 at pp. 27, 30–31)

DOE has interpreted the definition of GSLs in order to ensure that products used for general service lighting applications are included. DOE gave careful consideration to each criteria and what lamp types it would cover. DOE determined a lower bound lumen range and ANSI base specification were essential in identifying lamps used in general service lighting applications. DOE also found that voltages higher and lower than line voltage are also being used in general lighting applications and therefore, a voltage specification was not useful. Further DOE's interpretation accounted for exemption of specialty lamps that could not provide overall illumination and confirmation that there is no overlap of coverage among lamp rulemakings. Therefore, DOE finds that its interpretation adequately captures the intention of a general service lamp. DOE is proposing a new definition of ''general service lamp'' in section 430.2 to capture the criteria and exemptions discussed in more detail in the following sections.

DOE considered lamps' potential for energy savings, including impacts such as shifts to incandescent technologies, when determining which GSLs to establish standards for in this rulemaking (see section IV.E for further details).

DOE received specific comments on several aspects of the interpretation of the GSL definition, as discussed in the following sections.

1. General Lighting Applications

CA IOUs questioned the term general lighting application. They noted that it is defined in 10 CFR 430.2 as ''lighting that provides an interior or exterior area with overall illumination,'' and yet there is no definition of overall illumination. CA IOUs requested an interpretation from DOE. (CA IOUs, Public Meeting Transcript, No. 29 at p. 28) The definition for general lighting application was added to the CFR upon codifying the Energy Independence and Security Act of 2007 (Public Law 110–140; EISA 2007). DOE considers the term ''overall illumination'' to be similar in meaning to the term ''general lighting'' as defined in the industry standard ANSI/IES RP–16–10 (hereafter ''RP–16''). RP–16 states that ''general lighting'' means lighting designed to provide a substantially uniform level of illuminance throughout an area, exclusive of any provision for special local requirements.

2. Lamps Addressed in Other Rulemakings

As discussed previously, DOE has the authority to consider additional lamp types that it determines are used to satisfy lighting applications traditionally served by GSILs. To limit the probability that one lamp type might be subject to two different standards, DOE did not consider adding lamp types that are or could be addressed in a separate rulemaking proceeding. For example, the GSFL and IRL rulemaking considered establishing standards for additional types of fluorescent lamps (such as 2-foot linear fluorescent lamps). 80 FR 4041, 4055 (Jan. 26, 2015). While that rulemaking ultimately concluded that additional lamps should not be subject to standards, DOE did not consider the additional lamps evaluated as GSFLs to be candidates for coverage in the GSL rulemaking.

NEMA agreed with DOE's assessment in the preliminary analysis that SBMV lamps should not be included in this rulemaking as they are high-intensity discharge (HID) lamps, and as such could be covered in another rulemaking. (NEMA, No. 34 at p. 6) Further, Westinghouse acknowledged that they agreed with not considering any products that are covered under another rulemaking due to potential complications. (Westinghouse, Public Meeting Transcript, No. 29 at p. 39) Having received no other feedback on this topic, DOE continues not to propose standards in this rulemaking for products currently covered by other rulemakings. DOE requests comment on this approach.

3. High-Lumen Lamps (≤2,600 Lumens)

In the preliminary analysis, DOE considered including lamps with lumen output between 310 and 2,600 lumens.[24] DOE maintains this lower bound because lamps with lumen output less than 310 lumens do not provide sufficient overall illumination. Regarding lamps with a lumen output greater than 2,600 lumens, DOE believes that these lamps can be used in overall illumination and therefore meet the definition of GSL. However, in the preliminary analysis DOE considered not establishing standards for GSLs with lumens greater than 2,600 due to a potential shift to incandescent technologies. As noted previously, due to the Appropriations Rider, DOE is unable to consider modifying the existing exemption for GSILs with lumen output greater than 2,600 lumens. In the preliminary analysis, DOE reasoned that establishing energy conservation standards for higher lumen lamps in more-efficient technologies (*e.g.,* integrated and non-integrated CFLs), while not also addressing higher lumen incandescent lamps, may ultimately increase national energy consumption due to a shift to lower-cost incandescent technologies.[25]

EEAs recommended that DOE broaden the scope of coverage considered in the preliminary analysis to include lamps with outputs between 2,601 and 3,300 lumens. EEAs noted that this change would ensure lamps currently exceeding 150 W are also covered and would remove any incentive for manufacturers to introduce slightly brighter bulbs as a means to avoid compliance with standards. Conventional 150 W incandescent lamps produce around 2,500–2,700 lumens, and EEAs had noticed an increased amount of 150 W and 200 W incandescent lamps available in stores. EEAs stated that they also expect LED ELs to continue to increase, leading to new LED lamps that deliver higher light levels on the market by 2020. As DOE may not implement or enforce energy conservation standards on GSILs in this rulemaking, should DOE promulgate standards for CFLs and LED lamps with

[23] An E26 base, or medium screw base, means an Edison screw base identified with the prefix E–26 in the ''American National Standard for Electric Lamp Bases'', ANSI_IEC C81.61–2003, published by the American National Standards Institute. 10 CFR 430.2

[24] *Id.* at 2–27.

[25] *Id.* at 2–28.

outputs between 2,601 and 3,300 lumens, there could be an even more pronounced migration to the 150 W and 200 W incandescent lamps. (EEAs, No. 32 at p. 7)

Earthjustice found that DOE's determination that establishing standards for CFL and LED versions of high-lumen lamps, but not for high-lumen incandescent lamps, could increase national energy consumption fails to consider that including high-lumen lamps as GSLs would trigger the 45 lm/W backstop requirement. While Earthjustice disagreed with DOE's interpretation that the Appropriations Rider prohibits DOE from promulgating standards for high-lumen incandescent lamps, Earthjustice noted that even with DOE's interpretation, the backstop still applies to any lamps DOE determines meet the EPCA criterion for coverage as a general service lamp. Therefore, Earthjustice asserted that all high-lumen lamps, including incandescent high-lumen lamps, will need to meet a standard of 45 lm/W. Earthjustice urged DOE to reconsider its approach to the scope of coverage given the backstop provision's application to all GSLs. (Earthjustice, No. 30 at pp. 3–4)

Southern Company commented that if the backstop goes into effect and the standard is at 45 lm/W, there will most likely need to be exceptions based on available technology. Southern Company stated that there are instances where consumers trying to use higher lumen bulbs are forced to use incandescents because there is no product on the market that fits their size limitations. Southern Company requested DOE consider exceptions for products with space constraints or higher lumen outputs. (Southern Company, Public Meeting Transcript, No. 29 at pp. 131–132)

DOE agrees that the backstop under 42 U.S.C. 6295(i)(6)(A)(v), in all likelihood, will become effective beginning January 1, 2020. In this NOPR analysis, DOE further evaluated products in the high-lumen range and found limited product offerings and concluded that these products have a low market share and therefore, would not result in significant energy savings. (See chapter 3 of the NOPR TSD for further details.) Further, DOE agrees there are technological limitations currently to creating higher efficacy replacements while maintaining form factor for high lumen lamps. Hence, regardless of implications of the backstop, DOE maintains its decision not to establish standards for GSLs greater than 2,600 lumens in this rulemaking. DOE requests comment on the energy savings potential of standards for GSLs greater than 2,600 lumens.

4. Lamps without an ANSI Base

In the preliminary analysis, DOE considered GSLs to have an ANSI base to ensure they can be used in sockets commonly found in residential, commercial, and industrial fixtures.[26] NRDC asked for clarification on this ANSI base criterion for meeting the GSL definition. NRDC asked for example, if DOE would consider a lamp with a non-ANSI base that uses an adapter to fit a medium screw base socket; although, NRDC noted that this combination is not currently in practice. (NRDC, Public Meeting Transcript, No. 29 at pp. 24–25) Westinghouse commented that they make adapters, but stated that, as per EPAct, they are not permitted to make any adapter that converts a medium screw base socket to any other socket type. (Westinghouse, Public Meeting Transcript, No. 29 at pp. 25–26)

DOE is not aware of any lamps on the market relevant to the GSL scope that have a non-ANSI base which can be converted into an ANSI base via an adapter or other device. DOE will continue to monitor the market for such products and requests comments on whether such lamps are commercially available.

5. Operating Voltage

CA IOUs recommended that lamps designed and marketed to be operated at 130 V or higher (often marketed as long-life lamps) be included in the definition of GSL. (CA IOUs, No. 33 at p. 2) In the preliminary analysis, DOE stated that lamps with operating voltage outside the range of 110 to 130 V can be used in general lighting applications and are therefore, GSLs.[27] Specifically, DOE found that lamps operating on low voltage (*i.e.,* requires the use of a transformer) can provide overall illumination. However, DOE's interpretation of not requiring GSLs to operate on a specific voltage means that lamps operating at 130 V or higher are also within the scope of GSLs.

6. Summary of GSL Interpretation

In summary, DOE is proposing to interpret general service lamps as lamps intended to serve in general lighting applications and have the following basic characteristics: (1) An ANSI base with the exclusion of light fixtures; (2) lumen output of 310 lumens or greater; (3) operate at any voltage; (4) are not the subject of other rulemakings; and (5) are not designed and labeled for use in certain non-general applications (see section IV.D for more information).

C. Definitions Supporting GSLs

DOE also considered several definitions to support its interpretation of the GSL definition and received comments on certain definitions, discussed in the sections below.

1. General Service LED Lamps

General service LED lamps are included in the definition of GSL. LED lamps can be integrated or non-integrated. DOE does not currently have a definition for ''general service LED lamp,'' however ''light-emitting diode or LED'' is defined at 10 CFR 430.2 as a p-n junction solid-state device of which the radiated output, either in the infrared region, the visible region, or the ultraviolet region, is a function of the physical construction, material used, and exciting current of the device. In the preliminary analysis, DOE considered the following definition for general service LED lamps: ''*General service light-emitting diode (LED) lamp* means an integrated or non-integrated LED lamp designed for use in general lighting applications (as defined in 430.2).''[28]

NEMA suggested additional wording to clarify the use of LEDs in general service LED lamps and proposed the language ''that uses light emitting diodes as the primary source of light'' be added to the end of DOE's proposed definition. (NEMA, No. 34 at p. 3) DOE agrees that the additional language may provide clarification by connecting the lamp type with the light source used. DOE therefore proposes the following definition for general service LED lamp and requests comment on whether further modifications are needed: ''*General service light-emitting diode (LED) lamp* means an integrated or non-integrated LED lamp designed for use in general lighting applications (as defined in 430.2) and that uses light-emitting diodes as the primary source of light.''

2. Organic Light-Emitting Diode Lamps

OLED lamps are also included in the definition of GSL. DOE does not currently have a definition for OLED lamp; however, OLED is defined at 10 CFR 430.2 as a thin-film light-emitting device that typically consists of a series of organic layers between two electrical contacts (electrodes). In the preliminary analysis, DOE considered defining ''*Organic light-emitting diode or OLED lamp* to mean an integrated or non-

[26] *Id.* at 2–28.

[27] *Id.* at 2–22.

[28] *Id.* at 3–5.

integrated lamp that uses OLEDs as the primary source of light.'' [29]

NEMA noted that a typographical error existed in the definition considered for OLED lamp and suggested the following revisions: ''Organic light-emitting diode or OLED lamp means an integrated or non-integrated lamp designed for use in general lighting applications that uses OLEDs as the primary source of light.'' (NEMA, No. 34 at p. 3) DOE agrees that specifying that OLED lamps are for use in general lighting applications further clarifies the scope of the GSL rulemaking. DOE also appreciates NEMA noting the typographical error and has corrected the error in the proposed definition. Therefore, DOE is proposing the following definition for OLED lamp in this NOPR analysis and requests comment on whether further modifications are needed: ''*Organic light-emitting diode or OLED lamp* means an integrated or non-integrated lamp designed for use in general lighting applications that uses OLEDs as the primary source of light.''

3. Integrated Lamp and Non-integrated Lamp

In the preliminary analysis, DOE considered defining integrated lamps and non-integrated lamps for GSLs as: ''*Integrated lamp* means a lamp that contains all components necessary for the starting and stable operation of the lamp, does not include any replaceable or interchangeable parts, and is connected directly to a branch circuit through an ANSI base and corresponding ANSI standard lamp-holder (socket)'' and ''*Non-integrated lamp* means a lamp that is not an integrated lamp.'' [30]

NEMA disagreed with DOE's proposed definition of integrated lamp stating that the bases on integrated lamps mentioned in the definition should be limited to those bases most commonly used with the lamps covered within the rulemaking's scope. Currently, these bases would be limited to medium screw bases and GU24 bases [31] for integrated lamps, but those could be adjusted if the scope of the regulation changed in the future. NEMA suggested the following definition: ''Integrated lamp means a CFL or LED lamp that contains all components necessary for the starting and stable operation of the lamp, does not include any replaceable or interchangeable parts, and is intended to be connected directly to a branch circuit through a Medium Screw Base or a GU24 base.'' (NEMA, No. 34 at pp. 2–3)

NEMA also disagreed with the DOE's proposed definition of non-integrated lamps because many of the lamps that would be covered by this broad definition are not within the scope of the rulemaking. (NEMA, No. 34 at p. 7) GE added that the non-integrated lamp definition is too broad and remarked that DOE needs to provide the specifics of what a non-integrated lamp is within the scope of this rulemaking. (GE, Public Meeting Transcript, No. 29 at pp. 52–53) NEMA suggested the following definition: ''Non-integrated lamp means a lamp that requires additional external components for starting and stable operation of the lamp, such as a ballast or a driver and has a single-ended 2-pin or 4-pin base.'' (NEMA, No. 34 at p. 3)

DOE developed the definitions of ''integrated lamp'' and ''non-integrated lamp'' to be technology neutral and broadly encompass any ANSI base in order to cover all lamp types within the GSL scope, and not just those for which standards are being set in this rulemaking. Further, for standards specific to a base type, DOE would clearly state the base type to which standards are applicable. Additionally, lamp designs of GSLs are either integrated (*i.e.,* include within them all components for operation) or are non-integrated (*i.e.,* require an external component for operation). Because all lamps fit in either one or the other configuration, DOE finds that its approach to defining non-integrated lamps as any lamp that is not an integrated lamp to comprehensively include all possible GSLs with the external component configuration. Therefore, DOE proposes to maintain the definitions of ''integrated lamp'' and ''non-integrated lamp'' as specified in the preliminary analysis.

4. Hybrid Lamps

In the preliminary analysis, DOE noted that the CFL test procedure rulemaking is proposing the definition of ''*Hybrid compact fluorescent lamp* to mean a compact fluorescent lamp that incorporates one or more supplemental light sources of different technology.'' 80 FR 45724 (July 31, 2015).

NEMA commented that DOE's proposed definition of hybrid CFLs was vague and suggested the following definition to increase clarity: ''Hybrid compact fluorescent lamp means a compact fluorescent lamp that incorporates one or more supplemental light sources of different technology, such as halogen or LED, which are energized and operated independently and may or may not operate simultaneously.'' (NEMA, No. 34 at p. 4) Because this definition is being proposed in the CFL test procedure rulemaking, DOE will address NEMA's comment within that rulemaking.

5. Base Types

As NEMA agreed with the preliminary definition of pin base lamps (NEMA, No. 34 at p. 4), and DOE received no other comments, DOE is continuing to propose the definition of ''*Pin base lamp* to mean a lamp that uses a base type designated as a single pin base or multiple pin base system in Table 1 of ANSI C81.61, Specifications for Electrics Bases.''

In the preliminary analysis, DOE also considered defining ''*GU24 base* to mean the GU24 base standardized in ANSI C81.61.'' NEMA agreed with the proposed definition for GU24 base. (NEMA, No. 34 at p. 4) Since DOE received no further comments, DOE is continuing to propose the definition for GU24 base as specified in the preliminary analysis.

In the preliminary analysis, for non-integrated lamps DOE had identified pin bases and screw bases as the only bases that would meet the scope of GSLs. DOE requested comment on this assessment. NEMA confirmed that there are no other base types for non-integrated lamps that meet the definition of GSLs. (NEMA, No. 34 at p. 7)

6. Light Fixture

In the preliminary analysis, DOE considered adding the definition of ''light fixture'' to the **Federal Register** in order to ensure that complete light fixtures with ANSI bases (*e.g.,* certain retrofit kits) are not included in the scope of this rulemaking. Specifically, DOE considered the definition for ''*Light Fixture* to mean a complete lighting unit consisting of lamp(s) and ballast(s) (when applicable) together with the parts designed to distribute the light, to position and protect the lamps, and to connect the lamp(s) to the power supply.'' [32]

NEMA agreed with the considered light fixture definition. (NEMA, No. 34 at p. 4) DOE is proposing to slightly modify the definition to clarify that a light fixture may contain light sources other than lamps, such as LED modules or arrays, and drivers in addition to ballasts. Therefore, DOE is proposing the following definition for ''light fixture'' in this NOPR analysis and is requesting comment on this definition:

[29] A typographical error occurred on p. 3–6 of the preliminary analysis stating ''as light'' rather than ''of light.''

[30] GSL preliminary analysis at 3–4.

[31] Medium screw base is defined in 10 CFR 430.2, and DOE proposes a definition for GU24 base in section IV.C.5.

[32] *Id.* at 3–6.

''*Light Fixture* means a complete lighting unit consisting of light source(s) and ballast(s) or drivers(s) (when applicable) together with the parts designed to distribute the light, to position and protect the light source, and to connect the light source(s) to the power supply.''

7. LED Downlight Retrofit Kits

DOE did not consider a definition for LED downlight retrofit kits in the preliminary analysis; however, DOE conducted a survey of the market and found several LED downlight retrofit kits available at common distribution channels and determined a definition was necessary to clarify whether these kits are considered GSLs. DOE found that LED downlight retrofit kits are designed to directly replace traditional downlights that use technologies such as incandescent or halogen lamps or CFLs. DOE also determined that LED downlight retrofit kits generally use an ANSI lamp base and are certified to the UL 1598C standard for LED Retrofit Luminaire Conversion Kits.[33] The retrofit kits integrate the light source and trim and therefore require the existing trim and lamp to be removed before installing in the existing fixture housing. DOE does not consider LED downlight retrofit kits to be GSLs because the kits integrate additional components such as the trim and require the existing trim to be removed. In support of the scope of this rulemaking, DOE is proposing a definition for LED downlight retrofit kits which aligns with the definition for SSL Downlight Retrofits in the May 29, 2015, ENERGY STAR Program Requirements for Luminaires (Light Fixtures) Version 2.0 (hereafter ''ENERGY STAR Luminaires Specification V2.0'').[34] The definition proposed for ''*LED Downlight Retrofit Kit''* means a product intended to install into an existing downlight, replacing the existing light source and related electrical components, typically employing an ANSI standard lamp base, either integrated or connected to the downlight retrofit by wire leads, and is a retrofit kit classified or certified to UL 1598C . LED downlight retrofit kit does not include integrated lamps or non-integrated lamps.'' DOE requests comment on the definition proposed.

8. Summary of Definitions

In the preliminary analysis, DOE developed definitions for the following terms in support of the scope of the rulemaking: ''Integrated lamp,'' ''non-integrated lamp,'' ''general service LED lamp,'' ''OLED lamp,'' ''light fixture,'' ''pin base lamp,'' and ''GU24 base.'' In the NOPR analysis, DOE is continuing to propose the definitions considered in the preliminary analysis for these terms except for the edits to ''general service LED lamp,'' ''OLED lamp,'' and ''light fixture,'' as specified in previous sections. DOE is also proposing a new definition for ''LED downlight retrofit kits.'' The proposed definitions are detailed in chapter 3 of this NOPR TSD.

D. Exempted Lamps

DOE considered whether lamps designed or labeled for specific applications could provide overall illumination and therefore meet the definition of general service lamp. DOE determined that the exemptions for specialty applications listed in 42 U.S.C. 6291(30)(D)(ii) are only applicable to GSILs.[35] Although the GSIL exemptions do not automatically apply to other lamp technologies, DOE considered whether these exemptions should be continued for GSLs. The definition of ''general service incandescent lamp'' includes the following list of exempted incandescent lamps:

(1) An appliance lamp;
(2) A black light lamp;
(3) A bug lamp;
(4) A colored lamp;
(5) An infrared lamp;
(6) A left-hand thread lamp;
(7) A marine lamp;
(8) A marine signal service lamp;
(9) A mine service lamp;
(10) A plant light lamp;
(11) A reflector lamp;
(12) A rough service lamp;
(13) A shatter-resistant lamp (including a shatter-proof lamp and a shatter-protected lamp);
(14) A sign service lamp;
(15) A silver bowl lamp;
(16) A showcase lamp;
(17) A 3-way incandescent lamp;
(18) A traffic signal lamp;
(19) A vibration service lamp;
(20) A G shape lamp (as defined in ANSI C78.20) and ANSI C79.1–2002 with a diameter of 5 inches or more;
(21) A T shape lamp (as defined in ANSI C78.20) and ANSI C79.1–2002 and that uses not more than 40 watts or has a length of more than 10 inches; and
(22) A B, BA, CA, F, G16–1/2, G–25, G30, S, or M–14 lamp (as defined in ANSI C79.1–2002) and ANSI C78.20 of 40 watts or less.
10 CFR 430.2

In the preliminary analysis, DOE assessed whether each specified lamp type provides overall illumination and therefore can be used in general lighting applications.[36] DOE found the lumen output of some of these lamps was insufficient to provide overall illumination. Thus, DOE considered not establishing standards for appliance lamps, black lights, bug lamps, colored lamps, infrared lamps, marine signal lamps, mine service lamps, plant lights, sign service lamps, silver bowl lamps, showcase lamps, and traffic signal lamps under the GSL rulemaking because the lamps are intended for use in non-general applications. DOE preliminarily determined that left-hand thread lamps, marine lamps, reflector lamps, rough service lamps, shatter-resistant lamps, 3-way lamps, vibration service lamps, and lamps of several specific shapes could provide overall illumination and therefore do not require exemption for standards. DOE received comments regarding these potential exemptions and definitions for these lamp types. Therefore, in this NOPR analysis, DOE is proposing definitions for each of the specified lamp types to better delineate the GSL definition, especially in regards to determining the possible GSLs that use technologies other than incandescent and operate in applications equivalent to those of the lamps exempted from the GSIL definition. DOE requests comment on the definitions proposed. In addition, DOE requests comment on if there are any other lamp types that do not serve in general lighting applications and should be exempted from general service lamp standards.

1. Exempted Lamp Types

NEMA agreed that colored lamps, appliance lamps, black light lamps, bug lamps, plant lamps, infrared lamps, sign service lamps, showcase lamps, marine signal lamps, mine service lamps, silver bowl lamps, and traffic signal lamps should be exempted from standards since these are low volume lamps designed for specialty applications and do not provide overall illumination. (NEMA, No. 34 at pp. 4–5) CA IOUs and EEAs also recommended that DOE look closely at plant light lamps, bug lamps, silver bowl lamps, colored lamps, and appliance lamps to ensure that adequate legal definitions are in place to prevent lamps that could easily be used in general lighting applications from being

[33] Underwriter's Laboratory. *Standard for Light-Emitting Diode (LED) Retrofit Luminaire Conversion Kit.* 2014. Underwriter's Laboratory Inc. (Last accessed July 21, 2015.) *http://ulstandards.ul.com/standard/?id=1598C&edition=1&doctype=ulstd.*

[34] ENERGY STAR. *ENERGY STAR Program Requirements: Product Specification for Luminaires (Light Fixtures): Eligibility Criteria, Version 2.0.* 2015. U.S. Environmental Protection Agency: Washington, DC (Last accessed July 7, 2015.) *https://www.energystar.gov/sites/default/files/Luminaires%20V2.0%20Final%20Specification.pdf.*

[35] GSL preliminary analysis at 3–7.

[36] *Id.*

manufactured and marketed under these exemptions. (CA IOUs, No. 33 at p. 2; EEAs, No. 32 at pp. 6–7) DOE discusses these lamp types and others that it is proposing to exempt, as well as the relevant definitions, in the sections that follow.

a. Colored Lamp

In the preliminary analysis, DOE considered the definition for ''*Colored lamp* to mean a colored fluorescent lamp, a colored incandescent lamp, or a lamp designed and marketed as a colored lamp and not designed or marketed for general lighting applications with either of the following characteristics (if multiple modes of operation are possible [such as variable CCT], either of the below characteristics must be maintained throughout all modes of operation): (1) A CRI less than 40, as determined according to the method set forth in CIE Publication 13.3; or (2) A correlated color temperature less than 2,200 K or greater than 7,000 K as determined according to the method set forth in IES LM–66 or IES LM–79 as appropriate.'' [37]

NEMA agreed with the considered definition of colored lamps. (NEMA, No. 34 at p. 3) GE commented that this definition has been used successfully for linear fluorescent lamp technology for years and tends to push lamps into areas that define the colored space. Therefore, GE found it logical for this definition to also to work for CFLs or LED lamps. However, GE also noted that a definition for colored lamps needs to be further reviewed within the industry. (GE, Public Meeting Transcript, No. 29 at pp. 42–43) EEAs urged DOE to develop clear legal definitions for each exempted lamp type in order to prevent a manufacturer from simply applying an inexpensive removable cover to an incandescent lamp that could be used in general service applications if the cover was removed. They recommended that DOE include language in its definition that would not exempt such lamps that are operable once one or more components are removed. Additionally, EEAs noted that the definition of colored incandescent lamp includes lamps with a correlated color temperature (CCT) below 2,500 K, which might also represent a potential loophole as it is not far from the 2,700 K of conventional lamps. EEAs asked that DOE eliminate this language in its regulations. (EEAs, No. 32 at p. 6) In interviews, some manufacturers noted that colored lamps are evaluated based on perceived color, and as such would be better defined by the wavelength of the light emitted, rather than the CRI or CCT. However, given the different possible colors of colored lamps, manufactuers noted it would be problematic to include distinct wavelengths in the definition, especially given the definition's application to developing LED technologies. Given that CRI and CCT may be the best descriptors of the lamp type overall, DOE received feedback from manufacturers interviewed that the lower CCT limit should be raised to 2,500 K to accommodate the demand for 2,200–2,450 K atmospheric mood lighting in hospitality applications. Accordingly, DOE continues to propose defining this lamp type with CRI and CCT, but broadens the lower CCT range to less than 2,500 K as: ''*Colored lamp* means a colored fluorescent lamp, a colored incandescent lamp, or a lamp designed and marketed as a colored lamp and not designed and marketed for general lighting applications with either of the following characteristics (if multiple modes of operation are possible [such as variable CCT], either of the below characteristics must be maintained throughout all modes of operation): (1) A CRI less than 40, as determined according to the method set forth in CIE Publication 13.3; or (2) A correlated color temperature less than 2,500 K or greater than 7,000 K as determined according to the method set forth in IES LM–66 or IES LM–79 as appropriate.''

b. Appliance Lamp

CA IOUs and EEAs recommended that DOE establish a maximum allowable light output for appliance lamps to prevent the lamps from being used in general service applications. EEAs specified that DOE should establish this maximum allowable light output level at approximately 400 lumens. CA IOUs and EEAs noted that these lamps often utilize thicker glass in order to withstand higher temperatures, but they could potentially be made to look and operate like a conventional GSIL. EEAs added that a manufacturer could simply alter a current 43 W halogen incandescent, add a thicker glass enclosure, and market it as an equivalent of a GSL, only identifying it as an appliance lamp in smaller print on the front of the package. EEAs stated that the 400-lumen limit, a light output just below conventional 40 W incandescent lamps, would be sufficient to illuminate the small oven spaces for which appliance lamps are intended and prevent them from being used as a loophole to compliance with standards. (CA IOUs, No. 33 at p. 2; EEAs, No. 32 at pp. 6–7)

A statutory definition of appliance lamp currently exists at 42 U.S.C. 6291(30)(T). Appliance lamp is defined as: ''*Appliance lamp* means any lamp that— (1) Is specifically designed to operate in a household appliance, has a maximum wattage of 40 watts, is sold at retail (including an oven lamp, refrigerator lamp, and vacuum cleaner lamp); and (2) Is designated and marketed for the intended application, with (i) The designation on the lamp packaging; and (ii) Marketing materials that identify the lamp as being for appliance use.'' 10 CFR 430.2.

DOE acknowledges that the 40 W limit currently included in the statutory definition of appliance lamp is intended for incandescent technology; however, DOE is unable to modify this wattage limit as it is part of a statutory definition. Per the definition, appliance lamps are required to be designated and marketed as such on both the lamp packaging and marketing materials. Further, DOE clarified the term ''designed and marketed'' in the GSFL and IRL standard rulemaking to ensure that the marketing materials explicitly stated the intended application of the exempted lamp. DOE defined ''designated and marketed'' to mean that the intended application of the lamp is clearly stated in all publicly available documents (*e.g.,* product literature, catalogs, and packaging labels). 80 FR 4053–4054 (Jan. 26, 2015). Therefore, DOE believes the specialty application of appliance lamps will be sufficiently clear, thus preventing consumers from using appliance lamps in general service lighting applications.

c. Black Light Lamp

In interviews, DOE presented a preliminary definition of ''*Black light lamp* to mean a lamp that is designed and marketed as a black light lamp and is an ultraviolet lamp that emits a significant portion of its radiative power in the UV–A band (315 to 400 nm).''

Manufacturers agreed with this preliminary definition of black light lamps based on the definition of black light lamp in the industry standard RP–16. RP–16 defines black light lamp as an ultraviolet lamp that emits a significant portion of its radiative power in the UV–A band (315 to 400 nm). However, DOE determined that additional specificity was necessary for the definition of black light lamp to clearly describe the exemption. Therefore, DOE proposes to exempt black light lamps defined as: ''*Black light lamp* means a lamp that is designed and marketed as a black light lamp and is an ultraviolet lamp with the highest radiant power

[37] *Id.* at 3–8.

peaks in the UV–A band (315 to 400 nm) of the electromagnetic spectrum.''

d. Bug Lamp

In manufacturer interviews, DOE presented a preliminary definition of bug lamp ''*Bug lamp* to mean a lamp that emits a significant portion of its radiative power in the UV–A band (315 to 400 nm) and the visible spectrum (380 to 770 nm).''

Manufacturers disagreed with this definition, noting that bug lamps are not those lamps made to attract insects, but rather those designed to emit light outside the typical perception of night-flying insects. Such lamps emit light only in the red or yellow part of the spectrum and are marketed as a bug lamp. Therefore, in this NOPR DOE proposes to exempt bug lamps defined as: ''*Bug lamp* means a lamp that is designed and marketed as a bug lamp, has radiant power peaks above 550 nm on the electromagnetic spectrum, and has a visible yellow coating.''

e. Plant Light Lamp

In manufacturer interviews, DOE received feedback on the following preliminary definition for plant light lamps: ''*Plant light lamp* means a lamp that contains a filter to suppress the yellow and green portion of the spectrum. Plant light lamps must be specifically designed and marketed for plant growing applications.''

Some manufacturers noted that the definition applies only to incandescent lamps, as other lighting technologies are not constrained to use filters. Manufacturers pointed out that the main purpose of such lamps is to mimic sunlight for growing plants indoors. The light output of the lamp may be more tailored to the needs of the specific plants being cultivated. Therefore, DOE amends the preliminary definition and instead proposes to exempt plant light lamps defined as: ''*Plant light lamp* means a lamp that is designed to promote plant growth by emitting its highest radiant power peaks in the regions of the electromagnetic spectrum that promote photosynthesis: blue (440 nm to 490 nm) and/or red (620 to 740 nm). Plant light lamps must be designed and marketed for plant growing applications.''

f. Infrared Lamp

In manufacturer interviews, DOE received feedback on the following preliminary definition for infrared lamp: ''*Infrared lamp* means a lamp that radiates predominately in the infrared spectrum (770 nm to 1 mm).''

Manufacturers commented that DOE should align the definition with that used in the RP–16. Further, manufacturers specifically requested that DOE remove the wavelength range and add a clause that the visible radiation is not of principle interest. RP–16 defines ''infrared lamp'' as a lamp that radiates predominately in the infrared; the visible radiation is not of principal interest. DOE finds the wavelength range necessary for clearly describing the exemption and also believes that describing the primary application of infrared lamps (*i.e.,* to provide heat) is more straightforward. Therefore, DOE proposes defining infrared lamp to align with the RP–16 definition with slight modifications as: ''*Infrared lamp* means a lamp that is designed and marketed as an infrared lamp, has its highest radiant power peaks in the infrared region of the electromagnetic spectrum (770 nm and 1 mm), and which has a primary purpose of providing heat.''

g. Sign Service Lamp

In interviews, DOE received feedback from manufacturers generally agreeing with a preliminary definition of sign service lamps, proposed below. DOE received some feedback regarding additional technology-specific features that should be incorporated in the definition. However, DOE is proposing technology-neutral definitions to support the scope of the rulemaking. Therefore, DOE proposes to define sign service lamps as: ''*Sign service lamp* means a vacuum type or gas-filled lamp that has sufficiently low bulb temperature to permit exposed outdoor use on high-speed flashing circuits, is designed and marketed as a sign service lamp, and has a maximum rated wattage 15 watts.''

h. Showcase Lamp

In manufacturer interviews, DOE received feedback on the following preliminary definition for showcase lamp: ''*Showcase lamp* means a lamp that has a T-shape as specified in ANSI C78.20 and ANSI C79.1 and a length exceeding 25 cm [centimeters] and is marketed as a showcase lamp.''

The majority of manufacturers agreed with a preliminary definition of showcase lamps, however DOE received some feedback to remove the length requirement, as there was concern that showcase lamps varied in length. DOE agrees the definition is sufficiently narrow without the length requirement and therefore proposes to define showcase lamps as: ''*Showcase lamp* means a lamp that has a T-shape as specified in ANSI C78.20 and ANSI C79.1, is designed and marketed as a showcase lamp, and has a maximum rated wattage of 75 watts.''

i. Marine Signal Service Lamp, Mine Service Lamp, Silver Bowl Lamp, and Traffic Signal Lamp

In interviews, DOE received feedback from manufacturers agreeing with several preliminary definitions of exempted lamp types including marine signal service lamps, mine service lamps, silver bowl lamps, and traffic signal lamps. DOE did not receive any negative feedback or suggested changes. Therefore, DOE proposes to define these terms as: ''*Marine signal service lamp* means a lamp that is designed and marketed for marine signal service applications''; ''*Mine service lamp* means a lamp that is designed and marketed for mine service applications''; ''*Silver bowl lamp* means a lamp that has a reflective coating applied directly to part of the bulb surface that reflects light toward the lamp base and that is designed and marketed as a silver bowl lamp''; and ''*Traffic signal lamp* means a lamp that is designed and marketed for traffic signal applications.''

j. Designed and Marketed

In the recent final rule for general service fluorescent lamps and incandescent reflector lamps, DOE adopted a definition for the term ''designed and marketed'' to ensure that the intended application of the lamp is clearly stated in all publicly available documents (*e.g.,* product literature, catalogs, and packaging labels). DOE believes that it is important that all public disclosures be consistent about the intended use or application of the lamp. 80 FR 4042, 4053–4054 (January 26, 2015).

DOE is proposing a revised definition of ''designed and marketed'' to clarify that the term means that a lamp is specifically designed for a specialty application and that, when distributed in commerce, the packaging and all publicly available documents indicate the intended application. This will help ensure that lamps that are exempt from the definition of general service lamp do not have packaging or marketing materials that imply they are for use in general lighting applications. DOE proposes to revise the definition of ''designed and marketed'' to read: ''*Designed and marketed* means that the product is specifically designed to fulfill the indicated application and, when distributed in commerce, is designated and marketed for the intended application, with the designation on the packaging and all publicly available documents (*e.g.,* product literature,

catalogs, and packaging labels) indicating the intended application. This definition is applicable to terms related to the following covered lighting products: Fluorescent lamp ballasts; fluorescent lamps; general service fluorescent lamps; general service incandescent lamps; general service lamps; incandescent lamps; incandescent reflector lamps; medium base compact fluorescent lamps; and specialty application mercury vapor lamp ballasts.''

2. Non-Exempted Lamp Types

In the preliminary analysis, DOE determined that several of the specified lamp types were able to provide overall illumination and therefore could serve in general lighting applications and did not require an exemption from standards. NRDC and CEC expressed their support of the determination that many of the currently exempt lamps do provide overall illumination and therefore do not need to be exempted. (NRDC, Public Meeting Transcript, No. 29 at p. 12; CEC, No. 31 at p. 2) DOE discusses these lamp types in the following sections.

a. Reflector Lamp

In the preliminary analysis, DOE considered defining the term ''reflector lamp'' in support of the scope of coverage and presented the definition for ''*Reflector lamp* to mean a lamp that has an R, PAR, BPAR, BR, ER, MR, or similar bulb shape as defined in ANSI C78.20 and ANSI C79.1 and is used to direct light.'' [38]

NEMA agreed with the proposed definition of reflector lamps. (NEMA, No. 34 at p. 4) However, NEMA did not think it was appropriate to include reflector lamps as covered products in this rulemaking because they are designed for specific applications and offer unique performance and efficiency features. (NEMA, No. 34 at p. 6) DOE observes that reflector lamps provide overall illumination and serve in general lighting applications. DOE finds no evidence that reflector lamps would be prohibited from use in general service applications, and therefore proposes the definition of reflector lamp considered in the preliminary analysis. DOE welcomes comment on including non-IRLs in the definition of GSLs.

DOE also considered the following definition for ''non-reflector lamp'' in the preliminary analysis to further define the scope: ''*Non-reflector lamp* means a lamp that is not a reflector lamp.'' [39] NEMA commented that the definition of non-reflector lamp was vague and suggested modifying the definition to mean ''an integrated or non-integrated lamp that is not a reflector lamp.'' (NEMA, No. 34 at p. 4) DOE notes that the definitions for reflector and non-reflector are intended to describe the shapes of the lamps specifically. DOE is therefore maintaining the definition for non-reflector lamp. DOE proposes definitions for integrated and non-integrated lamp in section IV.C.3.

b. Rough Service Lamp, Shatter-Resistant Lamp, and Vibration Service Lamp

In the preliminary analysis, DOE noted that rough service lamps and vibration service lamps are defined specifically in the context of incandescent or halogen technology. However, DOE determined that the utility of rough service, vibration service, and shatter-resistant lamps is their service in applications where vibrations occur or in applications where broken glass due to shattering would be a safety hazard and therefore must be contained. DOE believes that LED lamps are inherently durable and thus can provide the necessary utility to serve in these applications.

NRDC and CA IOUs commented that special treatment lamps such as shatter-resistant and vibration service lamps can be used in general applications. (NRDC, Public Meeting Transcript, No. 29 at pp. 12–13; CA IOUs, No. 33 at p. 2) EEAs agreed that energy-efficient CFLs and LED lamps already exist on the market to meet the needs of each of these lamp types, and in some cases provide superior functionality. As LED lamps are not filament based, they are more robust than vibration service incandescent lamps. (EEAs, No. 32 at pp. 5–7) NEMA commented that the rough service lamp definition and vibration service lamp definition are unique to incandescent technology and are not applicable to CFL or LED lamp technology as those lamps are more shock resistant by design. NEMA further noted that shatter-resistant lamps normally contain a coating that absorbs a small portion of the light output; and therefore, light absorption factors would have to be considered when setting efficacy regulations covering this technology. (NEMA, No. 34 at p. 5) However, as LED lamps capable of operating in shatter-resistant applications exist at the highest ELs, DOE finds there is no technological reason to separate them into their own product class, let alone exempt them from standards. Because DOE found that the utilities offered by these lamp types are available at higher levels of efficacy, DOE is proposing not to exempt non-incandescent lamps for use in rough service, shatter-resistant, and vibration service applications in this GSL rulemaking.

c. Three-Way Lamp

In the preliminary analysis, DOE determined that 3-way lamps are able to provide overall illumination, and therefore can be used in general lighting applications. Further, DOE found that 3-way CFLs and LED lamps are available, and one of the most-efficacious GSLs currently available on the market is a 3-way LED lamp. Therefore, DOE found no technological reason not to include non-incandescent 3-way lamps in this GSL rulemaking.[40]

NRDC and CA IOUs agreed that 3-way lamps can be used in general applications. (NRDC, Public Meeting Transcript, No. 29 at pp. 12–13; CA IOUs, No. 33 at p. 2) EEAs agreed that 3-way CFLs and LED lamps already exist on the market designed to replace conventional 3-way incandescent lamps. (EEAs, No. 32 at pp. 6–7) NEMA commented that if 3-way CFL or LED lamps are regulated, the efficiency requirements should be evaluated based on the highest, most energy consuming setting, as is done in other current standards (*e.g.,* ENERGY STAR) for these products. NEMA explained that 3-way CFLs will operate at different efficacies at different light levels and it is important that DOE base compliance with standards at the most-efficacious or highest light output level. Forcing the lower light output settings to meet high ELs would be very problematic for industry and may remove this product utility from the market. (NEMA, No. 34 at p. 5) DOE agrees with NEMA that the unique utility of 3-way lamps needs to be retained and that 3-way lamps performance varies depending on the light output setting. Therefore, in both the CFL TP NOPR and the LED TP SNOPR, DOE proposed to operate CFLs and LED lamps at the maximum input power. 80 FR 45724 (July 31, 2015); 80 FR 39644 (July 9, 2015). Further, when tested at the highest output level, DOE finds that 3-way lamps are available at the highest ELs and therefore proposes not to exempt 3-way lamps from this rulemaking.

d. Left-Hand Thread Lamp and Marine Lamp

DOE did not consider providing exemptions for left-hand thread lamps or marine lamps in the preliminary analysis. NEMA and EEAs agreed that

[38] *Id.* at 3–9.

[39] *Id.*

[40] *Id.* at 3–8.

the left-hand thread lamp and marine lamp exemptions are not necessary for CFL or LED lamp technology. (NEMA, No. 34 at p. 6; EEAs, No. 32 at pp. 6–7) DOE agrees that these lamp types provides overall illumination and can serve in general lighting applications, and therefore continues not to propose an exemption for left-hand thread lamps or marine lamps from GSL standards.

e. Lamps of Specific Shapes

In the preliminary analysis, DOE determined that lamps of several specific shapes (such as G, T, B, BA, CA, F, G16.5, G25, G30, S, and M14, as defined in ANSI C79.1–2002 and ANSI C78.20) provide overall illumination, and therefore can serve in general lighting applications and do not require an exemption from standards.[41] EEAs agreed with DOE's determination that lamps of these shapes provide overall illumination and can serve in general lighting applications and as such would no longer warrant an exemption. (EEAs, No. 32 at pp. 6–7) NEMA commented that specific lamp shapes exempted in the current incandescent rule primarily provide decorative illumination and are not wholly functional in all general service applications. NEMA stated that decorative lamp shapes provide unique technical challenges for both CFL and LED lamp technology, and they cannot be assumed to be capable of reaching similar efficacy levels. NEMA noted that the technical effort necessary to mimic the consumer-demanded performance attributes of some decorative products would come with corresponding trade-offs in efficacy. NEMA added that because manufacturers are only beginning to develop these types of lamps, the size of this impact on efficacy is not well-known. NEMA commented that regulating this emerging product category at this time would slow product innovation, as well as development and consumer acceptance, as standards inhibit the flexibility of the manufacturer to experiment with product specifications that may relate to the utility of the product. NEMA suggested DOE regulate these products in a future rulemaking. (NEMA, No. 34 at p. 6)

DOE recognizes the rapid development of LED lamps, and notes that products with certain lamp shapes are part of emerging product lines at this time. As stated previously, DOE determined that these lamps could serve in general lighting applications because they emit a minimum of 310 lumens, thus providing overall illumination. However, based on comments received and feedback from manufacturer interviews, DOE considered whether lamps of these certain shapes were able to achieve the same level of efficacy as the more common 60 W A-shape equivalent replacements. DOE also considered whether lamps of these shapes could achieve those higher levels of efficacy in their existing form factors.

DOE found that in general the lamps of these certain shapes were not able to achieve the highest levels of efficacy under consideration in the NOPR analysis while maintaining their form factors. (See section V.C.5 for more information on the ELs.) DOE compared the size of the CFL and LED lamps that were available in these certain shapes to more efficacious 60 W A-shape equivalent replacements to determine if the form factors were smaller, which could indicate that space constraints were preventing the lamps from achieving comparable efficacies. DOE found that B-shape lamps (including blunt shape), C- and CA-shape lamps (including candle shape), F-shape lamps (including flame or flame tip shape), S-shape lamps, and torpedo or torpedo tip shape lamps were considerably smaller in size than the 60 W A-shape equivalent replacements. Therefore, DOE is proposing to exempt from the standards proposed in this rulemaking lamps of these shapes that have a diameter of less than or equal to 1.875 inches when measured at the widest point. DOE also determined that the G-shape lamps (including globe shape) with lamp diameter when measured at the widest point of less than or equal to 2.0625 inches and A15 lamps with diameter when measured at the widest point of less than or equal to 2.185 inches were also notably smaller in size than the 60 W A-shape equivalent replacements. DOE is therefore also proposing to exempt these lamp types from the standards proposed in this rulemaking. In summary, DOE is proposing to exempt B-, blunt, C-, CA-, candle, F-, flame, flame tip, S-, torpedo, and torpedo tip shape lamps with a diameter of less than or equal to 1.875 inches; G- and globe shape lamps with a diameter of less than or equal to 2.0625 inches; and A15 lamps with a diameter of less than or equal to 2.185 inches. DOE notes that these lamps are general service lamps but is not proposing standards for these lamps in this NOPR analysis. DOE will reconsider these exemptions from GSL standards as the market continues to evolve. DOE welcomes comment on the exemptions proposed for non-incandescent lamps of certain shapes, in particular on the proposed diameters.

E. GSLs Under Consideration for Standards

In the preliminary analysis, DOE did not consider establishing standards for all GSLs. Specifically, DOE considered establishing standards in this rulemaking for the following GSLs: (1) Integrated, non-reflector, medium screw base lamps with a lumen output between 310 and 2,600 lumens; (2) integrated and non-integrated, non-reflector GU24 base lamps with a lumen output between 310 and 2,600 lumens; and (3) non-integrated, non-reflector, pin base, CFLs with a lumen output between 310 and 2,600 lumens.

EEAs stated that their support for including a lamp type as a covered lamp is contingent on DOE ultimately setting a standard for that lamp type. EEAs stated they do not support DOE covering a lamp type, and thereby preempting state standards, without also establishing standards. (EEAs, No. 32 at p. 5)

In the preliminary analysis, DOE did not consider establishing standards for GSLs for which it determined that there would be low potential for energy savings; it would not be technologically feasible to establish standards; and/or restrictions from the Appropriations Rider prevented consideration of standards. DOE notes that for GSLs, state preemption requirements are specified for California and Nevada under 42 U.S.C. 6295(i)(6)(A)(vi). Namely, beginning, January 1, 2018, no provision of law could preclude these states from adopting: (1) A final rule adopted in accordance with 42 U.S.C. 6295(i)(6)(A)(i)–(iv); (2) the minimum efficacy standard of the backstop requirement (45 lm/W) if no final rule was adopted; or (3) for the state of California, any California regulations related to the covered products adopted pursuant to state statute in effect as of the date of enactment of EISA 2007. 42 U.S.C. 6295(i)(6)(A)(vi). Other than these narrow exceptions, EPCA's statutory pre-emption provision would prohibit any state from adopting energy conservation standards for any type of GSL regardless of whether DOE sets standards for that type of GSL.

CA IOUs and Earthjustice commented that any lamp type determined to be a general service lamp in this rulemaking also becomes subject to the backstop requirement. These commenters stated that EPCA's definition of ''general service lamp'' incorporates a few specific types of lamps, including GSILs, CFLs, and LED lamps, but it also authorizes DOE to determine that a lamp is a general service lamp if it is ''used to satisfy lighting applications

[41] *Id.*

traditionally served by general service incandescent lamps.'' 42 U.S.C. 6291(30)(BB)(i). Therefore, commenters asserted that if DOE determines that a type of lamp meets this criterion, it automatically becomes subject to the backstop requirement. CA IOUs noted that setting standards for CFL and LED lamp technologies should not be problematic as the backstop would stop market migration to incandescent technologies. (CA IOUs, Public Meeting Transcript, No. 29 at p. 32; Earthjustice, No. 30 at p. 3) DOE agrees that if the backstop goes into effect on January 1, 2020, per statutory requirement, any lamp that DOE determines is a GSL would be subject to the backstop.

NRDC stated that should the Appropriations Rider be lifted, DOE should review the coverage of other base types, lumen outputs above 2,600, and other such lamps in this rulemaking. (NEMA, No. 34 at p. 2; NRDC, Public Meeting Transcript, No. 29 at p. 42) As noted in the preliminary analysis, DOE's evaluation of GSLs for which to establish standards considered the restrictions based on the Appropriations Rider. If the limitation on DOE's use of appropriated funds per the Appropriations Rider is removed during the course of this rulemaking, DOE will consider revising the scope of the rulemaking.

DOE also received several specific comments on its assessment of GSLs considered for standards in this rulemaking.

1. Integrated Candelabra and Intermediate-Base Lamps

In the preliminary analysis DOE determined that while these lamp types are within the scope, it would not set standards for GSLs with candelabra and intermediate bases in this rulemaking due to the Appropriations Rider.[42] Earthjustice stated that as of March 2015, DOE will be in violation of its obligation to review and amend the energy conservation standards for intermediate-base incandescent lamps and candelabra base incandescent lamps under 42 U.S.C. 6295(m)(1). (Earthjustice, No. 30 at p. 1) EEAs urged DOE to cover lamps with candelabra and intermediate bases as equivalent, given that GSIL versions of these lamps currently are subject to wattage limits only and there is nothing inherently unique about these lamps besides the size of the screw base. EEAs stated that candelabra and intermediate-base lamps are available using incandescent, CFL, and LED technology. (EEAs, No. 32 at p. 5)

DOE evaluated integrated GSLs with intermediate and candelabra bases. DOE identified one incandescent/halogen reflector candelabra base integrated lamp and a limited number of incandescent/halogen reflector intermediate-base integrated lamps. However, as stated previously DOE is not considering these lamp types due to the Appropriations Rider. DOE identified very few reflector candelabra base or intermediate base integrated lamps in CFL or LED technology. Due to this low market share and thereby low energy savings potential, DOE continues to maintain its decision not to establish standards for reflector candelabra and intermediate-base integrated lamps.

Regarding non-reflector lamps, DOE found that there are fewer candelabra and intermediate bases offered in CFL and LED lamp technology compared to the number offered with incandescent/halogen technology; the latter technology cannot be considered due to the Appropriations Rider (see section IV.A for further details). Due to this low market share and thereby low energy savings potential, DOE continues to maintain its decision not to establish standards for non-reflector candelabra and intermediate base integrated lamps.

2. Pin Base Lamps

DOE considered several types of integrated and non-integrated pin base lamps in the preliminary analysis including non-integrated pin base CFLs, non-integrated pin LED lamps, pin base lamps with GU24 bases, and MR16 pin base lamps.[43] DOE received comments on its assessment of whether standards should be established for these lamp types.

a. Non-Integrated Pin Base CFLs and LED Lamps

In the preliminary analysis, DOE considered establishing standards for non-integrated pin base CFLs. NEMA, GE, and Philips commented that non-integrated pin base lamps that go in dedicated fixtures and have dedicated ballasts are mostly commercial products and consumers have not been buying them for many years. Because such lamps are not an acceptable replacement for traditional GSILs, NEMA, GE, and Philips did not support including them in the scope. (NEMA, No. 34 at p. 16; GE, Public Meeting Transcript, No. 29 at pp. 40–41; Philips, Public Meeting Transcript, No. 29 at p. 41) GE commented that they do not believe there are significant opportunities to save energy with pin base lamps and do not think that pin base lamps should be included in an analysis aimed at medium screw base lamps as they are not replacements for such lamps. (GE, Public Meeting Transcript, No. 29 at pp.39–40, 79) NEMA explained that non-integrated pin base CFLs are rarely used in residential applications and cannot directly replace medium screw base GSLs without replacing the entire fixture. Fixtures using these lamp types are nearly all designed for commercial applications. (NEMA, No. 34 at p. 7, 11–12) Due to the complexity, the limited energy savings potential, and the maturity of this product line, NEMA suggested that DOE remove the product category from the scope of this rulemaking. (NEMA, No. 34 at p. 16)

Although non-reflector pin base non-integrated lamps are available in incandescent/halogen, CFL, and LED technologies, CFLs are by far the most common type. DOE determined that the term compact fluorescent includes both integrated and non-integrated CFLs and therefore DOE considered non-integrated, or pin base, CFLs in the scope of this rulemaking. DOE notes that the market share of pin base CFLs is not insignificant given the vast number of product offerings and common use in commercial applications. Further, DOE's analysis of non-integrated pin base lamps within the non-integrated product class has shown that there are levels of efficacy as well as reduced wattage options and therefore, a standard for these lamps is technologically feasible. DOE's analysis showed that the proposed efficacy levels for these lamp types would retain almost all the different base type options for non-integrated pin-base base CFLs. See section V.C for further details regarding the engineering analysis for the non-integrated product class. For these reasons, DOE continues to consider standards for non-integrated pin base lamps.

DOE also received comments on non-integrated pin base LED lamps. Regarding LED replacements for non-integrated pin base CFLs, NEMA acknowledged that there are some LED lamp replacements being developed at this time but noted that they do not create energy savings as they generally have an identical wattage to non-integrated pin base CFLs and represent a loss of utility as they do not work with some types of controls and dimming systems. Lamp and ballast pairings that NEMA has investigated do not have Underwriters Laboratories (UL) listing, which they considered significant. They stated that if one is going to retrofit pin base CFLs, there are more efficacious

[42] *Id.* at 3–11.

[43] *Id.* at 3–12.

choices than the non-reflector pin base non-integrated LED lamps. Additionally, compatibility problems with reduced wattage lamps are not well understood in the DOE analysis, and could result in field issues if pursued. Finally, NEMA asked DOE to afford the same recognition of the implications of a lamp rule on non-integrated ballast systems as they did in the GSFL and IRL standards rulemaking. (NEMA, No. 34 at p. 7, 11–12)

DOE agrees with NEMA regarding the issues with non-integrated pin base LEDs currently available on the market. DOE evaluated the non-integrated pin base LED lamps and found they are still in the development stage and currently do not maintain the same utility (*e.g.,* lumen output, system compatibility) of the pin base CFLs they are designed to replace. DOE therefore is not proposing to establish standards for these lamp types in this rulemaking.

b. GU24 Base Lamps

In the preliminary analysis, DOE considered including integrated and non-integrated GSLs with GU24 bases. NEMA commented that they believe the market share for integrated CFLs with GU24 bases is insignificant (less than 4 percent), and that GU24 base CFL products should be excluded from scope. Additionally, NEMA commented that currently there are no additional bases besides medium screw base used for GSLs that have a significant market share. (NEMA, No. 34 at p. 7) As stated previously, DOE has taken a broad interpretation of GSL and considers lamps with base types other than medium screw bases to be general service lamps because lamps with other base types, including GU24, are frequently used in general lighting applications. Further, DOE found that of the integrated pin bases considered, lamps with GU24 bases compose the vast majority of the market. While GU24 lamps may not currently be sold in the same volume as medium screw base lamps, DOE expects their sales to increase as a result of regulations, such as California's Building Code Standards Title 24,[44] which allows for the use of GU24 base lamps as high efficacy light sources. Given their expected market share, DOE proposes to include GU24 base integrated lamps in the GSL rulemaking.

c. MR16 Lamps

In the preliminary analysis, DOE considered not establishing standards for integrated and non-integrated pin base MR16 lamps.[45] GE agreed that MR16 lamps should not be covered in this rulemaking because they are still being developed to be a suitable replacement for the other technologies. (GE, Public Meeting Transcript, No. 29 at pp. 39–40) NEMA agreed that current MR16 LED lamps cannot provide all the functionality of currently available halogen MR16 lamps and should not be regulated during this rulemaking as it is a developing product category. (NEMA, No. 34 at p. 7)

CA IOUs and EEAs also supported DOE's proposal to not cover LED MR16s or other small diameter directional lamps (those with diameters less than 2.25 inches) in this rulemaking at this time. However, CA IOUs disagreed with DOE's rationale behind the decision. CA IOUs observed that DOE stated in the preliminary TSD that it would not consider setting standards for LED MR16s because DOE did not believe that LED technology is able to provide the same utility as halogen technology in the MR16 lamp shape. CA IOUs noted that DOE referenced the 2014 CALiPER study that found tested LED lamps provided a lower center beam candle power (CBCP) than would be predicted based on their claimed halogen equivalence (using ENERGY STAR's CBCP calculator). However, CA IOUS asserted that the CALiPER report did not conclude that LED MR16s are not able to provide the same utility as their halogen counterparts; thus, DOE should be cautious about drawing such conclusions. EEAs also disagreed with DOE's finding that energy-efficient options do not currently exist for MR16s and commented that there are many high-quality LED lamps in this form factor that meet a range of application needs. CA IOUs additionally stated that there are currently LED products that provide more center beam intensity than the minimum required by ENERGY STAR for a 50 W equivalent lamp of the same beam angle. Further, CA IOUs noted that DOE is not considering standards for halogen MR16s due to the Appropriations Rider, and therefore this comparison is irrelevant. (CA IOUs, No. 33 at pp. 2–3; EEAs, No. 32 at p. 7)

Instead, CA IOUs and EEAs supported the proposal not to include LED MR16s in this rulemaking because of momentum in multiple states (such as California and Washington) to regulate MR16s. CA IOUs and EEAs stated that such efforts would promote market transformation and lay the groundwork for NES. Once they are adopted at the state level, CA IOUs suggested that DOE should consider adopting standards for these products at levels equal to or higher than those adopted by the states. They requested that DOE remove or correct its statement that LED technology is not able to provide the same utility as halogen technology because there is no reason for DOE to make such an assessment in this rulemaking, and because there is not sufficient evidence to support such a claim. EEAs suggested that DOE should not establish standards for MR16 lamps based on the rational that the Appropriations Rider prevents DOE from updating IRL standards. EEAs noted that improved standards for substitutes or near-substitutes could backfire, further shifting the market to the unregulated lamps. (CA IOUs, No. 33 at pp. 2–3; EEAs, No. 32 at p. 7)

DOE finds that a comparison of halogen MR16 lamps to LED MR16 lamps is essential in determining if it is technologically feasible to set standards for these lamps. Data provided in the CALiPER report and DOE's assessment of MR16 products on the market do provide sufficient evidence that, at this time, LED MR16s are not able to provide the same utility as their halogen counterparts. From the CALiPER report, DOE determined that none of the tested lamps emitted comparable lumen output to the 50 W halogen MR16 lamps that CALiPER tested, despite 17 of the 27 products claiming equivalency to that wattage (or higher), nor could any CALiPER tested lamp match the ENERGY STAR predicted CBCP for 50 W halogen MR16s at any beam angle.[46] (See chapter 3 of the NOPR TSD for more information.) DOE also assessed MR16 LED lamps on the market and found that, in general for a given beam angle, the maximum lumen output of halogen lamps is not always achieved by LED replacements and the CBCP of LED replacements is generally lower than halogen lamps. Further, DOE found very few 120 V 50 W equivalent MR16s and no 12 V 50 W equivalent MR16s that met the Energy Star predicted CBCP based on halogen equivalencies, although some do meet the minimum ENERGY STAR requirements. Drawing its conclusions from not only the CALiPER report but its own evaluation of products on the market, DOE maintains that, at this time, LED technology is currently not able to provide the same utility as halogen technology in the MR16 lamp shape.

[44] California Energy Commission's Building Code Standards are available at: *http://www.energy.ca.gov/title24/.*

[45] *Id.* At 3–13.

[46] U.S. Department of Energy. CALiPER Application Summary Report 22: LED MR16 Lamps. June 2014. (Last accessed November 21, 2014.) *http://apps1.eere.energy.gov/buildings/publications/pdfs/ssl/caliper_22_summary.pdf.*

Hence, DOE is not setting standards for MR16 lamps in this rulemaking because more-efficient replacements maintaining the same utility are not available.

3. Organic Light-Emitting Diode Lamps

DOE considered not setting standards for OLED lamps in the preliminary analysis because OLED lamps are an emerging technology with limited commercial availability, and it remains unclear if the efficacy of existing OLED products can be improved.[47] NEMA agreed that it was premature to establish standards for OLED products at this time. This is due to concern with regulating emerging product categories, creating a substantial risk of slowing product innovation, development, and consumer acceptance. (NEMA, No. 34 at p. 6) GE agreed with DOE's position stating that most of industry believes it is too early to regulate OLEDs because it is a developing technology and there is not enough information about how it is going to develop. (GE, Public Meeting Transcript, No. 29 at pp. 19–20) Thus, DOE continues to not propose standards for OLED lamps in this NOPR analysis.

4. Summary of GSLs Under Consideration for Standards

In summary, DOE is proposing standards for the following GSLs: 1) integrated, non-reflector, medium screw base lamps with an initial lumen output between 310 and 2,600 lumens; 2) GU24 base, integrated and non-integrated, non-reflector lamps with an initial lumen output between 310 and 2,600 lumens; and 3) non-integrated, non-reflector, pin base, CFLs with an initial lumen output between 310 and 2,600 lumens. For further details on the assessment of GSLs considered for standards see chapter 3 of this NOPR TSD. DOE requests comments on its assessments of GSLs for which standards should be proposed.

F. Scope of Metrics

Because CFLs are included in the definition of a GSL, this rulemaking satisfies the requirements under 42 U.S.C 6295(m)(1) to review existing standards for MBCFLs. EPAct 2005 amended EPCA by establishing energy conservation standards for MBCFLs. Performance requirements were specified for five metrics: (1) Minimum initial efficacy; (2) lumen maintenance at 1,000 hours; (3) lumen maintenance at 40 percent of lifetime; (4) rapid cycle stress; and (5) lamp life. (42 U.S.C. 6295(bb)(1)) In addition to revising the existing requirements for MBCFLs, DOE has the authority to establish requirements for additional metrics including CRI, power factor, operating frequency, and maximum allowable start time based on the requirements prescribed by the August 9, 2001, ENERGY STAR® Program Requirements for CFLs Version 2.0, or establish other requirements after considering energy savings, cost effectiveness, and consumer satisfaction. (42 U.S.C. 6295(bb)(2)–(3))

DOE received several general comments regarding the determination of metrics in the preliminary analysis. CA IOUs recommended that DOE analyze the impacts of improvements to the minimum quality metrics for GSLs and adopt standards that result in increased energy savings or increased LCC savings for consumers as they believe that cost-effective improvements to performance aspects, such as product lifetime and power factor, may be achievable and those are two metrics where DOE has the authority to set standards. (CA IOUs, No. 33 at p. 8) In this proposal, DOE considered energy savings, cost effectiveness, and consumer satisfaction when assessing performance metric requirements pertinent to this rulemaking, including lifetime and power factor.

DOE received several overarching comments about adopting the latest ENERGY STAR specifications for existing and proposed additional MBCFL metrics. NRDC and EEAs supported updating the performance requirements for CFLs with the intent of aligning with ENERGY STAR. (NRDC, Public Meeting Transcript, No. 29 at pp. 46–47; EEAs, No. 32 at p. 8) GE stated that ENERGY STAR is supposed to be promoting a higher quality type of product. In regards to product lifetime, GE noted that traditionally, the DOE minimum standard lifetime of a product is a couple of thousand hours fewer than the ENERGY STAR requirement. GE suggested that DOE should consider levels other than those prescribed by ENERGY STAR for the non-energy efficiency related quality metrics. Furthermore, GE commented that, since the latest ENERGY STAR specifications for lamps came out recently, fewer lamps may meet the new criteria. (GE, Public Meeting Transcript, No. 29 at pp. 46, 48–50) Southern Company added that there are times that ENERGY STAR has a high percentage of the products on the market before updating standards, but the long-term goals of ENERGY STAR is closer to the range of 20 percent of the market. (Southern Company, Public Meeting Transcript, No. 29 at pp. 48–49) Philips stated that ENERGY STAR, by definition, should only represent the top 25 percent of the marketplace. Therefore, should DOE align performance requirements with ENERGY STAR, 75 percent of available products could be forced off the market. (Philips, Public Meeting Transcript, No. 29 at p. 47)

NRDC thought that more CFLs met ENERGY STAR requirements and urged DOE to examine the market share of CFLs that are ENERGY STAR qualified. (NRDC, Public Meeting Transcript, No. 29 at p. 48) EEAs stated that, unlike other ENERGY STAR product categories, the vast majority of CFLs on the market meet the existing ENERGY STAR requirements. In addition, EEAs noted the current ENERGY STAR specification was finalized in 2014 and the DOE regulations will not go into effect until 2020. (EEAs, No. 32 at p. 8) CA IOUs and EEAs recommended that DOE consider performance metric revisions to be consistent with the latest ENERGY STAR specification. The ENERGY STAR Program recently initiated an update to its Lamps Specification (Version 2), and if finalized in time, CA IOUs urged DOE to consider aligning with its specifications. (CA IOUs, No. 33 at p. 10; EEAs, No. 32 at p. 8))

DOE recognizes that ENERGY STAR requirements are meant to distinguish a certain premium among available products on the market. In its review of existing metrics for MBCFLs and determining additional metrics to establish for these lamp types, DOE examined various sources including the latest ENERGY STAR market share estimates, ENERGY STAR specifications (ENERGY STAR Program Requirements Product Specification for Lamps [Light Bulbs] Eligibility Criteria Version 1.1 [hereafter ''ENERGY STAR Lamps Specification V1.1'']), industry standards, and characteristics of lamps currently on the market.[48] The most recent market penetration report of ENERGY STAR lamps for the year 2014 indicated that 64 percent of CFLs were ENERGY STAR certified, indicating wide market adoption.[49] Based on this comprehensive evaluation, DOE determined the performance metrics that would appropriately satisfy the requirements of energy savings, cost

[47] GSL preliminary analysis at 3–6.

[48] DOE understands that ENERY STAR has completed an update to its current lamp specifications. Because this version remained in draft stage, at the time of this analysis, DOE referenced the ENERGY STAR Lamps Specification V1.1, the specifications currently in effect.

[49] ENERGY STAR. Unit Shipment and Market Penetration Report Calendar Year 2014 Summary. (Last accessed January 20, 2016.) *http://www.energystar.gov/ia/partners/downloads/unit_shipment_data/2014_USD_Summary_Report.pdf?f531-f608.*

effectiveness, and consumer satisfaction for MBCFLs.

1. Existing MBCFL Metrics

a. Lumen Maintenance

For lumen maintenance at 1,000 hours, DOE requires that the average of at least five lamps be a minimum of 90 percent of initial lumen output at 1,000 hours. The ENERGY STAR Lamps Specification V1.1 maintained this requirement with the added specification that all units must be surviving at 1,000 hours. For lumen maintenance at 40 percent of lifetime, DOE requires that 80 percent of the initial lumens must be achieved at 40 percent of lifetime. The ENERGY STAR Lamps Specification V1.1 also maintained this requirement with the added specification that no more than three units may be less than 75 percent of the initial lumen rating. In the preliminary analysis, DOE considered maintaining its current requirements for lumen maintenance at 1,000 hours and at 40 percent of lifetime for MBCFLs.[50]

EEAs noted that the test procedure utilized by ENERGY STAR currently requires a sample size of 10 lamps, five base up and five base down, unless the manufacturer restricts specific use or position. EPAct 2005 (*i.e.,* the current DOE standards) only require five samples. EEAs recommended that DOE utilize 10 samples in its requirements to be consistent with ENERGY STAR. EEAs also supported inclusion of ENERGY STAR's requirement that all units shall be surviving at 1,000 hours, and no more than three units may have lumen maintenance less than 75 percent at 40 percent of rated life. (EEAs, No. 32 at p. 8) However, NEMA commented that the current statutory and regulatory requirements for CFLs for lumen maintenance are acceptable. (NEMA, No. 34 at p. 8)

DOE determined that its current requirements for lumen maintenance adequately address potential issues with lumen depreciation that could lead to consumer dissatisfaction. DOE noted that the ENERGY STAR Lamps Specification V1.1 also maintained these requirements and added the requirements that all units shall survive at 1,000 hours and no more than three units may be 75 percent of the initial lumen rating. DOE, however, determined these additional requirements were not necessary to confirm the quality of the lamp; the existing requirements would ensure the lumen maintenance would be satisfactory to consumers. DOE assessed data submitted for the Compliance Certification Management System (CCMS) reporting requirements and found that the majority of lamps certified exceeded the minimum lumen maintenance standards. Regarding sample size, the number of MBCFL units tested is dictated by the DOE test procedure for these lamps, amendments to which are not within the scope of this rulemaking. (See section III.B for further details on relevant test procedures for GSLs.) Therefore, DOE is proposing to maintain the existing requirements of 90 percent of initial lumen output at 1,000 hours and 80 percent of initial lumen output at 40 percent of lifetime for MBCFLs.

b. Rapid Cycle Stress Testing

DOE has a minimum requirement for rapid cycle stress for MBCFLs that requires at least five lamps to survive cycling once per every two hours of rated lifetime. The ENERGY STAR Lamps Specification V1.1 specifies that CFLs with a start time greater than 100 milliseconds (ms) (*i.e.,* non-instant start) survive cycling once per hour of rated lifetime or a maximum of 15,000 cycles; and that CFLs with a start time less than or equal to 100 ms (instant start) are only required to survive cycling once per every two hours of rated lifetime. In the preliminary analysis, DOE considered increasing the number of cycles required for non-instant start lamps to once per every hour of rated life, or a maximum of 15,000 cycles and maintaining the requirement for instant start lamps to survive one cycle per every two hours of rated lifetime.[51]

NEMA commented that the current statutory and regulatory requirements for CFLs for rapid cycle stress testing are acceptable and increasing rapid cycle stress tests to current ENERGY STAR standards is not necessary to set an energy conservation standard. (NEMA, No. 34 at p. 8)

DOE found that manufacturers do not publish information on rapid cycle stress for MBCFLs. Further, manufacturers simply report the number of surviving units for DOE CCMS reporting requirements. However, as stated previously, the latest ENERGY STAR market penetration report indicates that 64 percent of CFLs were ENERGY STAR certified thus indicating the majority of CFLs meet the rapid cycle stress requirements.[52] Therefore, in this NOPR, DOE proposes to maintain the requirement for instant start lamps (*i.e.,* MBCFLs with a start time less than or equal to 100 ms) to survive one cycle per every two hours of lifetime and increasing the number of cycles required for non-instant start lamps (*i.e.,* MBCFLs with start times greater than 100 ms) to once per every hour of rated life or a maximum of 15,000 cycles.

c. Lifetime

DOE currently requires a minimum lifetime of 6,000 hours for MBCFLs. The ENERGY STAR Lamps Specification V1.1 requires the minimum lifetime to be 10,000 hours. In the preliminary analysis, DOE considered revising the lifetime standard for MBCFLs to adopt ENERGY STAR's minimum of 10,000 hours for MBCFLs.[53] NEMA commented that the current statutory and regulatory requirements for CFL lifetime are acceptable and that increasing the minimum lifetime standard to the ENERGY STAR level of 10,000 hours is not necessary for energy conservation standards. NEMA and GE added that if the minimum lifetime were increased, industry would recommend no more than 8,000 hours for the federal minimum as, by definition, not all products are intended to meet ENERGY STAR performance levels. (NEMA, No. 34 at p. 8; GE, Public Meeting Transcript, No. 29 at p. 46)

As previously noted, DOE understands that ENERGY STAR requirements are meant to determine the more energy-efficient products on the market. However, based on an assessment of commercially available lamps in manufacturer catalogs, DOE found that the majority of MBCFLs on the market have lifetimes of at least 10,000 hours. Further, of the MBCFLs for which data was submitted to DOE for CCMS reporting, 83 percent have a lifetime of at least 10,000 hours. Given that commercially available MBCFLs are already achieving this higher level of performance, DOE does not find such a minimum to be indicative of only the premium products on the market. Therefore, in this NOPR, DOE is proposing requiring MBCFLs to have a minimum lifetime of 10,000 hours.

2. Additional MBCFL Metrics

a. Color Rendering Index

DOE does not currently have a standard for CRI. The ENERGY STAR Lamps Specification V1.1 requires that CFLs have a CRI of at least 80. In the preliminary analysis, DOE considered adding a requirement for CRI of 80 or

[50] GSL preliminary analysis at 3–17.

[51] *Id.*

[52] ENERGY STAR. Unit Shipment and Market Penetration Report Calendar Year 2014 Summary. (Last accessed January 20, 2016.) *http://www.energystar.gov/ia/partners/downloads/unit_shipment_data/2014_USD_Summary_Report.pdf?f531-f608.*

[53] *Id.* at 3–18.

greater for MBCFLs.[54] NEMA stated that CRI is not necessary for consideration in this rulemaking. Additionally, they commented that they do not believe that CRI is an appropriate characteristic for a minimum energy conservation standard. (NEMA, No. 34 at p. 8–9)

DOE has explicit authority to consider a CRI standard for MBCFLs. (42 U.S.C. 6295(bb)(2)) Furthermore, a standard for CRI ensures consumer satisfaction because high CRI light sources render colors well, which could encourage the adoption of energy-efficient technology. Based on an assessment of commercially available lamps in manufacturer catalogs, DOE found that over 99 percent of MBCFLs on the market have a CRI of at least 80. Because a minimum CRI requirement would increase consumer satisfaction and DOE found that nearly all commercially available MBCFLs are already achieving a CRI of at least 80, DOE is proposing to require MBCFLs to have a CRI of 80 or greater.

b. Power Factor

DOE does not currently have a standard for power factor, however, DOE has explicit authority to consider power factor for MBCFLs. (42 U.S.C. 6295(bb)(2)) DOE reviewed industry specifications for MBCFLs and found that the ENERGY STAR Lamps Specification V1.1 and V2.0 require that CFLs have a power factor of 0.5 or greater. The industry standard ANSI C82.77 Harmonic Emission Limits—Related Power Quality Requirements for Lighting Equipment[55] suggests a power factor of 0.5 for integrally ballasted medium screw base compact light sources with input power less than or equal to 35 W. Based on an assessment of commercially available lamps in manufacturer catalogs, DOE determined that the majority of MBCFLs have a power factor in the range of 0.5 to 0.6 and a limited number of MBCFLs have a power factor greater than 0.6. Therefore, in the preliminary analysis, DOE considered adding a standard for power factor of 0.5 or greater for MBCFLs.[56]

NEMA commented that adding power factor requirements was not necessary and urged DOE to refrain from including a power factor requirement for GSLs in this rulemaking. They did not agree with DOE's assertion that a minimum power factor requirement could decrease energy use because that conclusion appeared to be based on a document not relevant to GSLs.[57] Additionally, NEMA commented that there are trade-offs associated with increasing the power factor in CFL and LED lamps that will reduce lamp efficacy and increase energy use, which contradicted DOE's statement in the preliminary analysis. (NEMA, No. 34 at p. 8) Further, NEMA commented that increasing the power factor for residential ballasts would raise ballast losses, which would more than offset any gains in distribution efficiency and could have a negative impact on system reliability. (NEMA, No. 34 at pp. 9–10)

On the contrary, CA IOUs and EEAs noted that improving a lamp's power factor has significant financial benefits for electric utility customers, as well as societal greenhouse gas benefits. A load with a low power factor draws more current than a load with a high power factor for the same amount of useful power transferred. CA IOUs and EEAs stated that higher currents mean increased energy losses both on the customer side of the meter, and on the utility side (grid losses). The losses from a small load (for example a CFL) with a poor power factor may be small, but losses increase exponentially as the total current increases (power loss is a function of the current squared times the resistance of the wiring). CA IOUs calculated that three lamps with poor power factor on a circuit result in nine times the losses of one lamp. (CA IOUs, No. 33 at p. 9; EEAs, No. 32 at p. 9)

Furthermore, CA IOUs and EEAs noted that grid efficiency is an integral part of electric rate design. In other words, if electric grids do not operate efficiently, rate payers will end up paying more for the energy they use through higher rates. So, in addition to the losses on the customer side of the meter, in the long run, consumers also pay for losses on the utility side of the meter. Therefore, CA IOUs stated that given CFLs now constitute roughly 30–40 percent of the screw base GSL market, CFL power factor has huge implications for consumer energy bills, grid efficiency, and greenhouse gas emissions. (CA IOUs, No. 33 at p. 9; EEAs, No. 32 at p. 9) NEMA, however, stated that GSLs do not typically represent a major portion of the power used, and in any scenario where CFLs or LED lamps are used to replace traditional incandescent lamps, the substantially lower wattage of these replacement lamps will result in a reduced lighting load regardless of power factor. (NEMA, No. 34 at pp. 8–9)

NEMA argued that CFLs used in the home have a leading power factor that tends to offset the lagging power factor of motor loads and helps to balance the overall power factor of the home. (NEMA, No. 34 at p. 10) CA IOUs disagreed that a combination of leading and lagging power factors will cancel each other out. They noted that displacement power factor is generally associated with capacitive and inductive loads; inductive loads, like motors, have ''lagging'' power factor, where current lags behind voltage, while typical capacitive loads (capacitors, electronics) have ''leading'' power factor (where the current leads voltage). However, CA IOUs pointed out that these types of equipment with poor power factor do not ''cancel each other out'' if they are non-linear loads with distortion power factor. CFL ballasts are an example of such a non-linear load (*i.e.,* they draw current in short spikes which generally do not relate to the voltage waveform). For these types of non-linear loads, the combination of leading and lagging power factors will not cancel each other out predictably, consistently, or effectively. Additionally, there is no displacement effect unless the two types of linear-load equipment within a given metered circuit operate at exactly the same time. CA IOUs noted that the low incidence of concurrent operation is rarely considered when the displacement argument is made. (CA IOUs, No. 33 at pp. 9–10)

In its determination of additional metrics for MBCFLs, DOE may consider features that are indicative of lamp quality, specifically energy usage, cost effectiveness, and consumer satisfaction. (42 U.S.C. 6295(bb)(3)) Due to the non-linear loads and the different phase angles associated with these loads, realizing the effect of a lamp's power factor on lagging power factors created by motors connected to the grid is difficult and depends on what is active on the grid.[58] However, DOE finds that power factor does impact energy use and, in general, it is important to ensure grid losses are minimized. Passive and active technologies that can correct power factors in lamps are commercially available and the circuitry used in power factor correction (PFC) is made to be very efficient, while consuming small

[54] *Id.* at 3–19.

[55] *ANSI C82.77 Harmonic Emission Limits—Related Power Quality Requirements for Lighting Equipment* (January 17, 2002)

[56] GSL preliminary analysis at 3–19.

[57] Specifically, DOE referenced *Reducing Power Factor Cost,* available here: *http://www.energy.gov/eere/amo/downloads/reducing-power-factor-cost.*

[58] USAID Asia. *Power Factor: Policy Implications for the Scale-up of CFL Programs.* 2010. (Last accessed July 13, 2015.) *http://standby.iea-4e.org/files/otherfiles/0000/0057/2010_USaid_PF_study_CFLs.pdf.*

amounts of power.[59] Therefore, DOE finds that setting a minimum power factor standard for MBCFLs to ensure that low quality products are not being used on the electrical grid is ultimately relevant to energy usage, cost effectiveness, and consumer satisfaction.

Upon reviewing ENERGY STAR's qualified product list for non-directional CFLs, EEAs reported that of the 1,189 models on the list, 225 had a power factor of 0.5 and 957 had a power factor of 0.6. As 80 percent of the listed models already have a power factor of 0.6, EEAs recommend DOE consider a power factor of at least 0.6. (EEAs, No. 32 at p. 9)

CA IOUs recounted that in the earlier days of the U.S. CFL market, most major manufacturers offered CFLs with PFC, and some still do. CA IOUs stated that in the United States, high power factor (0.85 or greater) is common in non-integrated CFL lamp-and-ballast systems, while less common among integrated CFLs, which have very low power factors, in the range of 0.5 to 0.6. The industry has settled on these values because that is all that has been required by ENERGY STAR, which is referenced by most utility programs. Other countries have promoted or adopted policy initiatives to encourage or require high power factor in CFLs, and these products are available from a number of major manufacturers at competitive prices in other markets. CA IOUs commented that in the European Union, high power factor is common in higher wattage CFL products (above 25 W). India is another market that has a large presence of high power factor CFLs, including many residential, lower-wattage product lines. CA IOUs provided the example of the Philips Tornado HPF line. CA IOUs' research found that there is a wide variety of high power factor CFL products offered at popular Indian online retailers at prices that are comparable to low power factor product prices. CA IOUs and EEAs encouraged DOE to draw from these international markets (where products are produced in large quantities) as a reference point for product costs, given that residential, integrated high power factor products are not as common in the United States. (CA IOUs, No. 33 at pp. 8–9; EEAs, No. 32 at p. 9) Further, CA IOUs recommended that DOE adopt a minimum power factor requirement for integrated and non-integrated CFLs of 0.85, as PFC chips are relatively inexpensive and are extremely cost-effective. (CA IOUs, No. 33 at pp. 8–9)

DOE agrees that MBCFLs exist with a power factor greater than 0.8, but found these lamps to be extremely uncommon in the U.S. market. Based on EPA's ENERGY STAR Certified Light Bulbs Database, less than 1 percent of MBCFLs had a power factor greater than 0.8. As noted DOE considered ENERGY STAR requirements, industry standards, and characteristics of lamps in the current market. The vast majority of the U.S. market reports power factors in the range of 0.5 to 0.6 for CFLs, which is consistent with ENERGY STAR and ANSI C82.77 requirement of a minimum power factor of 0.5 for these lamps. Thus, DOE believes that requiring a minimum power factor of 0.5 is achievable for MBCFLs while supporting improved overall efficacy.

c. Start Time

DOE does not currently have a standard for start time. The ENERGY STAR Lamps Specification V1.1 requires that the time needed for a lamp to become fully illuminated must be within one second of application of electrical power. In the preliminary analysis, DOE considered requiring a start time of within one second of the application of electrical power for MBCFLs.[60] NEMA stated that adding start time requirements is not necessary for energy conservation standards. Additionally, NEMA did not agree that start time has any effect on energy efficiency. (NEMA, No. 34 at p. 9)

Westinghouse agreed with a one-second start time requirement for CFLs. Regarding the definition of ''fully illuminated,'' Westinghouse believed ENERGY STAR requires 80 percent of rated lumens, not 100 percent. Westinghouse noted that the definition needed to be clarified. (Westinghouse, Public Meeting Transcript, No. 29 at p. 45)

EEAs noted that one of the complaints consumers voice about CFLs is the reduced level of light some CFLs produce when first turned on and the time it takes for the lamp to reach full brightness. EEAs suggested DOE include standards not just for start time, but also for run-up time. On February 13, 2015, the U.S. Environmental Protection Agency (EPA) issued its first draft of Version 2.0 of its lamp specification, which shortened the required time to achieve 80 percent stabilized light output to 60 seconds or less, from the current Version 1.0 requirement that allows 120 seconds. EEAs suggested DOE adopt the new run-up time from the draft of Version 2 of the ENERGY STAR lamp specifications. (EEAs, No. 32 at p. 8)

DOE finds that start time impacts consumer satisfaction, because a delay in starting is undesirable and can affect acceptance of a more-efficient lamp technology. Manufacturers do not publish information on start time for MBCFLs. However, one-second start time has been the ENERGY STAR specification for several years, and DOE finds that such a start time is reasonable for MBCFLs. DOE requests information on start times of the CFL market.

Further, DOE notes that it is the ENERY STAR specification for run-up time rather than start-up time that requires the lamp to achieve 80 percent stabilized light output. The ENERGY STAR specification for start time is the time it takes to maintain continuous illumination from the time the lamp is turned on. While DOE understands the distinction in these measurements and usefulness of the run-up time measurement, DOE finds that both start time and run-up time are capturing the consumer requirement of having a lamp provide light output in a timely manner. Because start time is more noticeable by consumers and an immediate indication of a low quality lamp, and to limit undue burden to manufacturers, DOE is proposing to require only start time for MBCFLs. Hence, in this NOPR, DOE is continuing to propose a requirement for start time. However, instead of specifying at full illumination, DOE's proposed requirement for start time is that the lamp must remain continuously illuminated within one second of application of electrical power.

d. Total Harmonic Distortion, Correlated Color Temperature, Operating Frequency

In the preliminary analysis DOE did not consider setting requirements for total harmonic distortion (THD), CCT, or operating frequency.[61] DOE determined that THD is directly related to power factor and setting a minimum power factor requirement will effectively set a standard for THD. DOE found that different CCTs are desirable depending on the application. DOE determined that operating frequency does not directly impact energy savings, cost effectiveness, or consumer satisfaction. NEMA agreed that requirements for THD, CCT, and operating frequency should not be considered. (NEMA, No. 34 at p. 8) Receiving no other comments and finding no other evidence to support standards for these factors, in this NOPR, DOE is not proposing

[59] Ibid.

[60] GSL preliminary analysis at 3–20.

[61] *Id.* at 3–18.

standards for THD, CCT, or operating frequency.

3. Additional Integrated LED Metric

EEAs asserted that DOE possesses the authority to require LED performance specifications in order to provide the consumer satisfaction necessary to assure that the energy savings anticipated from standards are achieved in practice. Yet, because CEC is currently evaluating its own performance quality metrics for LEDs, EEAs recommended that DOE not consider adopting such requirements at this time. (EEAs, No. 32 at pp. 8–9) CA IOUs encouraged DOE to continue monitoring the progress underway in CEC's Title 20 rulemaking regarding quality metrics for LED GSLs, and consider the resulting standards for adoption. (CA IOUs, No. 33 at p. 10)

As noted in section IV.F.2.b, DOE finds that power factor does impact energy use and, therefore, is also proposing a power factor requirement for integrated LED lamps. DOE considered ENERGY STAR requirements, industry standards, and characteristics of lamps in the current market. The vast majority of the U.S. market reports power factors greater than 0.7 for integrated LED lamps, which is consistent with ENERGY STAR Specification for Lamps V1.1 and ANSI C82.77 requirement of a minimum power factor of 0.7 for these lamps. DOE notes that the ENERGY STAR Specification for Lamps V2.0 [62] finalized December 2015 has adjusted the power factor requirement for general purpose lamps between 5 and 10 watts to 0.6 and exempted lamps less than 5 watts from a power factor requirement. In making this decision, ENERGY STAR noted recent growing sales trends for lower cost LED lamps with power factors below 0.7.[63] DOE requests comment on its proposal to require integrated LED lamps to meet a power factor of 0.7 or the reason and supporting information for choosing another power factor.

4. Summary of Metrics

DOE is proposing to maintain the existing requirements for lumen maintenance at 1,000 hours and lumen maintenance at 40 percent of lifetime. DOE is proposing to increase the stringency of some existing standards for MBCFLs, raising the required lifetime standard for MBCFLs to a minimum of 10,000 hours, and the number of cycles required for non-instant start lamps (*i.e.,* lamps with start times greater than 100 ms) to once per every hour of rated life with a maximum of 15,000 cycles. Finally, DOE is proposing three new performance metrics for MBCFLs; namely, requiring such lamps to have a CRI of 80 or greater, a power factor of 0.5 or greater, and a start time of within one second of the application of electrical power. NRDC agreed overall with the updates to the CFL quality parameters. (NRDC, Public Meeting Transcript, No. 29 at p. 13) CEC commented that additional standards for lifetime, lumen maintenance, power factor, and spectral content were needed because standards for efficacy without these quality metrics are less meaningful in implementation. (CEC, No. 31 at p. 2) DOE agrees with this assessment and provides the following table to summarize the MBCFL performance metrics proposed in this rulemaking. In addition, in this NOPR analysis, DOE is proposing that integrated LED lamps be required to meet a power factor of 0.7 or greater, as shown in Table IV–1. DOE requests any comments regarding proposed metrics for GSLs in this NOPR analysis.

TABLE IV–1—PERFORMANCE METRICS FOR MEDIUM BASE COMPACT FLUORESCENT LAMPS AND INTEGRATED LED LAMPS

Lamp type	Metric	Minimum standard considered
MBCFLs	Lumen maintenance at 1,000 hours.	90 percent of initial lumen output at 1,000 hours.
	Lumen maintenance at 40 percent of lifetime.*	80 percent of initial lumen output at 40 percent of lifetime.
	Rapid cycle stress	MBCFL with start time > 100 ms: survive one cycle per hour of lifetime* or a maximum of 15,000 cycles. MBCFLs with a start time of ≤ 100 ms: survive one cycle per every two hours of lifetime.*
	Lifetime*	10,000 hours.
	Power factor	0.5.
	CRI	80.
	Start time	The time needed for a MBCFL to remain continuously illuminated must be within one second of application of electrical power.
Integrated LED Lamps	Power factor	0.7.

* Lifetime refers to lifetime of a compact fluorescent lamp as defined in 10 CFR 430.2.

V. Methodology and Discussion of Related Comments

This section addresses the analyses DOE has performed for this rulemaking with regard to GSLs. Separate subsections address each component of DOE's analyses.

DOE used several analytical tools to estimate the impact of the standards proposed in this document. The first tool is a spreadsheet that calculates the LCC savings and PBP of potential amended or new energy conservation standards. The national impacts analysis uses a second spreadsheet set that provides shipments forecasts and calculates NES and NPV of total consumer costs and savings expected to result from potential energy conservation standards. DOE uses the third spreadsheet tool, the Government Regulatory Impact Model (GRIM), to assess manufacturer impacts of potential standards. These three spreadsheet tools are available on the DOE Web site for this rulemaking: *http://www1.eere.energy.gov/buildings/*

[62] ENERGY STAR. ENERGY STAR Program Requirements: Product Specification for Lamps (Light Bulbs): Eligibility Criteria, Version 2.0. 2015. U.S. Environmental Protection Agency: Washington, DC (Last accessed January 29, 2016). *http://www.energystar.gov/sites/default/files/ENERGY%20STAR%20Lamps%20V2_0%20Program%20Requirements.pdf.*

[63] ENERGY STAR. ENERGY STAR Program Requirements: Product Specification for Lamps (Light Bulbs): Eligibility Criteria, Version 2.0 DRAFT FINAL. 2015. U.S. Environmental Protection Agency: Washington, DC. (Last accessed January 29, 2016.) Available at: *http://www.energystar.gov/sites/default/files/ENERGY%20STAR%20Lamps%20V2%200%20Draft%20Final%2012-04-2015.pdf.*

appliance_standards/rulemaking.aspx?ruleid=83. Additionally, DOE used output from the latest version of the Energy Information Administration's (EIA's) *Annual Energy Outlook* (*AEO*), a widely known energy forecast for the United States, for the emissions and utility impact analyses.

A. Market and Technology Assessment

In the energy conservation standards rulemaking process, DOE conducts a market and technology assessment to provide an overall picture of the market for products concerned. Based primarily on publicly available information, the analysis provides both qualitative and quantitative information. The market and technology assessment includes the major manufacturers, product classes, retail market trends, shipments of covered products, regulatory and non-regulatory programs, and technologies that could be used to improve the efficacy of GSLs. DOE is restricted by the Appropriations Rider from using appropriated funds to implement or enforce standards for GSILs and therefore is not considering GSILs in this rulemaking at this time. See section IV.A for further details.

1. Product Classes

DOE divides covered products into classes by: (a) The type of energy used; (b) the capacity of the product; or (c) other performance-related features that justify different standard levels, considering the consumer utility of the feature and other relevant factors. (42 U.S.C. 6295(q)) In evaluating product class setting factors, DOE considers their impact on both efficacy and consumer utility. After evaluating several GSL characteristics, in the preliminary analysis, DOE considered ballast/driver location and lumen output as product class setting factors, resulting in three product classes: (1) Non-Integrated (*i.e.,* ballast/driver location external to the lamp); (2) Integrated Low-Lumen (*i.e.,* ballast/driver location internal to the lamp with light output from 310 to less than 2,000 lumens); and (3) Integrated High-Lumen (*i.e.,* lamps with light output from 2,000 to 2,600 lumens).[64]

DOE received some general comments regarding the product class structure presented in the preliminary analysis. CA IOUs support DOE's proposal to establish product classes based only on lumen output and ballast/driver location. (CA IOUs, No. 33 at p. 4) NEMA, however, disagreed with the preliminary analysis product class structure. NEMA stated that product classes should be determined by technical capability and varying utility of differing technological approaches to produce the same light output. NEMA asserted that placing all GSLs in common lumen ranges will result in the elimination of all technologies and all product utilities except that provided by the most-efficacious technology. Therefore determining product classes based only on lumen output is not appropriate for GSLs. NEMA also stated it was not good public policy to adopt a technology-neutral approach for GSLs under EPCA, in particular for general service CFL and LED lamp segments presently under consideration in this rulemaking, and for the halogen incandescent, CFL, and LED lamp classes. (NEMA, No. 34 at p. 11)

NEMA proposed a product class structure that would set separate product classes for standard incandescent/halogen lamps, modified spectrum incandescent lamps, LED lamps, and CFLs, further sub-divided by bare CFLs and covered CFLs. Further NEMA proposed five lumen package product class divisions. (NEMA, No. 34 at p. 13) NEMA's proposed product classes as well as comments on specific product class setting factors are discussed in detail in the following sections.

a. Lamp Technology

In the preliminary analysis, DOE did not find unique performance features in any lamp technology (*i.e.,* CFLs or LED lamps) that warranted separate product classes and therefore presented a technology-neutral product class structure. Several stakeholders supported DOE's decision not to set separate product classes for CFLs and LED lamps.

CEC stated that DOE's approach recognizes the general purpose of the lamps, focuses on achieving cost-effective energy savings, and avoids substitution issues caused by product classes. (CEC, No. 31 at pp. 1–2) EEAs noted that the product class structure recognizes that many technologies provide general illumination and allows all technologies to compete on a level playing field. (EEAs, No. 32 at p. 3) Earthjustice and CA IOUs agreed with DOE's decision noting that neither CFLs nor LED lamps represent a distinct utility for the consumer. (Earthjustice, No. 30 at p. 4; CA IOUs, No. 33 at p. 4) CA IOUs however, recognized that CFLs play an important role in the market as the current low-cost, high-efficacy option and they will continue to monitor the progress of LED lamps as their prices continue to drop and approach parity with CFLs. (CA IOUs, No. 33 at p. 4) While NRDC agreed with DOE's technology-neutral approach to product classes, they recommended that DOE continue to consider how LED lamps will evolve. (NRDC, Public Meeting Transcript, No. 29 at p. 13, 100–101) Southern Company stated that while there may not be enough differences to justify a separate class, there were sufficient differences in performance characteristics to warrant both CFLs and LED lamps on the market and urged DOE to set criteria to allow for a broad range of products to exist. (Southern Company, Public Meeting Transcript, No. 29 at p. 101)

In its product class determination, DOE does not factor in costs and bases its assessment on performance characteristics that clearly provide a crucial utility to consumers. 42 U.S.C. 6295(q). As noted in the above stakeholder comments and confirmed by DOE's own analysis in chapter 3 of the NOPR TSD, no such utility was identified that would necessitate separate product classes for CFLs and LED lamps.

NEMA disagreed with the technology-neutral approach to product classes and recommended three technology-based product classes with separate efficacy levels to allow each technology to remain available: Incandescent/halogen, CFL, and LED lamps, all of which have a medium screw base and are designed to operate directly on 120 or 130 volts. NEMA commented that the three technologies offer considerable differences in performance and utility; and allow consumers to choose the best technology for their application. In general, NEMA stated that filament lamps are low-cost omnidirectional point sources, CFL lamps are low-cost omnidirectional diffuse sources, and LED lamps are high cost directional point sources. (NEMA, No. 34 at p. 13)

Specifically, NEMA noted several differences between CFLs and LED lamps: LED lamps have a higher initial cost than CFLs; LED lamps have a longer lifetime than CFLs which are also susceptible to a shortened lifetime due to frequent switching; and LED lamps have very high efficiency while CFLs have relatively high efficiency. Further, while CFL operation is affected by high or low ambient temperature, LED lamp operation is affected only by high ambient temperature. NEMA noted CFLs' natural slow start as an advantage for dark area eye adaptation. Additionally, NEMA noted CFLs are omnidirectional, have diffuse light, low pleasing surface brightness while LED lamps are a directional point source, have extremely high chip surface brightness, and require special optics and diffusing materials for

[64] *Id.* at 2–59.

omnidirectional applications. Another difference cited was that color can be modified with some loss in efficiency at high chromaticity and high CRIs for CFLs and low chromaticity and high CRIs for LED lamps. (NEMA also noted several similarities between CFLs and LED lamps: Good CRI capability, vibration resistant, unaffected by occasional direct water spray, low heat source, and dimming with limitations.) (NEMA, No. 34 at pp. 12–13)

When determining product classes DOE does not factor in cost. (*See* 42 U.S.C. 6295(q)) DOE considers costs in determining the economic justification of standard levels for each product class. DOE did not find that the differences between CFLs and LED lamps noted by NEMA identified a unique utility that required separate product classes for each lamp type. LED lamp features of longer life, lack of issues due to frequent switching, and ability to operate in low ambient temperature would not be eliminated if LED lamps and CFLs were in one product class, as LED lamps are more efficient than CFLs. Further, the slow start in CFLs is usually considered a disadvantage and the potential for it being useful in dark area eye adaptation seems a limited application and of less value to the typical consumer compared to the benefit of an instant on LED lamp.

Moreover, although CFLs and LED lamps may attain color with a certain loss in efficiency at different ends of the chromaticity spectrum, they are able to achieve the same ranges of CCTs and CRIs. Likewise, while LEDs are a directional point source, with the use of optics and diffusing materials, they are able to attain omnidirectionality similar to that of CFLs. The surface brightness of LEDs is also mitigated by optics and covers. Additionally, LED lamps are designed and marketed for GSL applications and are being used as replacements for CFLs. Therefore, the utilities valued by consumers would not be eliminated in a technology-neutral product class structure.

NEMA stated that the unusual market distribution further illustrates the problems with putting all technologies together in the same product classes. The candidate standard level (CSL) 1 becomes mostly CFLs, while CSL 2 and CSL 3 represent older LED lamp technologies that are still on the market because of the rapid LED lamp product evolution. CSL 4 and 5 represent differing types of LED lamp technology that could never be met by CFLs. (NEMA, No. 34 at p. 22) GE added that there is a vast difference in technology between CFLs and LED lamps, one is very mature and one is still in an evolving stage. (GE, Public Meeting Transcript, No. 29 at p. 100) GE suggested two separate classes for CFLs and LED lamps because they would have different baselines and different efficiencies over time. GE further noted that having CFLs and LED lamps in one product class implies that CFLs will be eliminated and one criteria of this regulation is not to eliminate an entire product class. (GE, Public Meeting Transcript, No. 29 at p. 72)

The observed distribution of lamp technologies at ELs is a function of the general higher efficiency of LED technology relative to CFL technology. However, a product class division must be based on both a difference in efficacy and a unique consumer utility. Similarly, DOE cannot create a separate product class based on the maturity of a technology unless it results in a unique consumer utility. DOE standards are also not structured to eliminate products. Based on DOE's own evaluation, comments from stakeholders, and feedback in manufacturer interviews, DOE did not find any unique features that required separate product classes for lamp technologies (*i.e.,* CFLs and LED lamps).

Westinghouse warned that by not having two separate product classes for CFLs and LED lamps, ensuring higher lumen products are available to consumers would be challenging, particularly since the volume of CFLs is in the lower lumen bins and the necessary economies of scale may no longer exist from a manufacturing standpoint. (Westinghouse, Public Meeting Transcript, No. 29 at pp. 73–74) In its product class determination, DOE ensures that consumer utility is met by GSL products across lumen ranges at all ELs (see section V.A.1.c). In this NOPR analysis, DOE declines to establish a product class based on lamp technology.

NEMA understood that DOE cannot currently address incandescent/halogens, but commented that it should be recognized as a product class within the general service lamp area which is currently regulated. NEMA commented that the unique utility and attributes of incandescent or halogen lamp technologies are: low initial cost, omnidirectional point source with good optical control, ability to provide high sparkle and high brightness, operation unaffected by high or low ambient temperature, warm color appearance difficult to modify without loss of efficiency, very high CRI, relative low efficiency, relative short lifetime, adversely affected by vibration and direct water contact, lifetime not affected by frequent switching, good infrared source, immediate on to full brightness, great full range dimming in all applications. (NEMA, No. 34 at p. 12) DOE is not considering incandescent/halogen lamps in this rulemaking due to the Appropriations Rider. See section IV.A for further details.

b. Lamp Component Location

In the preliminary analysis, DOE considered a product class based on the location of the ballast or driver of the lamp: (1) Integrated lamps in which the ballast or driver are enclosed within the lamp and (2) non-integrated lamps in which the ballast or driver is an external, replaceable component. DOE is also proposing definitions for ''integrated lamp'' and ''non-integrated lamp'' in this NOPR (see IV for further details). NEMA commented that non-integrated pin base CFLs should not be included in the scope of this rulemaking and, therefore, should not be given a GSL product class. (NEMA, No. 34 at p. 11)

Non-integrated pin base CFLs are within the proposed scope of this rulemaking, and DOE is establishing standards for these lamps (see section IV.E.2). DOE determined that self-ballasted lamps may have lower inherent efficacy compared to lamps that utilize external ballasts due to the additional components and circuitry integrated into a self-ballasted lamp. The use of a self-ballasted lamp can be advantageous in that a consumer need only replace one lamp unit rather than two separate components. Self-ballasted lamps are also generally more compact and thus can be used in applications with size constraints. For these reasons, as in the preliminary analysis, DOE proposes establishing separate product classes based on ballast location in this NOPR analysis. (See chapter 3 of the NOPR TSD for further details.)

c. Lumen Package

In the preliminary analysis, DOE considered the product class setting factor of lumen package within the integrated lamp product classes. DOE determined that higher lumen output products cannot achieve the same levels of efficacy as lower lumen output products and considered the following product class divisions within the integrated lamp product class: (1) Low Lumen (*i.e.,* from 310 to less than 2,000 lumens) and (2) High Lumen (*i.e.,* 2,000 to 2,600 lumens). DOE received several comments supporting preliminary analysis' lumen package product class division.

Earthjustice noted that following the EPCA provision for establishment of product classes, DOE correctly concluded that lumen output provides

the only basis for product class divisions among integrated lamps. (Earthjustice, No. 30 at p. 4) EEAs also agreed with DOE's decision noting that high-lumen lamps may require different technological approaches to manage heat and maintain a form factor that fits consumer fixtures making them less efficient than low-lumen lamps. (EEAs, No. 32 at p. 3) Noting that LED lamps are not currently widely available above 2,000 lumens, CA IOUs tentatively supported the distinction between High-Lumen and Low-Lumen product classes. However, they noted one product class for integral lamps would be sufficient if higher lumen LED lamps become available. Additionally, CA IOUs stated that no further lumen package product class divisions were necessary because the sloped standards under consideration adequately address the difference in efficacy achieved by products of different lumen outputs. (CA IOUs, No. 33 at p. 4)

NEMA recommended that DOE consider more than two lumen package divisions. NEMA commented that with all technologies, efficiency decreases with decreasing wattage due to inescapable power losses from components. GE and NEMA stated that there are four natural, lumen ranges associated with wattage equivalencies as defined in existing GSIL standards and commonly used by consumers (see 10 CFR 430.32(x(iii)(A)) These lumen ranges are as follows: 100 W = 1,490–2,600 lumens, 75 W = 1,050–1,489 lumens, 60 W = 750–1,049 lumens, 40 W = 310–749 lumens. NEMA suggested that DOE should establish product classes based on these lumen ranges for each of its recommended lamp technology product class divisions (*i.e.,* incandescent/halogen, modified spectrum halogen, bare CFL, covered CFL, LED lamps). Asserting that the 100 W equivalent lumen bin was exaggerated at the higher end [65] and agreeing with DOE's proposal that the higher lumen range can be limited to 2,000 lumens for current LED lamp technology, NEMA proposed splitting the 1,490–2,600 lumen bin into 1,490–2,000 lumens and 2,000–2,600 lumens product class divisions. NEMA asserted that technical limitations and performance can vary greatly depending on the wattage and technology and this approach would allow DOE to set a lumens per watt number, wattage limit, a linear equation, a quadratic equation or an exponential equation as necessary within the lumen range and technology under consideration for each product class. (NEMA, No. 34 at p. 13; GE, Public Meeting Transcript, No. 29 at pp. 54–55)

NRDC stated that it was open to refining the 1,999 lumen upper bound under consideration in the preliminary analysis but did not support the four bin approach because it could result in gaming, and consequently dimmer bulbs. Instead, they advocated the use of a smooth continuous curve for the regulations. (NRDC, Public Meeting Transcript, No. 29 at pp. 55–56)

DOE analyzed commercially available lamps and found that a continuous equation best describes the relationship between efficacy and lumens rather than lumen bins. Further, DOE assessed equations of the ELs analyzed to ensure that consumer utility would be met by GSLs across all lumen ranges. In doing so, in the preliminary analysis, DOE determined that higher lumen output products cannot achieve the same levels of efficacy as lower lumen output products, specifically LED lamp replacements for incandescent lamps of wattages higher than 100 W. Because DOE determined that higher lumen packages offer a consumer utility, DOE considered a product class division based on lumen package. Therefore, in this NOPR analysis, within the integrated lamp product classes, DOE is continuing to propose separate product classes for lumen outputs from 310 to less than 2,000 and from 2,000 to 2,600.[66]

Hence, NEMA's proposal to establish product classes by lumen bins per GSIL standards to allow for flexibility in setting the type of standard is not necessary for preserving consumer utility and would result in an inconsistent configuration of standards for products covered under this rulemaking. Instead, DOE finds that its equation-based approach to standards and product class division based on high and low lumens, appropriately captures how GSL technologies are achieving ELs across lumen ranges using a consistent methodology.

Southern Company warned that many CFLs in the range of 1500 lumens will not fit in enclosed fixtures and unless LED lamps in this lumen range improve, products will not be available on the market. Southern Company recommended DOE consider a product class addressing physical constraint for higher lumen products. (Southern Company, Public Meeting Transcript, No. 29 at pp. 131–132) Westinghouse noted that even above 1600–1800 lumens, the physical size becomes a concern in terms of fitting in fixtures, particularly for LED lamps, and expressed concern that the 1,999 lumen upper bound might be too high. (Westinghouse, Public Meeting Transcript, No. 29 at p. 54) NRDC responded that there are 100 watt-equivalent LED lamps that offer 1,600 lumens and the form factor is similar to the lower wattage, lower light output LED lamps, which should address size constraints issues. (NRDC, Public Meeting Transcript, No. 29 at pp. 55–56; 132–133)

DOE did ensure that an integrated LED lamp in the 1,500–1,600 lumen range certified for enclosed fixtures met the highest ELs being analyzed. Therefore, DOE does not find that an additional product class related to lumen package is necessary.

d. Standby Mode

In the preliminary analysis, DOE evaluated setting a product class based on the ability of a lamp to operate in standby mode.[67] DOE believes that standby mode operation offers a consumer utility because these lamps have the ability to be remotely turned off, turned on, dimmed, among other functionality. However, DOE assumed that the market would shift to the lowest energy consuming method available, such as Bluetooth, and the energy consumed in standby mode would be negligible. Therefore, DOE did not consider standby mode functionality as a product class setting factor. NEMA agreed that standby power for LED products will be minimal compared to impacts of the classifications shown above and would not require a separate class. (NEMA, No. 34 at p. 14)

However, Westinghouse and the Northwest Energy Efficiency Alliance (NEEA) commented that standby power consumption for smart lamps is not zero. (Westinghouse, Public Meeting Transcript, No. 29 at pp. 239–240; NEEA, Public Meeting Transcript, No. 29 at p. 244) Westinghouse stated that smart lamps are similar to a fan remote control in that a switch has to be left on in order for the lamps to receive a control signal and this functionality consumes at least a minimal amount of power. (Westinghouse, Public Meeting Transcript, No. 29 at pp. 239–240)

In the NOPR analysis, DOE conducted testing on commercially available lamps with standby mode capability and determined that while standby power

[65] NEMA noted that the 100 W and 40 W ranges are exaggerated on the high end and the low end to extend the regulated product range to just above 25 W and just below 150 W traditional incandescent lamps.

[66] The higher bound of 2,600 lumens aligns with the scope of this rulemaking (see section [scope section on lumens]).

[67] GSL preliminary analysis at 2–58.

consumption can vary based on the standby technology used, it is not negligible. DOE conducted active mode and standby mode testing per the LED Test Procedure SNOPR[68] of all lamps with standby mode functionality found on the market. These lamps were designed with varying communication methods, including Zigbee, Bluetooth, Wi-Fi, and radio frequency remote controls. The majority of lamps identified also operate using a central hub for communication between the end-user and the lamp itself. DOE's test results, as presented in appendix 5A, indicate that the tested standby power generally varied between 0.2 W and 0.5 W. Specifically, the measured standby power was less than 0.5 W for 29 out of 31 tests. DOE finds that these results indicate that lamps with standby power have a non-negligible standby power consumption that will likely lower their efficacy, compared to lamps without standby power, all things being equal. Therefore, based on utility and impact on efficacy DOE is proposing a product class division based on standby mode.

e. Covering

In the preliminary analysis, DOE evaluated lamp cover (*i.e.,* something added to the lamp such that the main light source is not distinguishable) as a product class setting factor.[69] However, unable to find a consistent correlation between the addition of a cover and efficacy, DOE did not consider a product class division for lamps with covers versus without covers. DOE received several comments regarding a product class setting factor based on lamp cover.

CA IOUs supported DOE's decision to include covered and bare lamps in one product class because when considering the whole GSL product category, there is no relationship to efficacy. While minor efficacy reduction results from covering a CFL, CA IOUs pointed out that some of the most efficient and most cost-effective products on the market are LED lamps that have the ''covered'' appearance. (CA IOUs, No. 33 at p. 4) Earthjustice also noted that covered CFLs provide no distinct utility because covered LED lamps are available to provide the same aesthetic values at higher efficacies. (Earthjustice, No. 30 at p. 4)

Southern Company, however, stated that there are some functional differences between covered and bare lamps such as aesthetics: consumers will not use bare spiral lamps where they are visible. Southern Company emphasized that this is not a trivial consideration for consumers and recommended that separate product classes be set up for bare and covered lamps. (Southern Company, Public Meeting Transcript, No. 29 at pp. 108–110) Philips commented that one of the biggest advantages for the covered CFL is that it eliminates concerns about mercury because they are almost unbreakable, which is unique to CFLs and creates a large market for them. (Philips, Public Meeting Transcript, No. 29 at pp. 109–110)

NEMA recommended that DOE establish a product class for CFLs and within it bare and covered product class divisions. NEMA asserted that while covered CFLs have meaningfully lower efficiency they provide a unique utility in contrast to bare lamps. NEMA also noted that the CSLs proposed for CFL are not for two levels of performance of the same product, but instead for different products. CSL 0 is for a lamp with a cover, and CSL 1 is for bare spiral lamps. (NEMA, No. 34 at p. 12, 15) Southern Company added that bare and covered product class divisions would avoid the preliminary analysis results where CSL 1 is cheaper than CSL 0. (Southern Company, Public Meeting Transcript, No. 29 at pp. 108–110)

As noted previously, DOE is not proposing a separate product class for CFLs. In the preliminary analysis, DOE found that while a cover generally decreased efficacy in CFLs, a cover in the form of phosphor coating transforms light emitted from LEDs into visible light and increases efficacy.[70] Further many LED lamps that have covers also have high efficacies. Therefore, when considering all lamp technologies, a covering on a lamp does not have a consistent correlation with efficacy and there are products with coverings available at the highest levels of efficacy analyzed. For these reasons, in this NOPR analysis, DOE is continuing to not propose a product class for covered versus bare products. Regarding the differences in representative CFLs for the baseline and CSL 1 of the integrated lamp product classes presented in preliminary analysis, see section V.C for further details.

f. Lamp Spectrum

In the preliminary analysis, DOE evaluated lamp spectrum (*i.e.,* modified spectrum versus standard spectrum lamps) as a product class setting factor.[71] However, not finding a consistent correlation between spectrum and efficacy in GSL products, DOE did not consider spectrum as a product class setting factor. DOE received several comments regarding spectrum as a potential product class division.

NEMA stated that a modified spectrum product class was not necessary for CFLs and LED lamps. NRDC also agreed with not setting product class based on modified spectrum. CA IOUs supported the decision to remove the product class distinction for modified spectrum lamp. CA IOUs continued that there is no relation between efficacy potential and spectrum modification when considering the whole GSL product class. (NEMA, No. 34 at p. 14; NRDC, Public Meeting Transcript, No. 29 at p. 13; CA IOUs, No. 33 at p. 4) EEAs agreed with the determination that a manufacturer can produce a modified spectrum lamp without a decrease in efficacy and that a separate product class for modified spectrum lamps GSLs is not warranted. (EEAs, No. 32 at p. 9)

Modified spectrum is achieved by increasing the contrast between reds and greens in the spectral power distribution (SPD). Because efficacy is impacted in different ways based on the method used to achieve modified spectrum GSLs, DOE did not consider separate product classes for standard and modified spectrum GSLs. Therefore, DOE continues to not consider spectrum as a product class setting factor in this NOPR analysis. DOE also notes that this rulemaking is not removing any product classes based on spectrum applicable to existing standards.

EEAs stated that the current standards for modified spectrum GSILs are 25 percent less efficient than non-modified spectrum GSILs (10 CFR 430.32(x)(iii)(B)) and are too generous. EEAs stated that shelf space at big box retailers for modified spectrum GSILs can exceed that for non-modified spectrum, indicating that producing modified spectrum GSILs is the easiest way to comply with existing standards. EEAs continued that while they did not have specific sales data, it was likely that consumers that purchase modified spectrum GSILs receive less light than the conventional incandescent lamp they meant to replace, potentially causing consumers to shift to the 75 W equivalent lamp, instead of the 60 W, to increase light levels, resulting in increased energy consumption. (EEAs, No. 32 at pp. 9–10) DOE notes that it is not considering incandescent/halogen lamps in this rulemaking due to the Appropriations Rider. See section IV.A for further details.

[68] 80 FR 39644 (July 9, 2015).

[69] GSL preliminary analysis at 2–54.

[70] *Id.*

[71] *Id.* at 2–57.

g. Summary of Proposed Product Classes

In this NOPR analysis, DOE reevaluated the product class setting factors considered in the preliminary analysis and also considered an additional class setting factor. DOE is maintaining the product class divisions presented in the preliminary analysis and adding standby mode as product class setting factor. Table V–1 is a summary of the GSL product classes proposed in this NOPR. DOE requests comments on the proposed product classes.

TABLE V–1—PROPOSED GSL PRODUCT CLASSES

Lamp type	Initial lumen output	Standby mode/No standby mode
Integrated GSLs (*e.g.,* Self Ballasted CFL, Integrated LED lamp)	310 ≤ Initial Lumen Output < 2,000	No Standby Mode.
	2,000 ≤ Initial Lumen Output ≤ 2,600	No Standby Mode.
		Capable Of Operating In Standby Mode..
Non-Integrated GSLs (*e.g.,* Externally Ballasted CFL)	310 ≤ Initial Lumen Output ≤ 2,600	Capable Of Operating In Standby Mode.

2. Technology Options

In the technology assessment, DOE identifies technology options that are feasible means of improving lamp efficacy. This assessment provides the technical background and structure on which DOE bases its screening and engineering analyses. To develop a list of technology options, DOE reviewed manufacturer catalogs, recent trade publications and technical journals, and consulted with technical experts.

In the preliminary analysis, DOE identified several technology options that can improve the efficacy of GSLs.[72] Recognizing that GSLs comprise multiple lamp types, each with their own mechanisms for improving efficacy, DOE identified technology options by lamp type. Specifically, DOE presented technology options for CFL and LED lamp types and also identified a change in technology (*e.g.,* moving from CFLs to LED lamps) as a technology option. DOE received several comments on these options, as discussed in the following sections.

a. CFL Technology Options From the Preliminary Analysis

Stakeholders provided general comments regarding CFL technology. NEMA commented that the apparent differences in CFL efficacies are likely the result of differing manufacturing processes employed by individual manufacturers, rather than of superior design. (NEMA, No. 34 at p. 10) DOE has observed CFL efficacies of lamps with similar characteristics (*e.g.* CCT, CRI, shape) ranging from 57.1 lm/W to 69.2 lm/W, a difference that is likely not explainable by improved manufacturing processes alone. Further, numerous CFL products are offered at one particular efficacy from several manufacturers. DOE therefore finds that the different levels of CFL efficacies are not just the result of differences in how the lamps are manufactured.

GE and NEMA stated that many of the technology options listed have already been used over the years to optimize CFL efficacy and such technology is no longer able to make large improvements. (GE, Public Meeting Transcript, No. 29 at p. 59; NEMA, No. 34 at p. 9) Specifically, NEMA commented that while improvements have been made in glass coatings, a technological breakthrough would be needed to capture further efficacy gains with this option and there are no actions underway that would result in major improvements. Regarding electrode coatings, NEMA noted that their overall performance is already designed for energy conservation and long life, stating that further changes may shorten lamp lifetime. Additionally, potential improvements to this technology would be minimal. For higher efficiency phosphors, NEMA stated that because of rare earth oxide availability and cost issues, all coating resources are being used to reduce losses and optimize current technology performance, and current high efficiency phosphor technology is limited until a technological break-through occurs, which is unlikely. NEMA also stated that manufacturers have already reached the limits of gas fill technology.

In the preliminary analysis, DOE considered glass coatings, highly emissive electrode coatings, and higher efficiency phosphors as technology options for CFLs. As NEMA notes, these are mechanisms for improving lamp efficacy. Based on DOE's research of manufacturer catalogs, recent trade publications, and technical journals, and through discussions with technical experts, DOE concludes that there are various combinations of highly emissive electrode coatings; weights and mixes of phosphors; types and ratios of fill gases; and glass coatings that can be used in CFLs. Because of the range in efficacy levels for CFLs on the market, the less efficacious CFLs must not be using the optimal forms and/or combinations of these mechanisms. Additionally, DOE does not incorporate cost in the technology assessment. DOE considers costs in determining the economic justification of any standard levels developed using these technologies. Therefore, DOE proposes these technologies as means of improving the efficacy of current product offerings of CFLs in this NOPR analysis.

NEMA also commented that the effectiveness of any cold spot design is limited by the ambient temperature of a lamp in operation as the cold spot temperature can never be lower than adjacent ambient temperature, which limits the potential light output gains through cold spot optimization. (NEMA, No. 34 at p. 9)

In the preliminary analysis, DOE identified cold spot optimization as a technology option for improving CFL efficacy. The ''cold spot'' is the lowest temperature on the CFL where the vaporized mercury condenses. The cold spot is a function of current density, and light output increases with current density until it reaches a certain saturation point. Therefore, lamp efficacy can be increased at the optimal cold spot temperature. In a study of commercially available T2 and T3 CFLs, researchers found that light output reaches a maximum at about 48 °C for

[72] *Id.* at 3–45.

lamps with a fixed current of 140 mA.[73] According to the OSRAM Web site, the cold spot for fluorescent lamps should be designed to reach temperatures between 45 °C and 50 °C at 100 percent luminous flux.[74] These optimal cold spot temperatures could be achieved for a range of ambient temperatures. DOE understands that it may be difficult to achieve the most optimal cold spot temperature at very high ambient temperature environments, but these situations would be limited and some gains could still be possible with the level of cold spot optimization that is achievable. Therefore, DOE continues to consider cold spot optimization as a means for improving lamp efficacy and proposes it as a technology option in this NOPR analysis.

Regarding ballast components, NEMA agreed that the use of higher grade components could slightly reduce energy loss and that cost impact must be evaluated in determining requirements. However, NEMA stated that they are unaware of any emerging technology that promises to lower ballast losses while maintaining the performance of current premium ballast designs. (NEMA, No. 34 at p. 10)

In the preliminary analysis, DOE identified improvement in quality of electronic ballast components used in integrated CFLs and improved ballast circuit designs as means of improving the efficacy factor of the ballast, and thereby overall lamp efficacy.[75] Regarding the cost of improved ballast components, as noted previously, DOE does not factor in cost when assessing viability of technology options, but instead analyzes cost when determining the economic justification of using viable technologies. Regarding circuit designs, DOE identified advanced designs, such as cathode cut-out technology, integrated circuits, improved starting method, and synchronous rectification that could increase ballast efficiency. Because there are different levels of ballast efficiencies for integrated CFLs, DOE finds that circuit designs and/or features of varying efficiencies must be in use. Therefore, DOE continues to consider ballast designs as a means from improving efficacy and considers it as a technology option in this NOPR analysis.

NEMA disagreed with active cooling as a technology option and commented that active cooling approaches for CFLs have been studied, but are absolutely cost prohibitive, and may lower efficacy due to the power needs of the active cooling system. (NEMA, No. 34 at p. 9) DOE did not identify active cooling as a technology option to improve CFL efficacy in the preliminary analysis. DOE did consider active thermal managements systems for enhancing LED lamp efficacy which is discussed in section V.A.2.b.

Additionally, NEMA stated that manufacturers are already producing lamps with ideal diameters for maximum efficiency. (NEMA, No. 34 at p. 9) DOE notes it did not consider higher efficiency diameters as a means for improving CFL technology in the preliminary analysis.

b. LED Lamp Technology Options From the Preliminary Analysis

Stakeholders had some general comments on LED lamp technology. GE noted that LED lamps are a newer technology and therefore more likely to have continued efficacy advancements than CFLs. (GE, Public Meeting Transcript, No. 29 at p. 59) NEEA observed that an energy conservation standard promulgated by this rulemaking would not require compliance until 2020. As even the technology options under consideration that are in early stages of development are being commercialized at a fast pace, DOE will likely have more information on them before the final rule stage of this rulemaking. NEEA encouraged DOE to take into account all new information that emerges between the preliminary analysis and the NOPR. (NEEA, Public Meeting Transcript, No. 29 at pp. 60–61)

As part of the NOPR analysis, DOE does a thorough assessment of the technology options relevant to this rulemaking. In the NOPR analysis, DOE provides updates on the progress in research and development for the technologies identified in the preliminary analysis, as well as identifying any new technology options that may have emerged. DOE received several specific comments on technology options identified for increasing LED lamp efficacy in the preliminary analysis that are discussed below.

Efficient Down Converters

NEMA commented that efficient down converters are not in use today due to technical challenges surrounding narrow-band phosphors that enable high spectral efficiency, including robust packaging for lumen maintenance while achieving high quantum efficiency under high temperature and flux. (NEMA, No. 34 at p. 10) CA IOUs, however, supported the inclusion of quantum dot and phosphor emitter materials as technology options in the preliminary analysis. (CA IOUs, Public Meeting Transcript, No. 29 at p. 62)

In the preliminary analysis, DOE presented efficient down converters as a technology option that uses high-efficiency wavelength conversion materials to convert narrow band monochromatic light emitted by LED lamps into white light.[76] Feedback from manufacturer interviews indicated that manufacturers are continually trying to improve down conversion methods. One method is using phosphor, which involves incorporating the phosphor in the body of a blue LED, causing some of the blue light to be converted into yellow light and the remaining blue light to be mixed with the yellow light, resulting in white light. The vast majority of white LED lamps currently used in SSL applications employ the phosphor-conversion approach.[77] The performance of phosphor conversion can be increased by using improved phosphor material. DOE acknowledges that current phosphors have high quantum yields, but show wide emission spectra and saturation effects at high temperatures and high flux.[78] DOE has found there are research efforts and existing patents on optimized phosphor coating for LED lamps. DOE is funding a project that intends to increase the thermal conductivity of the encapsulant, resulting in lower temperature of phosphor particles by as much as 50 °C and raising the effective quantum efficiency (QE) to 95 percent for the phosphors at 150 °C at 35 A/cm^2 in white-light-emitting SSL sources.[79] Further, DOE is also aware of ongoing research regarding the use of quantum dots as a down conversion method. (See chapter 3 of the NOPR TSD for further details.) Therefore, based on the use of this technology in GSL products and the indication of continued research and development to resolve existing issues and further improve efficacy, DOE continues to consider efficient down

[73] Feng, Xiangfen and Yang, Hu. *Design Principle Study of High Efficiency Compact Fluorescent Lamps.* LEUKOS VOL 8 NO 4. (April 2012): 301–311.

[74] Osram Sylvania. *Cold Spot technology: Condensation point in the discharge tube.* 2015. (Last accessed July 14, 2015.) *http://www.osram.com/osram_com/news-and-knowledge/fluorescent-lamps/professional-knowledge/cold-spot-technology/index.jsp.*

[75] GSL preliminary anaylsis at 3–52.

[76] *Id.* at 3–53.

[77] U.S. Department of Energy. *2015 Solid-State Lighting R&D Plan.* May 2015. (Last accessed July 14, 2015.) *http://energy.gov/sites/prod/files/2015/06/f22/ssl_rd-plan_may2015_0.pdf.*

[78] Ibid.

[79] U.S. Department of Energy. *2015 Project Portfolio: Solid-State Lighting.* January 2015. (Last accessed July 14, 2015.) *http://energy.gov/sites/prod/files/2015/01/f19/2015_ssl-project-portfolio.pdf.*

converters as a viable means of increasing LED lamp efficacy and proposes it as a technology option in this NOPR analysis.

Improved Package Architectures

NEMA noted reliable die attachment methods are needed to enable high temperature operation for improved package architectures. NEMA also commented that there is a need for polymer optical encapsulants to improve color stability and emitter lifetime, and high thermal conductivity to reduce down-converting layer temperatures. Further, NEMA specified that another challenge is the development of high index encapsulants to increase photon extraction. The barriers to improvement differ depending on the architecture approach; NEMA gave the example of mixed color solutions requiring additional controls that would increase the cost of the total package. (NEMA, No. 34 at p. 10)

In the preliminary analysis, DOE presented improved package architecture as a technology option, noting examples of architecture enhancements such as RGB+, hybrid color, and bonding the chip directly on to the heat sink.[80] DOE is aware that die attachment and encapsulation are being continually improved. The challenge with die attachment is that defects can occur in the die if the bonding material requires high temperature. However, there is research regarding bonding materials that can be used at lower temperatures. For example, there is a patent on using a conductive paste as bonding method to allow bonding to occur at a lower temperature.[81] Further, in June 2015, Dow Corning was issued a patent by the Korean Intellectual Property Office (KIPO) for its new LED Optical Silicone Encapsulant Technology, which potentially offers improved light output, improved mechanical protection, and can act as a gas barrier to enhance component reliability.[82] Regarding color mixing, Cree's TrueWhite Technology, which mixes the light from red and unsaturated yellow LEDs to create white light, preserves high color consistency over the life of the product.[83] With respect to cost, as noted earlier, the technology option analysis examines mechanisms that increase efficacy, regardless of cost. Therefore, given that package architectures are continually being improved in GSL products and issues related to further advancing this technology are under research and development, DOE is proposing improved package architecture as a viable means of improving LED lamp efficacy in this NOPR analysis.

Alternative Substrate Materials

NEMA stated that the cost of gallium nitride (GaN) substrates is high for LEDs. Further NEMA stated the performance of Si and GaN-on-Si-based devices is not significantly better than sapphire-based devices and would not warrant a transition to these substrates. (NEMA, No. 34 at p. 10)

In the preliminary analysis DOE presented alternative substrates as a technology option noting certain alternatives to the most commonly used, sapphire substrate material.[84] A greater lattice match between the substrate material and the GaN LED material reduces the likelihood of defects and increases lumen efficacy of the LED. The lattice mismatch of sapphire (16 percent) and silicon (18 percent) are comparable and high. However, the lattice mismatch of silicon carbide (SiC) is 3.5 percent and for GaN is zero.[85] Therefore, DOE agrees that while the use of silicon may not result in better performance compared to sapphire, there are alternative substrates such as SiC and GaN that can enhance the efficacy of LED lamps. Soraa manufactures lamps using GaN on GaN LEDs and recently announced a new LED package reaching 75 percent wall-plug-efficiency.[86] Regarding the cost of GaN material, DOE notes that it does not take cost into consideration when identifying technology options and considers costs in determining the economic justification of any standard levels developed using these technologies. Hence, DOE continues to consider use of alternative substrates as a technology option to improve LED lamp efficacy.

Improved Thermal Interface Materials (TIMs)

NEMA stated that challenges to using improved TIMs include developing TIMs that enable high efficiency thermal transfer for long-term reliability and performance optimization of the LED device and overall lamp product. (NEMA, No. 34 at p. 10)

In the preliminary analysis, DOE presented improved TIMs as a technology option that allows for higher efficiency thermal transfer, which can improve LED efficacy by lowering LED junction temperature.[87] There are also research efforts targeting reliable high efficiency thermal transfer materials such as chemical vapor deposition (CVD) diamond, which provides high thermal conductivity, while allowing for standard methods of attachment (*e.g.,* solders and epoxies).[88] Companies such as Electrolube are focusing on reduced viscosity compounds with higher bulk thermal conductivities to produce TIMs that maximize efficiency in heat dissipation by minimizing thermal resistance.[89] Indium Corporation introduced a Heat-Spring, which is a metal thermal interface material that provides high thermal conductivity and is designed not to bake out or pump out, optimizing long-term performance consistency.[90] Therefore, there is continued development of higher efficiency and longer reliability TIMs. Further, in manufacturer interviews, several manufacturers noted that TIMs are a mechanism used to improve lamp efficacy. Therefore, DOE is continuing to consider improved TIMs as a viable means for increasing LED lamp efficacy.

Optimized Heat Sink Design

NEMA observed that the performance of the heat sink is generally compromised by material cost and geometrical constraints. (NEMA, No. 34 at p. 10)

[80] GSL preliminary analysis at 3–54.

[81] Miyairi, M., Ogashiwa, T., and Shioya, A. (2015) *U.S. Patent No. 2,833,393.* Washington, D.C: U.S. Patent and Trademark Office.

[82] Wright, Maury. *LED business news: Dow Corning IP, new funding, and Eaton management.* June 2015. (Last accessed July 14, 2015.) *http://www.ledsmagazine.com/articles/2015/06/led-business-news-dow-corning-ip-new-funding-and-eaton-management.html.*

[83] Cree. *FAQs about Cree LED Components.* 2015. (Last accessed July 14, 2015.) *http://www.cree.com/led-components-and-modules/tools-and-support/faqs.*

[84] GSL preliminary analysis at 3–58.

[85] Solid State Technology. *Beyond sapphire: LED substrates from GaN to ZnO, SiC, and Si.* May 14, 2012. (Last accessed July 14, 2015.) *http://electroiq.com/blog/2012/05/beyond-sapphire-led-substrates-gan-zno-sic-si/.*

[86] Soraa. *Soraa develops the world's most efficient LED; begins integration into large lamp line.* February 24, 2014. (Last Accessed July 14, 2015.) *http://www.soraa.com/news/soraa-large-lamp-gen3–022414.*

[87] RPI. *Junction temperature in light-emitting diodes assessed by different methods.* (Last accessed June 14, 2015.) *http://www.ecse.rpiscrews.us/~schubert/Reprints/2005%20Chhajed%20et%20al%20%28SPIE%20Photonics%20West%29%20Junction%20temperature%20in%20LEDs.pdf*

[88] Aidala, Dwain A. *CVD Diamond Solves Thermal Challenges.* Solid State Technology. (Last accessed July 14, 2015.) *http://electroiq.com/blog/2006/10/cvd-diamond-solves-thermal-challenges/.*

[89] Electrolube. *Thermal Management of LEDs: Looking Beyond Thermal Conductivity Values.* 2015. (Last accessed July 14, 2015.) *http://www.electrolube.com/technical-articles/thermal-management-of-leds-looking-beyond-thermal-conductivity-values/.*

[90] Indium Corporations. *Indium Corporation Features Heat-Spring for LED Manufacturing at Strategies in Light.* January 8, 2015. (Last accessed on July 14, 2015). *http://www.indium.com/people/marketing-communications/news-releases/heat-spring-for-led-manufacturing-at-strategies-in-light.*

In the preliminary analysis, DOE presented optimized heat sinks as a technology option that improves thermal conductivity and heat dissipation, lowering the temperature at the LED junction and increasing lamp efficacy.[91] DOE determined that geometrical constraints can be addressed in optimized heat sink designs. For example, finned designs made out of materials with high thermal transfer coefficients have been utilized in commercially available A-shape lamps. Further, there are existing patents on optimized heat sinks for LED lamps indicating this is an area of ongoing research. GE developed a heat sink that includes a reflective layer over the heat sink body with a reflectivity greater than 90 percent for light in the visible spectrum. Further is a light transmissive protective layer over the reflective layer that can sufficiently reflect visible and infrared light impinging on the surface of the heat sink, and still transmit heat from the LED lamp to the ambient environment with greater efficacy.[92] Therefore, DOE finds that geometrical constraints can be overcome to improve heat sink designs, and DOE is continuing to consider optimized heat sinks as a technology option that can increase the efficacy of LED lamps in this NOPR analysis.

Active Thermal Management Systems

Regarding active thermal management systems, NEMA commented that reliability and cost are major concerns. (NEMA, No. 34 at p. 10)

In the preliminary analysis, DOE considered active thermal management systems, which are specifically designed to provide cooling to LED components, decreasing the LED junction temperature.[93] Some active thermal management systems take the form of integral fans or vibrating membranes, increasing convection. Additionally, as active thermal management systems are being used in commercially available lamps, such as Philips MASTER LEDspot MR16s, DOE believes reliability concerns can be addressed by manufacturers.[94] Hence, DOE continues to consider active thermal management systems as a technology options that can increase the efficacy of LED lamps.

Improved Driver Design

In terms of improved driver design, NEMA commented that in addition to efficacy, drivers must meet many specifications (such as cost, power quality, flicker, dimmability, isolation, line regulation, and transient protection) and optimizing for specific applications often leads to a compromise in efficacy. (NEMA, No. 34 at p. 11)

In the preliminary analysis, DOE considered improved driver design as a mechanism for increasing overall lamp efficacy.[95] Manufacturer feedback during interviews and DOE's review of catalogs indicate a range of efficiencies associated with drivers. The existence of this range, coupled with historical increases in driver efficiency in commercially available lamps, demonstrates the potential for improvement in driver design, while meeting the functional specifications of the product. Therefore, DOE continues to consider an improved driver design as a technology option for improving LED lamp efficacy.

Reduced Current Density

NEMA stated that current density is only one aspect in the design of an efficient LED die and there are many trade-offs that take place to ensure higher efficacy. Further NEMA asserted that optimization of current density could result in lower overall efficacy. (NEMA, No. 34 at p. 11)

In the preliminary analysis, DOE presented reduced current density as a technology option for improving LED lamp efficacy.[96] DOE notes that increasing current results in a commensurate decrease in LED efficacy. This decrease in efficacy at higher currents is referred to as ''efficacy droop'' and is discussed in further detail in chapter 3 of the NOPR TSD. DOE's research shows that reducing current density within the appropriate package architecture will increase LED lamp efficacy while maintaining practical levels of lumen output per unit area. (See chapter 3 of the NOPR TSD for more information.) For example, chip-on-board (COB) is an LED packaging technology with very compact arrays of LEDs, allowing for greater light intensity and uniformity per unit area.[97] This technology uses many low-powered chips rather than a few high-powered chips to produce the desired lumen output, but at a higher lamp efficacy because the chips can be run at low current. New filament-style LED lamps use strands of as many as 36 low-powered LEDs running at low current (*i.e.,* approximately 15 mA) connected in series, encapsulated on glass or sapphire substrates, and coated in a phosphor resin. Lamps using these filament strands are currently some of the most efficacious on the market according to manufacturer catalogs.[98] A known issue with lower current density is that the each LED die produces fewer lumens. Methods of compact die arrays that allow for more dies per unit area mitigate this issue. Therefore, DOE finds that manufacturers are utilizing reduced current density to increase LED lamp efficacy and continues to consider it as a technology option in this NOPR analysis.

Device Level Optics

Regarding the use of device level optics, NEMA commented that package size limits the extent of beam-shaping that can be done with reasonable extraction efficacy and that it may not be desirable to integrate application-specific functions at a low system level for complexity management reasons. (NEMA, No. 34 at p. 11)

In the preliminary analysis, DOE presented device level optics as a technology option that involves optimizing optics at the chip level or the primary optic, so that the outer secondary optic can be removed, thereby eliminating losses due to absorption.[99] A primary optic is integrated into the LED package and optimizes light extraction using mechanisms such as reflective structure coatings and integrated lenses. DOE found that there are research efforts addressing issues of optimizing extraction efficiency for small package sizes, as well as improving beam shaping. An existing patent presents 27 different primary optic configurations that achieve more controlled beam shapes while allowing for a more simplified and efficient secondary optic.[100] Another patent discusses LED packages with enhanced mirror reflectivity that improve the overall emissions of the chip by stopping light absorption by the multiple chip layers.[101] Therefore, DOE considers

[91] GSL preliminary analysis at 3–59.

[92] Allen, Gary and Chowdhury, Ashfaqul. GELighting Solutions, LLC. (2014) *U.S. Patent No. 8,672,516.* Washington DC: U.S. Patent and Trademark Office.

[93] GSL preliminary analysis at 3–59.

[94] Philips. *MASTER LEDspot LV—The ideal solution for spot lighting.* July 3, 2015. (Last Accessed July 14, 2015.) *http://download.p4c.philips.com/l4bt/3/322779/master_ledspot_lv_322779_ffs_aen.pdf.*

[95] GSL preliminary analysis at 3–60.

[96] *Id.* at 3–61.

[97] Pro Photonix. *Chip-on-Board LED Technology.* 2015. (Last accessed July 14, 2015.) *http://www.prophotonix.com/resources/Technical-Overviews/about-chip-on-board.aspx.*

[98] Tevaja Lighting. *FiLED, Filament LED Bulbs, visual effects of incandescents.* 2015. (Last accessed July 14, 2015.) *http://www.tevaja.com/?page_id=11.*

[99] GSL preliminary analysis at 3–60.

[100] Tars, E., Kellerm, B., Guschl, P., and Negley, G. (2011) *U.S. Patent No. 8,564,004.* Washington DC: U.S. Patent and Trademark Office.

[101] Bergmann, M. et al. and Cree. (2014) *U.S. Patent No. 8,686,429.* Washington DC: U.S. Patent and Trademark Office.

optics as a viable means of increasing LED lamp efficacy in this NOPR analysis.

Further DOE determined that the main mechanism for increasing lamp efficacy through ''device level optics'' is through improvement in primary optics. Therefore, in this NOPR analysis, in order to clearly define this technology option, DOE is proposing to rename ''device level optics'' as ''improved primary optics.'' DOE is also refining the description of the technology option as enhancements to the primary optic of the LED package such as surface etching that would optimize extraction of usable light from the LED package and reduce losses due to light absorption at interfaces. DOE requests comment on its proposed renaming of ''device level optics'' to ''improved primary optics'' and refined description of this technology option. For further details of this technology option see chapter 3 of the NOPR TSD.

Increased Light Utilization

Regarding the increased light utilization technology option, NEMA commented that there is a trade-off between increased light utilization and system level cost. (NEMA, No. 34 at p. 11) In the preliminary analysis, DOE considered increased light utilization as a means for reducing optical losses from housing, diffusion, beam shaping, and color-mixing through mechanisms such as highly reflective coatings inside the lamp, thereby increasing overall luminaire efficacy. DOE does not take cost into consideration when identifying technology options. DOE considers costs in determining the economic justification of any standard levels developed using these technologies.

Further, in the NOPR analysis, DOE determined that the term ''increased light utilization'' can encompass many mechanisms for improving lamp efficacy including use of improved primary optics, improved package architecture, etc. However, the intent of this technology option is to specifically describe how reduction in optical losses is achieved through secondary optics such as diffuse coatings on the lamp. Therefore, in this NOPR analysis, in order to clearly define this technology option, DOE is proposing to replace the term ''increased light utilization'' with ''improved secondary optics.'' Further DOE is refining the description of the technology option as the reduction or elimination of optical losses from the lamp housing, diffusion, beam shaping, and other secondary optics to increase efficacy, using mechanisms such as reflective coatings and improved diffusive coatings. Additionally, DOE finds that because increased lamp efficacy through increased light utilization is a general phenomenon, covered in many proposed technology options, it does not need to be proposed as specific mechanism for achieving LED lamp efficacy. DOE requests comment on its proposal to replace the term ''increased light utilization'' with ''improved secondary optics'' and the refined definition of this technology option. For further details of this technology option see chapter 3 of the NOPR TSD.

c. Summary

In summary, after conducting an update of relevant publications and feedback in manufacturer interviews, DOE is proposing the technology options as shown in Table V–2. For further information on all technology options considered in this NOPR, see chapter 3 of the NOPR TSD. DOE requests comments on the proposed technology options.

TABLE V–2—GSL TECHNOLOGY OPTIONS

Lamp type	Name of technology option	Description
CFL	Highly Emissive Electrode Coatings	Improved electrode coatings allow electrons to be more easily removed from electrodes, reducing lamp power and increasing overall efficacy.
	Higher Efficiency Lamp Fill Gas Composition.	Fill gas compositions improve cathode thermionic emission or increase mobility of ions and electrons in the lamp plasma.
	Higher Efficiency Phosphors	Techniques to increase the conversion of ultraviolet (UV) light into visible light.
	Glass Coatings	Coatings on inside of bulb enable the phosphors to absorb more UV energy, so that they emit more visible light.
	Multi-Photon Phosphors	Emitting more than one visible photon for each incident UV photon.
	Cold Spot Optimization	Improve cold spot design to maintain optimal temperature and improve light output.
	Improved Ballast Components	Use of higher grade components to improve efficiency of integrated ballasts.
	Improved Ballast Circuit Design	Better circuit design to improve efficiency of integrated ballasts.
	Change in Technology	Replace CFL with LED technology.
LED	Efficient Down Converters	New high-efficiency wavelength conversion materials, including optimized phosphor conversion, quantum dots, have the potential for creating warm-white LEDs with improved spectral efficiency, high color quality, and improved thermal stability.
	Improved Package Architectures	Novel package architectures such as color mixing (RGB+) and hybrid architecture to improve package efficacy.
	Improved Emitter Materials	The development of efficient red, green, or amber LED emitters, will allow for optimization of spectral efficiency with high color quality over a range of CCT and which also exhibit color and efficiency stability with respect to operating temperature.
	Alternative Substrate Materials	Alternative substrates such as gallium nitride (GaN), silicon carbide (Si-C) to enable high-quality epitaxy for improved device quality and efficacy.
	Improved Thermal Interface Materials	TIMs that enable high efficiency thermal transfer for long-term reliability and performance optimization of the LED device.
	Optimized Heat Sink Design	Improve thermal conductivity and heat dissipation from the LED chip thus reducing efficacy loss from rises in junction temperature.
	Active Thermal Management Systems	Devices such as internal fans and vibrating membranes to improve thermal dissipation from the LED chip.
	Improved Primary Optics	Enhancements to the primary optic of the LED package such as surface etching that would optimize extraction of usable light from the LED package and reduce losses due to light absorption at interfaces.
	Improved Secondary Optics	Reduce or eliminate optical losses from the lamp housing, diffusion, beam shaping, and other secondary optics to increase efficacy using mechanisms such as reflective coatings and improved diffusive coatings.
	Improved Driver Design	Increase driver efficiency through novel and intelligent circuit design.

TABLE V–2—GSL TECHNOLOGY OPTIONS—Continued

Lamp type	Name of technology option	Description
	AC LEDs	Eliminate the requirements of a driver and therefore reduce efficiency losses from the driver.
	Reduced Current Density	Driving LED chips at lower currents while maintaining light output, and thereby reducing the efficiency losses associated with efficacy droop.

B. Screening Analysis

After DOE identifies the technologies that improve the efficacy of GSLs, DOE conducts the screening analysis. The purpose of the screening analysis is to determine which options to consider further and which options to screen out. DOE consults with industry, technical experts, and other interested parties in developing a list of technology options. DOE then applies the following set of screening criteria to determine which options are unsuitable for further consideration in the rulemaking (10 CFR part 430, subpart C, appendix A at 4(a)(4) and 5(b)):

1. *Technological feasibility.* DOE will consider technologies incorporated in commercially available products or in working prototypes to be technologically feasible.

2. *Practicability to manufacture, install, and service.* If mass production of a technology and reliable installation and servicing of the technology could be achieved on the scale necessary to serve the relevant market at the time the standard comes into effect, then DOE will consider that technology practicable to manufacture, install, and service.

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

4. *Adverse impacts on health or safety.* If DOE determines that a technology will have significant adverse impacts on health or safety, it will not further consider this technology.

Those technology options not screened out by the above four criteria are called ''design options'' and are considered as possible methods of improving efficacy in the engineering analysis. DOE received several comments on the screening analysis presented in the GSL preliminary analysis.

1. CFL Technology Options Screened Out

a. Multi-Photon Phosphors

NEMA commented that multi-photon phosphors have been analyzed in the past and no cost effective improved performance phosphors have been identified, so NEMA agreed with DOE's decision to screen out multi-photon phosphors. (NEMA, No. 34 at p. 9)

In the preliminary analysis, DOE screened out multi-photon phosphor technology based on the first criterion, technological feasibility, because the technology was still in the research phase.[102] DOE finds that the technology remains in research phase and is unaware of any prototypes or commercially available products that incorporate this technology and therefore proposes to continue to screen multi-photon phosphor technology out based on the first criterion, technological feasibility.

2. LED Technology Options Screened Out

a. AC LEDs

NEMA noted that true AC LEDs have less than 50 percent utilization and require external components for, among other things, surge protection and flicker mitigation. Further, for high voltage LEDs there is an efficiency loss due to die segmentation and increased package complexity to sustain the high voltage and wide variety of optimum forward voltages. Therefore, NEMA agreed with DOE's decision to screen out AC LEDs. (NEMA, p. 11)

In the preliminary analysis, DOE presented AC LEDs as a technology option that removed the need for a driver component, potentially reducing efficiency losses.[103] DOE determined that manufacturers are finding solutions to several of the issues noted by NEMA. DOE found that Seoul Semiconductor has a number of high voltage AC LED modules commercially available for integration into lamps. Further, in July 2014, Seoul Semiconductor announced a new line of AC LED modules with improved AC drivers designed specifically for the omnidirectional lamps, improved compatibility with TRIAC dimmers, and mitigated flicker issues with dimming. Regarding utilization issues, DOE found improvements in circuit design can increase LED utilization. For example, Texas Instruments' (TI's) TPS92411 MOSFET switch allows a small capacitor to be placed across each LED segment on a circuit, storing energy to keep all LEDs lit, even when the AC line voltage is too low, thereby increasing LED utilization.

However, at the time of the preliminary analysis, DOE did not find commercially available products that contained this technology, and screened it out based on the first criterion, technological feasibility. During research conducted for the NOPR analysis, DOE found that Eastar Lighting is producing two 5 W G-shaped AC LED lamp models with 330 lumens and 360 lumens that could meet the scope of GSLs. Because only two models are being produced by one manufacturer, it is unclear if these lamps could be produced on a commercial scale. Additionally, the products are not available across a range of lumen packages and limited to the G-shape. Therefore, DOE is proposing to screen out AC LEDs based on the second and third criteria, respectively practicability to manufacture, install, and service and adverse impacts on product utility or product availability.

b. Quantum Dots

NRDC mentioned that new TVs are starting to use quantum dots and have LED back lights. As these technologies are out of the research phase, they could be applicable to general lighting applications. (NRDC, Public Meeting Transcript, No. 29 at p. 60) However, Philips disagreed, commenting that the technology is being very closely monitored within the lighting industry, but it is currently cost prohibitive. (Philips, Public Meeting Transcript, No. 29 at p. 61)

In the preliminary analysis, DOE screened out this technology based on the first criterion, technological

[102] GSL preliminary analysis at 2–61.

[103] *Id.*

feasibility. DOE acknowledges the continued development of quantum dots and their use in TVs and other lighting displays, and notes that in a recent report from Yole Développement, the use of quantum dots in lighting is projected to rise by 2020.[104] However, DOE continues to find no evidence that quantum dot technology is currently used in commercially available lamps. Therefore, DOE proposes to continue to screen out this technology option based on the first criterion, technological feasibility, and will not consider quantum dot technologies as a design option for improving the efficacy of GSLs.

c. Improved Emitter Materials

In the preliminary analysis, DOE screened out improved emitter materials, which can increase the efficiency of LED emitters, the component that generates light output. In particular LED lamp efficacy can be improved with the use of more efficient green emitters. However, because research in this area was ongoing, DOE screened out this technology option based on the first criterion, technological feasibility. In this NOPR analysis, DOE found that improved emitter materials remain in the research phase and proposes to continue to screen them out based on technological feasibility.

3. Summary

In this NOPR, of the technology options identified for improving GSL efficacy, DOE is proposing screening out the following:

CFL Technology Options Screened Out

- Multi-photon phosphors because they could not be proven to be technologically feasible.

LED Technology Options Screened Out

- AC LEDs because they could not be proven to be practicable to manufacture, install and service and had adverse impacts on product utility or product availability;
- Improved emitter materials because they could not be proven to be technologically feasible; and
- Quantum dot technologies because they could not be proven to be technologically feasible.

The following are GSL technologies that DOE has not screened out and is proposing as design options:

CFL Design Options

- Highly Emissive Electrode Coatings
- Higher Efficiency Lamp Fill Gas Composition
- Higher Efficiency Phosphors
- Glass Coatings
- Cold Spot Optimization
- Improved Ballast Components
- Improved Ballast Circuit Design
- Change in Technology

LED Design Options

- Efficient Down Converters (with the exception of quantum dots technologies)
- Improved Package Architectures
- Alternative Substrate Materials
- Improved Thermal Interface Materials
- Optimized Heat Sink Design
- Active Thermal Management Systems
- Improved Primary Optics
- Improved Secondary Optics
- Improved Driver Design
- Reduced Current Density

See chapter 4 of the NOPR TSD for further details on the GSL screening analysis. DOE requests comment on the proposed design options in this NOPR analysis.

C. Engineering Analysis

1. General Approach

The engineering analysis is generally based on commercially available lamps that incorporate the design options identified in the technology assessment and screening analysis. (See chapters 3 and 4 of the NOPR TSD for further information on technology and design options.) The methodology consists of the following steps: (1) Selecting representative product classes, (2) selecting baseline lamps, (3) identifying more efficacious substitutes, and (4) developing ELs by directly analyzing representative product classes and then scaling those ELs to non-representative product classes. The details of the engineering analysis are discussed in chapter 5 of the NOPR TSD. The following discussion summarizes the general steps of the engineering analysis:

Representative product classes: DOE first reviews covered lamps and the associated product classes. When a product has multiple product classes, DOE selects certain classes as ''representative'' and concentrates its analytical effort on these classes. DOE selects representative product classes primarily because of their high market volumes and/or distinct characteristics.

Baseline lamps: For each representative product class, DOE selects a baseline lamp as a reference point against which to measure changes resulting from energy conservation standards. Typically, a baseline model is the most common, least efficacious lamp sold in a given product class. For this NOPR analysis, DOE uses performance data presented in manufacturer catalogs to determine lamp efficacy. DOE also considers other lamp characteristics in choosing the most appropriate baseline for each product class such as wattage, lumen output, CCT, shape, and lifetime.

More efficacious substitutes: DOE selects higher efficacy lamps as replacements for each of the baseline models considered. When selecting higher efficacy lamps, DOE considers only design options that meet the criteria outlined in the screening analysis (see section V.B or chapter 4 of the NOPR TSD). DOE also sought to maintain the baseline lamp's characteristics, such as base type, CCT, and CRI among other specifications, for substitute lamps. For non-integrated GSLs, DOE pairs each lamp with an appropriate ballast because non-integrated GSLs are a component of a system, and their performance is related to the ballast on which they operate.

Efficacy levels: After identifying the more efficacious substitutes for each baseline lamp, DOE develops ELs. DOE bases its analysis on three factors: (1) The design options associated with the specific lamps studied; (2) the ability of lamps across lumen packages to comply with the standard level of a given product class; and (3) the max-tech EL. DOE then scales the ELs of representative product classes to any classes not directly analyzed.

DOE received comments on the general approach to the engineering analysis presented in the preliminary analysis. NEMA and Westinghouse expressed concerns over DOE's use of catalog data. In general, NEMA stated that rated or initial lumens reported in catalogs are long term means and are not necessarily measured values. NEMA especially noted that catalog data for the covered products that are currently without published test procedures would be particularly problematic. Westinghouse commented that manufacturers may be aggressively marketing their product and without supporting test data, it is difficult to determine which numbers are legitimate. Westinghouse further requested that DOE exclude outliers and set standards that allow for differences between specialty and high-volume manufacturing. (NEMA, No. 34 at p. 15; Westinghouse, Public Meeting Transcript, No. 29 at pp. 97–98)

DOE used performance data of commercially available GSLs presented in manufacturer catalogs to identify potential baseline lamps and develop ELs. DOE used catalog data as the basis of its engineering analysis because it is

[104] I-Micronews. *Phosphors & Quantum Dots 2015: LED Downconverters for Lighting & Displays.* 2015. (Last accessed July14, 2015.) *http://www.i-micronews.com/led-report/product/phosphors-quantum-dots-2015-led-downconverters-for-lighting-displays.html#description.*

the largest and most comprehensive dataset. However, DOE also used publicly available test data from CEC's Appliance Efficiency Database, DOE's LED Lighting Facts Product List, EPA's ENERGY STAR Certified Light Bulbs Database, and DOE's CCMS Database when possible to verify efficacies calculated from catalog values and to ensure lamps can comply with ELs based on test data. DOE also conducted independent testing, using the LED Test Procedure SNOPR, of representative units and similar lamps to verify performance at the highest levels of efficacy. See section V.C.4 and appendix 5A of the NOPR TSD for more information.

Although certain products included in the scope of this rulemaking do not currently have finalized DOE test procedures (*e.g.,* LED lamps), industry standards for measuring efficacy have been in place for several years for these products. Therefore, manufacturers and the organizations conducting verification testing are likely using existing industry standard test methods to determine performance values. EPCA directs DOE to establish test procedures for covered products in advance of prescribing an energy conservation standard. (42 U.S.C. 6295(o)(3)(A)) Thus, DOE plans to finalize test procedures for all GSLs for which DOE is proposing standards prior to the completion of this rulemaking.

Regarding outliers, DOE identified data outliers in both its collection of lamp performance data from manufacturer catalogs and in its review of efficacy values from DOE's CCMS Database. DOE identified both on the high and low end outliers, and in cases where DOE was unable to verify the value using test data or manufacturer confirmation, DOE maintained its approach from the preliminary analysis of not considering the lamp in the engineering analysis. DOE welcomes comment on the data approach.

2. Representative Product Classes

In the case where a covered product has multiple product classes, DOE identifies and selects certain product classes as ''representative'' and concentrates its analytical effort on those classes. DOE chooses product classes as representative primarily because of their high market volumes and/or unique characteristics. DOE then scales its analytical findings for those representative product classes to other product classes that are not directly analyzed. In the preliminary analysis, DOE considered directly analyzing all product classes for GSLs: Integrated low-lumen GSLs, integrated high-lumen GSLs, and non-integrated GSLs.

In this NOPR analysis, DOE is directly analyzing both the Integrated Low-Lumen and the Integrated High-Lumen product classes because there are technological limitations to producing high-lumen (*i.e.,* 2,000 lumens or greater) GSLs using LED technology and therefore ELs for this product class cannot be scaled from the Integrated Low-Lumen product class. DOE is also continuing to directly analyze the Non-Integrated product class because of observed differences in efficacy trends and maximum technologically feasible levels between integrated and non-integrated lamps. Further, manufacturer feedback indicated that scaling between the integrated and non-integrated products is not appropriate.

As stated in section V.A.1, for this NOPR analysis, DOE is also proposing a product class division based on standby mode functionality for the Integrated Low-Lumen and Integrated High-Lumen product classes. Based on manufacturer feedback and testing conducted, DOE determined that standby power consumption is not negligible and therefore the efficacy of these lamps would be impacted. Because standby mode functionality also offers a consumer utility, DOE is proposing a product class division. Based on manufacturer feedback and testing conducted, DOE determined that integrated lamps with standby mode functionality are typically the same design as integrated lamps without standby mode functionality but with the addition of wireless communication components. Because the technology is fundamentally the same, DOE is proposing to scale from the Integrated Low-Lumen and Integrated High-Lumen product classes without standby mode to the respective product classes capable of operating in standby mode. See section V.C.6 for more information on scaling.

In summary, DOE is proposing to directly analyze the product classes shown (in gray) in Table V–3 as representative in the NOPR analysis. See chapter 5 of the NOPR TSD for further discussion.

TABLE V–3—GENERAL SERVICE LAMPS REPRESENTATIVE PRODUCT CLASSES

Lamp type	Lumen package	Standby mode operation
Integrated GSLs	310 ≤Initial Lumen Output <2,000	No Standby Mode. Capable Of Operating In Standby Mode.
	2,000 ≤Initial Lumen Output ≤2,600	No Standby Mode. Capable Of Operating In Standby Mode.
Non-Integrated GSLs	310 ≤Initial Lumen Output ≤2,600	

3. Baseline Lamps

Once DOE identifies the representative product classes for analysis, it selects baseline lamps to analyze in each class. Typically, a baseline lamp is the most common, least efficacious lamp that meets existing energy conservation standards. Specific lamp characteristics were used to characterize the most common lamps purchased by consumers (*e.g.,* wattage, CCT, CRI, and light output). Because certain products within the scope of this rulemaking have existing standards, GSLs that fall within the same product class as these lamps must meet the existing standard in order to prevent backsliding. (*See* 42 U.S.C. 6295(o)(1)) Thus, DOE only considered baseline lamps in the Integrated Low-Lumen and Integrated High-Lumen product classes that meet the existing standards for bare MBCFLs. The Non-Integrated product class does not have any applicable existing standards.

a. Integrated Lamps

In the preliminary analysis, DOE identified baseline lamps in the integrated lamps product classes as the most common, least efficacious lamps in those product classes that meet existing standards for MBCFLs.[105] For the Integrated Low-Lumen product class in the preliminary analysis, DOE found that the most common lamps were 60 W equivalent lamps and typically produced lumen output in the range of 700–900 lumens. DOE determined that the baseline lamp for the Integrated Low-Lumen product class was a 14 W, 750 lumen (*i.e.,* 60 W equivalent) A-shape CFL with a lifetime of 10,000

[105] GSL preliminary analysis at 5–4.

hours, a CRI of 80, and a CCT of 2,700 K. For the Integrated High-Lumen product class in the preliminary analysis, DOE found that the most common lamps were 125 W equivalent lamps which typically produce lumen output in the range of 2,000–2,600 lumens. DOE determined that the baseline was a 32 W, 2,000 lumen (*i.e.,* greater than 100 W equivalent) spiral CFL with a lifetime of 10,000 hours, a CRI of 80, and a CCT of 2,700 K.

DOE received comments from stakeholders on the baseline lamps selected for the Integrated Low-Lumen product class. GE, NEMA, and Westinghouse commented that the baseline (CSL 0) and CSL 1 did not represent two ELs for CFLs, but rather two distinct products used for different purposes. Specifically, GE, NEMA, and Westinghouse noted that the baseline in the Integrated Low-Lumen product class was a covered CFL and CSL 1 was a bare CFL, and lamps with covers should not be eliminated because they provide consumer utility. (GE, Public Meeting Transcript, No. 29 at pp. 71–72; NEMA, No. 34 at p. 15; Westinghouse, Public Meeting Transcript, No. 29 at pp. 208–209)

NEMA also commented that because ENERGY STAR requirements are designed for premium products and are not mandatory, DOE should not set the baseline for MBCFLs to align with the ENERGY STAR specification. NEMA further noted that there are energy-efficient MBCFLs currently on the market that do not meet ENERGY STAR requirements. (NEMA, No. 34 at pp. 8, 15)

As stated in section V.A.1, DOE is not proposing a product class division for covered versus bare products because LED lamps are available at higher levels of efficacy with a cover. In addition DOE typically selects a baseline lamp that is the most common, least efficacious lamp that meets existing energy conservation standards. Because spiral lamps are more common than covered lamps, DOE determined a spiral lamp was more representative of the product class. Further, DOE agrees that ENERGY STAR requirements are not mandatory and is therefore not analyzing these requirements as the baseline. The requirements in the current ENERGY STAR specification, ENERGY STAR Lamps Specification V1.1, are higher than the existing energy conservation standards, and DOE typically selects the most common lamp that just meets existing energy conservation standards as the baseline.

NEEA noted a discrepancy in the lumen bins used across the analyses that could result in data inconsistencies. Regarding the Integrated Low-Lumen product class baseline, NEEA noted that the engineering analysis considered replacement options between 700 and 900 lumens for 60 W equivalent replacements, while the LCC and PBP analyses considered a range of 750 to 1,050 lumens. (NEEA, Public Meeting Transcript, No. 29 at p. 231) DOE appreciates the comment from NEEA on the inconsistency of the lumen bin equivalencies. DOE revised the NOPR analysis to consider 60 W equivalent replacements, including the baseline, as lamps with lumen output between 750 and 1,049 lumens, which aligns with the EISA 2007 lumen bins and the downstream analyses. See sections V.G and V.H for more information.

In the NOPR analysis, based on a review of lamps that had the most common characteristics, DOE identified a 14 W, 800 lumen (*i.e.,* 60 W equivalent) spiral CFL with a lifetime of 8,000 hours, a CRI of 82, and a CCT of 2,700 K. Therefore, DOE analyzed a bare spiral CFL with efficacy closest to the existing energy conservation standard as the baseline in the Integrated Low-Lumen product class for the NOPR analysis. DOE did not receive comments on the baseline lamp selected for the Integrated High-Lumen product class. DOE confirmed a 32 W, 2,000 lumen (*i.e.,* greater than 100 W equivalent) spiral CFL with a lifetime of 10,000 hours, a CRI of 80, and a CCT of 2,700 K is the appropriate baseline for the Integrated High-Lumen product class.

DOE is proposing the baseline lamps for the Integrated Low-Lumen and Integrated High-Lumen product classes specified in Table V–4. DOE requests comment on the baseline lamps analyzed in the NOPR analysis, in particular the spiral CFL baseline in the Integrated Low-Lumen product class.

TABLE V–4—INTEGRATED PRODUCT CLASSES' BASELINE LAMPS

Product class	Lamp shape	Base type	Lamp type	Nominal wattage (W)	Initial lumens (lm)	Rated efficacy (lm/W)	Lifetime (hr)	CCT (K)	CRI
Integrated Low-Lumen (310 ≤ Initial Lumen Output < 2,000).	Spiral	E26	CFL	14	800	57.1	8,000	2,700	82
Integrated High-Lumen (2,000 ≤ Initial Lumen Output ≤ 2,600).	Spiral	E26	CFL	32	2,000	62.5	10,000	2,700	80

b. Non-Integrated Lamps

In the preliminary analysis, DOE identified the baseline lamp in the Non-Integrated product class as the most common, least efficacious lamp.[106] The Non-Integrated product class does not have applicable existing standards and therefore the lowest efficacy lamps on the market were considered for the baseline. DOE found that the base types of non-integrated CFLs typically correspond to certain wattages and lumen outputs, and thus DOE concentrated on a common wattage and its associated base type. Based on a review of lamps that had the most common characteristics, DOE determined that the baseline lamp for the Non-Integrated product class was a 26 W, 1,710 lumen double tube[107] G24q–3 base CFL with a lifetime of 10,000 hours and a CCT of 4,100 K in the preliminary analysis.

NEMA expressed concern regarding the baseline lamp selected for the Non-Integrated product class, noting that because CFL pin base lamps have unique base and pin configurations, if the baseline lamp is eliminated, consumers will be forced to replace their fixtures and will be left with stranded assets. (NEMA, No. 34 at p. 15) As stated, DOE selected a common wattage and its associated base type as representative in the Non-Integrated product class and therefore chose a baseline lamp with these characteristics. However, DOE ensured that the vast majority of base types will be available at EL 1. DOE also determined through

[106] *Id.* at 5–12.

[107] The double tube shape for CFLs, that is, a CFL with two U-shaped glass tubes, is also sometimes referred to as quad tube in industry.

manufacturer feedback that non-integrated CFLs replaced with a lamp of the same base type and shape would not require a fixture, socket, or ballast change provided the ballast is compatible with the replacement lamp. Therefore, consumers replacing baseline lamps are not expected to have stranded assets. See section V.C.5 for more information.

In this NOPR analysis, DOE confirmed a 26 W, 1,710 lumen double tube G24q-3 base CFL with a lifetime of 10,000 hours and a CCT of 4,100 K is the appropriate baseline for the Non-Integrated product class. DOE is proposing the baseline lamp for the Non-Integrated product classes specified in Table V–5.

TABLE V–5—NON-INTEGRATED PRODUCT CLASS BASELINE LAMP

Lamp shape	Base type	Lamp type	Nominal wattage (W)	Rated wattage (W)	Initial lumens (lm)	Mean lumens (lm)	Rated efficacy (lm/W)	Lifetime (hr)	CCT (K)	CRI
Double Tube	G24q–3	CFL	26	26	1,710	1,450	65.8	10,000	4,100	82

4. More Efficacious Substitutes

DOE selects a series of more efficacious replacements for the baseline lamps considered within each representative product class. DOE considered only technologies that met all four criteria in the screening analysis. In the preliminary analysis, these selections were made such that potential substitutions maintained light output within 10 percent of the baseline lamp's light output with similar characteristics when possible.[108] In identifying the more efficacious substitutes, DOE utilized a database of commercially available lamps. Further details specific to the more efficacious substitutes of the Integrated Low-Lumen, Integrated High-Lumen, and Non-Integrated product classes are discussed in the following sections.

a. Integrated Lamps

For integrated GSLs, DOE identified more efficacious substitute lamps that saved energy and had light output within 10 percent of the baseline lamp's light output. DOE selected more efficacious substitutes with the same base type as the baseline lamp since replacing an integrated lamp with a lamp of a different base type would potentially require a fixture or socket change and thus is considered an unlikely replacement. For the preliminary analysis, DOE also ensured that the more efficacious substitutes were marketed as omnidirectional, thus maintaining the even light distribution of the baseline lamp. DOE received comments on these requirements and the more efficacious substitutes analyzed for the Integrated Low-Lumen and Integrated High-Lumen product classes.

Omnidirectionality

NEMA agreed that in order to satisfy consumer expectations for replacement lamps, substitutes must be within 10 percent of the lumen output from the baseline lamp. In addition, NEMA commented that more efficacious substitutes should be reasonably omnidirectional in order to serve in general service lamp applications. NEMA noted that ENERGY STAR specifies intensity distribution requirements for omnidirectionality, however CFLs are excluded from testing because they are presumed to be omnidirectional and thus requiring omnidirectionality in a substitute lamp could inadvertently exclude CFLs. (NEMA, No. 34 at p. 15)

DOE agrees that A-shape and spiral CFLs are not typically marketed as omnidirectional despite exhibiting such properties. Therefore, DOE did not require the more efficacious A-shape and spiral CFLs to be explicitly marketed as omnidirectional. However, because A-shape LED lamps are frequently available in both omnidirectional and semi-omnidirectional versions, DOE confirmed that omnidirectional LED lamps were selected in order to maintain omnidirectionality and to ensure that the more efficacious substitutes could be used in the same applications as the lamps being replaced. For the NOPR analysis, DOE maintained the approach of analyzing LED lamps explicitly marketed as omnidirectional and CFLs that are spiral or A-shape as more efficacious substitutes.

Additional CFL More Efficacious Substitutes

Several stakeholders commented that DOE should consider analyzing higher efficacy CFL representative units in the Integrated Low-Lumen product class. CA IOUs and EEAs remarked that CFLs are available in a broad range of efficacies, and there should be more than one CSL corresponding to the different levels of CFL performance. (CA IOUs, No. 33 at p. 4; CA IOUs, Public Meeting Transcript, No. 29 at pp. 88–89; EEAs, No. 32 at p. 4) CEC stated that DOE should consider the existence of more efficacious CFLs at CSLs 2 and 3 and incorporate the wattages, lifetimes, and shipments of those more efficacious CFLs in the NIA. (CEC, No. 31 at p. 2) NRDC commented that they believe the intention was not to eliminate CFLs, and noted there are more efficacious CFLs available than analyzed. (NRDC, Public Meeting Transcript, No. 29 at p. 92) Westinghouse agreed with NRDC, stating that it is preferable to preserve CFLs to allow a wider product assortment, benefiting consumers and industry. (Westinghouse, Public Meeting Transcript, No. 29 at p. 98)

Stakeholders offered specific suggestions on more efficacious CFLs to consider in the analysis. EEA commented that there are 60 W replacement CFLs available today with efficacies up to 69.2 lm/W and 100 W replacements with efficacies that exceed 70 lm/W. (EEAs, No. 32 at p. 4) NRDC encouraged DOE to set a CSL between the current CSL 1 and CSL 2 with the same efficacy as CSL 2 but with a shorter lifetime of 10,000 hours. (NRDC, Public Meeting Transcript, No. 29 at p. 194) CA IOUs noted that the CSLs in the Integrated Low-Lumen product class can have multiple lamp technologies that meet the levels. CA IOUs stated that DOE assumes that only LED lamps can meet EL 2, however CFLs can also meet this level. CA IOUs explained that there are CFLs available on the market with efficacies above 67 lm/W, including products on the ENERGY STAR Qualifying Product List from over 12 manufacturers. (CA IOUs, No. 33 at p. 4; CA IOUs, Public Meeting Transcript, No. 29 at pp. 88–89)

DOE acknowledges that higher efficacy CFLs exist on the market currently. Therefore for this NOPR analysis, DOE also analyzed an energy-saving 11 W CFL with 750 lumens, an efficacy of 68.2 lm/W, and a lifetime of 10,000 hours as a 60 W equivalent replacement at EL 2 in the Integrated

[108] GSL preliminary analysis at 5–13.

Low-Lumen product class. This lamp is modeled based on a commercially available 11 W CFL with the same lifetime and slightly lower lumen output, however DOE believes this efficacy improvement is technologically feasible. In addition, DOE identified other non-energy-saving options including a 13 W CFL with 900 lumens and an efficacy of 69.2 lm/W that can meet EL 2. However, DOE did not analyze this lamp as a representative unit because DOE typically only analyzes energy-saving options in the engineering analysis. DOE did, however, account for the availability of this option in the NIA. See section V.H for more information.

Improvement of LED Lamps

DOE received several comments regarding potential efficacy improvements of LED lamps. NRDC, EEAs, and CEC encouraged DOE to use a forward thinking-approach for LED lamps and to consider even higher levels of efficacy due to recent and future expected market developments. NRDC and EEAs pointed out that as an individual LED becomes more efficient, fewer LEDs are required to produce the same amount of light. This allows an LED lamp to have a smaller heat sink (because there is less heat to dissipate) and smaller components (because there is less power required), leading to an overall smaller form factor. All of these changes lead to an increase in overall lamp efficacy and typically an accompanying decrease in overall lamp cost.[109] NRDC noted that DOE is not predicting improvements in the efficacy of LED lamps besides what is currently commercially available. However, given historical improvements, it is expected such gains will occur by 2020. EEAs urged DOE to consult with EIA and the agency's Solid-State Lighting Program to ensure that expected efficiency trends are captured in the analysis. CEC specifically asked DOE to consider ELs with even greater levels of efficacy to reflect the levels under consideration in California. For example, a 60 W replacement lamp at the most stringent CSL under consideration in the preliminary analysis had a required efficacy of approximately 85 lm/W, whereas CEC is proposing a standard of 98 lm/W with similar quality requirements (such as CRI). (NRDC, Public Meeting Transcript, No. 29 at pp. 98–100; EEAs, No. 32 at p. 4; CEC, No. 31 at p. 1)

DOE agrees that LED lamp technology is rapidly developing and that new products are continuously being introduced. DOE has identified more efficacious commercially available products since the preliminary analysis and has increased the efficacy of the ELs under consideration. For example, the maximum technologically feasible (max-tech) level in the preliminary analysis was represented by a 60 W replacement with an efficacy of 84.2 lm/W (corresponding to an A-value of 91.7), and in this NOPR analysis, DOE identified LED lamps with efficacies in excess of 100 lm/W, as discussed in the following paragraphs. During the course of this rulemaking, DOE will continue to monitor the market for new commercially available products and information on working prototypes and update its analysis as appropriate.

While DOE publishes information on market trends through its Solid-State Lighting Program and reviews publications from other agencies, including the EIA, DOE only considers technologies incorporated in commercially available products or in working prototypes to be technologically feasible. 10 CFR 430, subpart C, appendix A, section 4(a)(4)(i) DOE does, however, use market trends and efficacy projections to inform its assumptions in the national impacts analysis. See section V.H for more information on the efficacy market distributions by product class.

As stated, for the NOPR analysis, DOE found several more efficacious LED lamps at levels of efficacy higher than the max-tech level identified in the preliminary analysis of 84.2 lm/W for a 60 W equivalent replacement in the Integrated Low-Lumen product class. When selecting more efficacious substitutes, DOE identified multiple 8.5 W LED lamps with 800 lumens, efficacy of 94.1 lm/W, and lifetime of 25,000 hours. DOE also identified a few 60 W equivalent replacement LED lamps with even lower wattages and greater efficacies, ranging from about 100 lm/W to 124.6 lm/W. The characteristics of these lamps were typically unique to one manufacturer. Because these lower-wattage products were newly introduced on the market, most of the lamps did not have test data available, and therefore DOE conducted independent testing to confirm the rated performance of these lamps for this NOPR analysis.

DOE conducted efficacy testing in accordance with the LED Test Procedure SNOPR[110] on multiple integrated LED lamps that exceeded the max-tech level identified in the preliminary analysis. Specifically, DOE tested 8.5 W, 8 W, 7 W, and 6.5 W LED lamps with rated lumen output within the range of 750–1,049 lumens (*i.e.,* 60 W equivalent replacements). As noted in appendix 5A of the NOPR TSD, DOE was able to confirm that the tested values of the 8.5 W, 8 W, and 6.5 W LED lamps matched or exceeded the rated performance characteristics with tested efficacies ranging from 94.8 lm/W for an 8.5 W lamp to 113 lm/W for a 6.5 W lamp. The 7 W LED lamp tested below the minimum lumen output DOE considered as suitable for 60 W equivalent replacements and therefore was not considered as a more efficacious substitute. Additionally, in order to maintain more efficacious substitutes across all lumen packages of the Integrated Low-Lumen product class, DOE did not analyze the 6.5 W LED lamp. See section V.C.5 for more information.

DOE notes that the 8 W LED lamp tested was a 3-way lamp tested at its middle setting and resulted in an efficacy of 111.4 lm/W. Based on the testing, DOE has determined that a commercially available 3-way LED lamp when operated at its middle setting demonstrated the potential for a standard, non-3-way, 8 W LED lamp to achieve this EL. Therefore, using the rated performance values, DOE modeled an 8 W LED lamp with 820 lumens and an efficacy of 102.5 lm/W. DOE assumed the modeled lamp would have similar characteristics to the most common commercially available 60 W equivalent LED replacements. Thus, DOE modeled the lamp to have an A19 shape, medium base type, 25,000 hour lifetime, 2,700 K CCT, 80 CRI, and dimming functionality. DOE requests comment on the 3-way lamp used as a basis for the modeled LED lamp and information on whether such a lamp would meet DOE's screening criteria and should be maintained for the final rule analysis.

Based on catalog information and the independent testing conducted for the NOPR analysis, DOE selected an 8.5 W LED lamp with 800 lumens, efficacy of 94.1 lm/W, and lifetime of 25,000 hours as a more efficacious substitute corresponding to EL 3 in the Integrated Low-Lumen product class. DOE also found that for the LED lamps above EL 2, the consumer price decreased as efficacy increased. (See section V.D for more information on product price determination.) Therefore, DOE did not analyze any additional lamps between EL 2 and EL 3 because the 8.5 W was at the lowest incremental first cost for a commercially available product above

[109] See section V.D for discussion of the product price determination methodology and comments related to pricing.

[110] 80 FR 39644 (July 9, 2015).

EL 2. DOE also analyzed the modeled 8 W LED lamp with 820 lumens, efficacy of 102.5, and lifetime of 25,000 hours as a more efficacious substitute at EL 4.

The more efficacious substitutes analyzed in this NOPR analysis for the Integrated Low-Lumen and Integrated High-Lumen product classes are summarized in Table V–6.

TABLE V–6—INTEGRATED PRODUCT CLASSES' REPRESENTATIVE LAMP UNITS

Product class	EL	Lamp shape	Base type	Lamp type	Nominal wattage (W)	Initial lumens (lm)	Rated efficacy (lm/W)	Lifetime (hr)	CCT (K)	CRI
Integrated Low-Lumen (310 ≤ Initial Lumen Output <2,000).	Baseline ...	Spiral	E26 ...	CFL ...	14	800	57.1	8,000	2,700	82
	EL 1	Spiral	E26 ...	CFL ...	13	800	61.5	10,000	2,700	80
	EL 2	A19	E26 ...	LED ...	12	800	66.7	25,000	2,700	83
		Spiral	E26 ...	CFL ...	[111] 11	750	68.2	10,000	2,700	82
	EL 3	A19	E26 ...	LED ...	8.5	800	94.1	25,000	2,700	80
	EL 4	A19	E26 ...	LED ...	[112] 8	820	102.5	25,000	2,700	80
Integrated High-Lumen (2,000 ≤ Initial Lumen Output ≤2,600).	Baseline ...	Spiral	E26 ...	CFL ...	32	2,000	62.5	10,000	2,700	82
	EL 1	Spiral	E26 ...	CFL ...	30	2,000	66.7	10,000	2,700	82
	EL 2	Spiral	E26 ...	CFL ...	29	2,200	75.9	12,000	2,700	82

b. Non-Integrated Lamps

For non-integrated GSLs, DOE considered more efficacious lamps that did not increase energy consumption relative to the baseline and had light output within 10 percent of the baseline lamp-and-ballast system when possible. Due to potential physical and electrical constraints associated with switching base types, DOE selected substitute lamps that had the same base type as the baseline lamp. DOE identified substitute lamps that were the same wattage as the baseline but produced more light and were therefore more efficacious or lamps that were lower wattage than the baseline but produced similar light and were therefore more efficacious. DOE paired each representative lamp with an appropriate ballast because non-integrated GSLs are a component of a system, and their performance is related to the ballast on which they operate. DOE received comments on these requirements and the more efficacious substitutes analyzed for the Non-Integrated product class.

Lumen Output Criterion

DOE received comments regarding the lumen output criterion used for selecting more efficacious substitutes in the Non-Integrated product class. GE commented that consideration must be given to the Occupational Safety and Health Administration (OSHA) safety and minimum light requirements. GE noted that non-integrated CFLs are typically designed to meet certain requirements in commercial spaces and if the lighting level drops, there could be issues meeting safety requirements such as OSHA exit lighting requirements. (GE, Public Meeting Transcript, No. 29 at pp. 84–85)

On the contrary, NEEA observed that most buildings are grossly over lit because the buildings are designed to meet lighting safety requirements when the lamps eventually fall to 70 percent of their initial lumen output. NEEA commented that lumen reductions of 20 to 30 percent are feasible in well-designed spaces and thus a 10 to 11 percent reduction is safe and acceptable. (NEEA, Public Meeting Transcript, No. 29 at pp. 85–86) GE clarified that there are a variety of spaces and their concern is specifically regarding the spaces that are not currently over lit. (GE, Public Meeting Transcript, No. 29 at p. 86)

DOE understands the concern to maintain lumen output. Therefore, for this NOPR analysis, DOE continued to utilize the criterion of maintaining 10 percent of the mean lumen output when possible in developing lamp-and-ballast replacement scenarios. As stated, DOE paired the non-integrated GSLs with representative ballasts because the non-integrated GSLs operate on a ballast in practice. For the NOPR analysis, DOE again paired the non-integrated GSLs with a one-lamp electronic, programmed start ballast to represent the lamp and ballast combinations present in the market. In assessing light output of the representative systems for the Non-Integrated product class, DOE made a distinction between mean and initial lumen output. DOE used catalog initial lumen output to calculate efficacy when determining ELs. As noted by stakeholders, the light output of a lamp decreases over time. To account for this real-world depreciation in lumens, DOE analyzed more efficacious systems that maintain mean lumen output within 10 percent of the baseline system, when possible. Mean lumen output is a measure of light output midway through the rated life of a lamp, and a 10 percent change is a common parameter used by lighting designers to specify acceptable substitute products on the basis of light output.

NEMA commented that the baseline and more efficacious substitutes are 4-pin non-integrated CFLs specifically used in commercial applications. (NEMA, No. 34 at p. 15) NEMA, GE, and Westinghouse further commented that the two CSL 1 choices are problematic because the full wattage lamp has slightly higher lumens but does not offer energy savings and the reduced wattage lamp is not within 10 percent of the baseline lumen output and may not be compatible with the existing ballast or acceptable to consumers. (NEMA, No. 34 at p. 15; GE, Public Meeting Transcript, No. 29 at pp. 72–73; Westinghouse, Public Meeting Transcript, No. 29 at pp. 74–75)

DOE determined the reduced wattage more efficacious substitute is a viable replacement, particularly in the commercial sector where energy savings are prioritized. Although the initial lumen output of the reduced wattage lamp was 11 percent lower than the

[111] Lamp is modeled based on commercially available 11 W CFLs.

[112] Lamp is modeled based on commercially available 3-way lamp with same specifications at middle setting.

baseline lamp, the mean lumen output of the reduced wattage lamp chosen was significantly closer to the baseline lamp's mean lumen output. As stated previously, DOE considers mean lumen output in order to account for lumen deprecation of the system. Therefore, when comparing system mean lumen output of the reduced wattage lamp and baseline lamp, the lumen output of the reduced wattage system was only 5 percent lower than the baseline system. Additionally, DOE acknowledges that the full wattage replacement does not achieve energy savings, however DOE believes this a likely replacement option for consumers in specific applications and therefore maintained this replacement option for scenarios where light output must remain constant for this NOPR analysis.

Compatibility of More Efficacious Substitutes

Westinghouse expressed concern over the expectation that the consumer would understand the lamp-and-ballast-matching process. Westinghouse noted that consumers understand one-to-one wattage replacements, but it cannot be assumed that consumers would know how to select a replacement lamp to operate on an existing ballast if the original wattage is no longer available. Westinghouse observed that consumers return lamps after having tried to fit a replacement on the wrong ballast. Regardless of whether matching the base type was all that was needed to correctly replace a lamp with a new product compatible with the ballast, Westinghouse commented that consumers tended to rely only on matching wattage when replacing lamps. (Westinghouse, Public Meeting Transcript, No. 29 at pp. 79, 80–82)

Conversely, NRDC suggested that DOE reexamine the assumption that more efficacious lamps with different wattages would be incompatible with the installed ballast and socket. Specifically, NRDC pointed out that the more efficacious lamps would have a lower wattage than the lamps they were replacing, and therefore would not impose a safety risk. NRDC noted that wattage equivalency guidance had been successful at educating consumers replacing screw base lamps and similar guidance could be deployed for pin base lamps. In addition, NRDC related that consumers typically bring these lamps to the store when purchasing replacements to ensure a lamp of the proper shape and base type is selected, and therefore a slightly different wattage should not pose an issue. (NRDC, Public Meeting Transcript, No. 29 at pp. 83–84)

DOE agrees that more efficacious substitutes with lower wattages can be suitable replacements for installed lamps. DOE found lamps with the same base type and shape as their higher wattage counterparts that were listed as compatible with the same ballast. Manufacturer feedback also confirmed that non-integrated CFLs replaced with a lamp of the same base type and shape would not require a fixture, socket, or ballast change provided the ballast is compatible with the replacement lamp. Therefore, for this NOPR analysis, DOE maintained the replacement option of a reduced wattage in addition to the full wattage lamp.

The more efficacious substitutes analyzed in this NOPR analysis for the Non-Integrated product class are summarized in Table V–7.

TABLE V–7—NON-INTEGRATED PRODUCT CLASS DESIGN REPRESENTATIVE LAMP UNITS

CSL	Lamp shape	Base type	Lamp type	Nominal wattage (W)	Rated wattage (W)	Initial lumens (lm)	Mean lumens (lm)	Rated efficacy (lm/W)	Lifetime (hr)	CCT (K)	CRI
Baseline.	Double Tube.	G24q–3.	CFL ...	26	26	1,710	1,450	65.8	10,000	4,100	82
EL 1 ...	Double Tube.	G24q–3.	CFL ...	26	26	1,800	1,525	69.2	12,000	4,100	82
EL 1 ...	Double Tube.	G24q–3.	CFL ...	21	21	1,525	1,400	72.6	16,000	4,100	82

5. Efficacy Levels

After identifying more efficacious substitutes for each of the baseline lamps, in the preliminary analysis DOE developed CSLs based on the consideration of several factors, including: (1) the design options associated with the specific lamps being studied (*e.g.,* grades of phosphor for CFLs, improved package architecture for LEDs); (2) the ability of lamps across the applicable lumen range to comply with the standard level of a given product class; and (3) the max-tech level. In the preliminary analysis, DOE considered an equation-based approach to establish CSLs for GSLs reflecting the relationship between efficacy and lumen output. DOE received comments specific to this approach presented in the preliminary analysis.

NEMA expressed concern about how the efficacy curves will translate across the four lumen ranges. NEMA stated that there can be slight discontinuities in efficacy, depending on the technology used in the various ranges. They suggested that each lumen bin be evaluated separately to set the proper EL for that bin and each specific technology. NEMA added that it is likely that the curve will not connect smoothly across all four bins at every CSL, and there will be fewer CSL levels for CFL technology, whether integrated or non-integrated. (NEMA, No. 34 at pp. 16–17)

Conversely, NRDC, EEAs, and CA IOUs expressed support for ELs that are smooth continuous curves rather than the bin approach. (NRDC, Public Meeting Transcript, No. 29 at p. 12; EEAs, No. 32 at pp. 3–4; CA IOUs, Public Meeting Transcript, No. 29 at p. 96) NRDC commented that they were opposed to the current four bin approach because the current standards have four bins which has resulted in gaming and dimmer bulbs. (NRDC, Public Meeting Transcript, No. 29 at pp. 55–56) CA IOUs and EEAs agreed noting that the current step functions used for the GSIL standards had the unintended consequence of encouraging manufacturers to product dimmer bulbs. (CA IOUs, Public Meeting Transcript, No. 29 at p. 96; CA IOUs, No. 33 at p. 3; EEAs, No. 32 at pp. 3–4; EEAs, No. 32 at pp. 3–4) EEAs cited as an example halogen incandescent lamps that are almost 10 percent dimmer than the incandescent lamps they are intended to replace. EEAs concluded that DOE's proposed continuous function results in efficacy requirements that scale with light output, which removes the incentive for manufacturers to market dimmer bulbs as a means to comply with the standards. (EEAs, No. 32 at pp. 3–4)

DOE is continuing to propose an equation-based approach in this NOPR analysis that results in a smooth, continuous curve. DOE is maintaining

the continuous function approach based on its assessment that a step function, where efficacy rises significantly at certain increments in lumen output or wattage, is not representative of the technology used in the products covered by this rulemaking. Further, DOE agrees that a step function increases the potential for products to be introduced at the lowest lumen output that is required for a given wattage to comply with the standard.

Regarding NEMA's concern about the impacts of the efficacy curves across the four lumen bins (or packages), DOE has ensured that GSLs across lumen packages are maintained at the highest EL for each product class, including the four lumen packages in the Integrated Low-Lumen product class. DOE does however, agree, that the ELs may not be continuous across product classes. DOE analyzed fewer ELs in the Integrated High-Lumen product class because DOE found that suitable LED replacements lamps were not available and therefore only analyzed CFLs in this product class. Similarly, DOE analyzed fewer ELs in the Non-Integrated product class because suitable LED replacement lamps were not available. DOE also developed unique ELs for the Non-Integrated product class because DOE determined the efficacy-lumen relationship was different for non-integrated GSLs. The specific ELs proposed for each product class are discussed in more detail in the following sections.

CA IOUs also supported DOE's proposal to set standards as a function of light output, rather than wattage because the utility of a bulb is more closely tied to its lumen output than its wattage. Despite consumers historically identifying products by their wattage, there is a much broader range of efficacies and wattages available today. CA IOUs added that it is important to align standards with these changes in the lighting industry and ensure that they are relevant to the new mix of products available on the market. (CA IOUs, No. 33 at pp. 3–4)

DOE agrees that the primary utility provided by a lamp is lumen output, which can be achieved through a wide range of wattages depending on the lamp technology. DOE believes that lamps providing equivalent lumen output and therefore intended for the same applications should be subject to the same minimum efficacy requirements. Therefore, DOE is maintaining its lumens-based approach in this NOPR analysis.

The following sections discuss the ELs developed in the NOPR analysis for the Integrated Low-Lumen, Integrated High-Lumen, and Non-Integrated product classes in more detail.

a. Integrated Lamps

In the preliminary analysis, DOE analyzed CSLs for both the Integrated Low-Lumen and the Integrated High-Lumen product classes. DOE used commercially available lamps and their associated efficacies when possible to determine the design options required to meet each CSL. For the Integrated Low-Lumen and Integrated High-Lumen product classes, DOE used the catalog initial lumen output and the catalog wattage of the lamp to calculate efficacy. To establish final minimum efficacy requirements for each CSL, DOE evaluated whether any adjustments were necessary to the initial CSLs to ensure lamps were available across the entire lumen range represented by the product class and to ensure the CSLs were achievable.

For the Integrated Low-Lumen representative product class, five CSLs were considered in the preliminary analysis.[113] The baseline represented a basic CFL with an efficacy near the existing MBCFL standard level. CSL 1 represented an improved CFL with more-efficient phosphors and improved ballast components. CSL 2 represented a basic LED lamp with an efficacy near the lowest performing LED lamps currently available on the market. CSL 3 represented an improved LED lamp with improved package architecture, high-efficiency driver, and improved optics. CSL 4 represented an advanced LED lamp with further improved package architecture, high-efficiency driver, and improved optics. CSL 5 was the maximum technologically feasible level and represented an LED lamp with the most-efficacious combination of package architecture, driver, and optics available on the market today.

NEMA recommended revisions to the integrated low-lumen CSLs presented in the preliminary analysis. Specifically, NEMA proposed for bare CFLs an EL of 50 lm/W for lamps within 310–749 lumens; 60 lm/W for lamps within 750–1,049 lumens; 61 lm/W for lamps within 1,050–1,489; and 62 lm/W for lamps within 1,490–2,000 lumens. For covered CFLs, NEMA proposed an EL of 45 lm/W for lamps within 310–749 lumens; 50 lm/W for lamps within 750–1,049 lumens; 52 lm/W for lamps within 1,050–1,489; and 55 lm/W for lamps within 1,490–2,000 lumens. For LED lamps, NEMA proposed an EL of 55 lm/W for lamps within 310–749 lumens and 65 lm/W for lamps within 750–2,000 lumens.[114] (NEMA, No. 34 at p. 14)

As discussed in section V.A.1, regarding NEMA's proposed levels, DOE continued to maintain technology-neutral product classes in the NOPR analysis with no division for lamps with a cover. Further, DOE is proposing four levels of efficacy above the baseline. The baseline represents a basic CFL with an efficacy near the existing MBCFL standard level. EL 1 represents an improved CFL with more-efficient phosphors and improved ballast components. EL 2 is represented by a basic LED lamp with an efficacy near the lowest performing LED lamps currently available on the market, and an advanced CFL modeled based on the highest performing commercially available CFLs (see section V.C.4 for more information). EL 3 represents an improved LED lamp with improved package architecture, high-efficiency driver, and improved optics. EL 4 is the maximum technologically feasible level and represents an advanced LED lamp modeled based on the highest performing commercially available LED lamp [115] using the most-efficacious combination of package architecture, driver, reduced current density, and optics (see section V.C.4 for more information).

For the Integrated High-Lumen representative product class, two CSLs were considered in the preliminary analysis.[116] The baseline represented a basic CFL with an efficacy near the existing MBCFL standard level. CSL 1 represented an improved CFL with more-efficient phosphors and improved ballast components. CSL 2 was the maximum technologically feasible level and represented the most-efficacious combination of phosphors and ballast components.

NEMA also recommended revisions to the Integrated High-Lumen CSLs presented in the preliminary analysis. Specifically, NEMA proposed for bare CFLs an EL of 62 lm/W for lamps within 2,000–2,600 lumens. For covered CFLs, NEMA proposed an EL of 55 lm/W for lamps within 2,000–2,600 lumens. For LED lamps, NEMA proposed no standard for lamps with 2,000 lumens or greater. (NEMA, No. 34 at p. 14)

For the NOPR analysis, regarding NEMA's suggested levels, DOE maintained no product class division for

[113] GSL preliminary analysis at 2–73.

[114] NEMA also proposed CSLs for incandescent/halogen lamps. However, DOE cannot consider standards for incandescent/halogen lamps due to the Appropriations Rider.

[115] This lamp is modeled based on a commercially available 3-way lamp that is operating at the middle setting.

[116] GSL preliminary analysis at 2–73.

lamps with a cover for the Integrated High-Lumen product class. Further, DOE is proposing two ELs. The baseline represents a basic CFL with an efficacy near the existing MBCFL standard level. EL 1 represents an improved CFL with more-efficient phosphors and improved ballast components. EL 2 is the maximum technologically feasible level and represents the most-efficacious combination of phosphors and ballast components.

As stated previously, DOE adopted an equation-based approach to establish ELs for GSLs. In the preliminary analysis, DOE developed the general form of the equation by evaluating efficacy trends of integrated GSLs across a range of lumen outputs. The continuous equations specified a minimum lamp efficacy requirement across the lumen output range and represented the efficacy a lamp achieves. DOE determined that adjustments to CSLs considered in the preliminary analysis were necessary. DOE made slight adjustments to capture the efficacy of lamps with those design options across the entire lumen output range. This allowed for continuous CSLs across product classes. DOE also found that compliance and verification testing data supported the CSLs under consideration and therefore did not make any adjustments to CSLs based on this additional data.

Adjustments to Efficacy Levels

DOE received comments suggesting potential adjustments to the CSLs considered in the preliminary analysis due to lumen package availability and testing and verification data. Southern Company expressed concern regarding the availability and size of products with lumen outputs in the upper end of the Integrated Low-Lumen product class range, specifically in the 1,500 to 2,000 lumen range. Southern Company indicated there could be issues with form factor for both CFLs and LED lamps and a separate product class may be warranted to ensure consumer needs are satisfied. (Southern Company, Public Meeting Transcript, No. 29 at pp. 199–200)

For the NOPR analysis, DOE again analyzed the impacts of the ELs across all lumen packages. In the Integrated Low-Lumen product class, DOE confirmed that 40 W, 60 W, 75 W, and 100 W equivalent replacements, which correspond to the four lumen bins of the current GSIL standard, could meet the highest EL proposed (EL 4) in the NOPR analysis. DOE did not consider ELs that were not achievable for all lumen packages within the product class. Regarding Southern Company's concern for replacement lamps in the range of 1,500 to 2,000 lumens, DOE identified several LED lamps in this range (*i.e.,* 100 W equivalent replacements) that meet the max-tech level proposed, EL 4. Further, DOE confirmed that the form factors of the LED lamps at EL 4 (max tech) and the CFLs available at EL 2 (highest level a CFL can meet) are consistent with the lamps they are intended to replace. DOE determined that the majority of the 100 W GSILs in this lumen range are A21 shapes. DOE found that the LED lamps meeting EL 4 are designed in the A21 form factor and the majority of CFLs available at EL 2 are spiral shapes with dimensions that also fit within the A21 form factor. Therefore, DOE concluded that consumers should not experience issues with incompatible length or diameter of replacement lamps.

In addition to lumen package, DOE also analyzed whether the full range of CCTs were available at the highest EL proposed. In the Integrated Low-Lumen product class, DOE made a slight downward adjustment to EL 4 in order to ensure lamps of all CCTs were able to meet the EL. In the Integrated High-Lumen product class, DOE made a slight downward adjustment to EL 2 to ensure lamps of all CCTs were available. Additionally, this adjustment allowed for higher lumen output 100 W equivalent replacements (*e.g.,* 1,800 lumen lamps) to meet EL 2 in the Integrated Low-Lumen product class.

CA IOUs commented that if DOE believes that higher efficacy CFLs would not meet CSL 2, such as if testing showed that their actual efficacies are slightly lower than the values reported in specification sheets or to Energy Star, they recommend that DOE include a CSL that is specifically designed to align with these higher performance CFLs by lowering CSL 2 slightly, or by adding a new CSL between CSLs 1 and 2. (CA IOUs, No. 33 at p. 4; CA IOUs, Public Meeting Transcript, No. 29 at pp. 88–89)

For the NOPR analysis, DOE used publicly available certification data and verification testing from CEC's Appliance Efficiency Database, EPA's ENERGY STAR Certified Light Bulbs Database, and DOE's CCMS Database to confirm that commercially available CFLs are able to meet EL 2. DOE found that DOE's CCMS Database supported the catalog values of numerous lamps, and in some cases the certification and verification data exceeded the catalog values. Thus, DOE determined that EL 2 was achievable for CFLs.

Impacts of Efficacy Levels

In addition, DOE received several comments on the impacts of the CSLs it presented for the Integrated Low-Lumen and Integrated High-Lumen product classes in the preliminary analysis. NEMA commented that placing all integrated lamps into only two categories results in CSLs that only represent one type of technology. They are concerned that this will cause the standards to be set too low thus allowing all technologies, or too high thus allowing only the most efficient LED lamps. NEMA noted that either situation would not be ideal for energy savings, product cost/availability or utility. They recommended that a product class matrix that separates lamps by technology be used to mitigate these issues. (NEMA, No. 34 at p. 16)

As discussed in section V.A.1, DOE is proposing product classes that are not separated by technology because CFLs and LED lamps offer similar utility. Further, two of the four ELs (*i.e.,* EL 1 and EL 2) analyzed by DOE are met by both CFLs and LED lamps. DOE weighed the benefits and burdens of each potential standard in order to select the proposed standard level. See section VI.C.1 for more information.

Westinghouse remarked that the reason they there are efficacy differences between bare and covered CFLs is because the light output from the internal spiral is captured by the covering. Westinghouse noted that the correct level is one that allows covered products to be manufactured because there are applications where those are necessary. (Westinghouse, Public Meeting Transcript, No. 29 at p. 98) As discussed in section V.A.1, DOE was unable to find a consistent correlation between the addition of a cover and efficacy and therefore did not consider a product class division for lamps with covers versus without covers. Further, LED lamps are available at higher levels of efficacy with a cover if an application exists that necessitates a lamp with a cover.

Regarding the standard to be proposed, CEC noted that federal standards could have a preemptive effect and thus if less stringent, could have negative implications on California's energy consumption. (CEC, No. 31 at p. 2) With some exceptions, Federal energy conservation requirements generally supersede state laws or regulations concerning energy conservation testing, labeling, and standards. (42 U.S.C. 6297(a)–(c)) However, 42 U.S.C. 6295(i)(6)(A)(vi) states that California or Nevada beginning on or after January 1, 2018 shall not be precluded from adopting: (1) a final rule adopted by the Secretary in accordance with 42 U.S.C. 6295(i)(6)(A)(i)–(iv); (2) the backstop

provision of 45 lm/W if no final rule has been adopted; or (3) any California regulations for GSLs adopted pursuant to state statute in effect as of the date of enactment of the Energy Independence and Security Act of 2007 if no final rule is adopted.

Table V–8 summarizes the efficacy requirements at each EL for the Integrated Low-Lumen and Integrated High-Lumen product classes. DOE requests comment on the ELs under consideration for both of the integrated lamp product classes, including the max-tech levels.

TABLE V–8—SUMMARY OF ELS FOR GSL INTEGRATED REPRESENTATIVE PRODUCT CLASSES

Representative product class	Efficacy level	Efficacy lm/W
Integrated Low-Lumen (310 ≤ Initial Lumen Output < 2,000)	EL 1	67.6–29.42*0.9983^Initial Lumen Output.
	EL 2	73.4–29.42*0.9983^Initial Lumen Output.
	EL 3	101.6–29.42*0.9983^Initial Lumen Output.
	EL 4	108.6–29.42*0.9983^Initial Lumen Output.
Integrated High-Lumen (2,000 ≤ Initial Lumen Output ≤ 2,600)	EL 1	67.6–29.42*0.9983^Initial Lumen Output.
	EL 2	73.4–29.42*0.9983^Initial Lumen Output.

b. Non-Integrated Lamps

In the preliminary analysis, DOE analyzed CSLs for the Non-Integrated product class. DOE used commercially available lamps and their associated rated efficacies to determine the design options required to meet CSLs. For the Non-Integrated product class, DOE used the catalog initial lumen output and the ANSI rated wattage of the lamp, or nominal wattage if the ANSI rated wattage was not available, to calculate efficacy. To establish final minimum efficacy requirements for each CSL, DOE evaluated whether any adjustments were necessary to the initial CSL to ensure lamps were available across the entire lumen range represented by the product class.[117]

In the preliminary analysis, one CSL was considered for the Non-Integrated representative product class. The baseline represented a basic CFL with an efficacy near the lowest performing non-integrated GSLs currently available on the market. DOE considered two representative lamp units at CSL 1. The first representative unit at CSL 1 was a full wattage, improved CFL with more-efficient phosphors and thus more light output. The second representative unit at CSL 1 was a more efficacious reduced wattage CFL that produced similar lumen output as the baseline unit. The full wattage representative lamp unit was used to set the minimum efficacy requirements of EL 1 because it represented the maximum technologically feasible level that applied across all lumen packages within the product class. The reduced wattage CFL gave consumers the option to replace their current full wattage lamp with one that saves energy. DOE maintained this approach for the NOPR analysis.

As stated previously, DOE adopted an equation-based approach to establish CSLs for GSLs in the preliminary analysis. DOE utilized a similar approach as was used with the other product classes and developed the general form of the equation by evaluating efficacy trends of non-integrated GSLs across a range of lumen outputs. The continuous equation developed specified a minimum lamp efficacy requirement across the lumen output range and represented the efficacy a lamp achieves.

NEMA expressed concern on how the CSL equation for non-integrated GSLs was developed because the lamps are currently unregulated and have no test procedure. NEMA is unaware of databases for these lamps and the veracity of potential data. NEMA stressed that DOE cannot rely upon catalog data to determine the efficacy of pin base CFLs. Nominal and rated wattage are not measured watts and catalog initial lumens represent long-term data, not individual lamp photometric performance. Further, NEMA commented that testing laboratories may not be using the same test methods since there is no defined test procedure for non-integrated lamps and thus the information published in individual manufacturers' catalogs may not be comparable. (NEMA, No. 34 at pp. 15–16)

DOE understands the concern regarding the lack of available test data for non-integrated CFLs; however, industry standards for testing efficacy have been in place for several years for these products. Therefore, manufacturers are likely using existing industry standard test methods to determine performance values published in catalogs. Further, catalog data are the most comprehensive data source currently available for this product class. For these reasons, DOE maintained its approach in the NOPR analysis of using catalog initial lumen output and the ANSI rated wattage of the lamp, or nominal wattage if the ANSI rated wattage was not available, to calculate efficacy and to subsequently determine the EL. DOE notes that EPCA directs DOE to establish test procedures for covered products in advance of prescribing an energy conservation standard. (42 U.S.C. 6295(o)(3)(A)) Thus, DOE plans to finalize test procedures for GSLs for which DOE is proposing standards prior to the completion of this rulemaking.

Base Type and Fixture Compatibility

In the preliminary analysis, as stated, DOE made slight adjustments to capture the efficacy of lamps with those design options across the entire lumen output range. In particular, DOE ensured that lamps of different base types were represented at the CSL. DOE evaluated the impacts of CSL 1 on the individual base types in the Non-Integrated product class. DOE confirmed that the vast majority of base types were still available at CSL 1, and thus consumers would not be forced to switch between lamps with differing base types. Further, DOE concluded that because the different bases are maintained at CSL 1 and base type dictates the required ballast, consumers will not be required to change ballasts. DOE also evaluated whether replacing the baseline lamp with more efficacious substitutes at the higher CSL would require a fixture change. DOE concluded that fixture compatibility would not be an issue for the vast majority of consumers because the fixtures most frequently used with the non-integrated GSLs analyzed were available in configurations for several different lamp types thus indicating flexibility in size.[118]

DOE received several comments pertaining to base type and fixture requirements when replacing non-integrated GSLs. Manufacturers expressed concern over the replacement

[117] *Id.* at 2–75.

[118] *Id.*

of pin base CFL system components. GE commented that pin base lamps and their corresponding ballasts are pinned and keyed in specific ways to deter improper replacement which can potentially result in safety and performance issues. GE stated that due to this sophisticated safety system, there are very few options to save energy in ballasted pin base lamp applications. (GE, Public Meeting Transcript, No. 29 at pp. 77–78) However, NEEA noted that, from their experience, if the base is correct and fits into the socket, and the lumen output is in the desired range, then the correct lamp was chosen and will work with the existing ballast. (NEEA, Public Meeting Transcript, No. 29 at pp. 80–82) GE agreed that if a lamp fits the key way it will likely be compatible for most applications, however GE clarified that even if a more efficacious replacement lamp fits in the socket, performance may be impacted. GE noted that lamp compatibility can be affected if installed on a different system or dimmer. For these reasons, GE stated that pin base CFLs are often sold paired with a compatible ballast. (GE, Public Meeting Transcript, No. 29 at pp. 82–84)

Philips added that particular lamps and ballasts must be installed together, and thus if a lamp needs to be replaced with a more efficacious product, the ballast also could need to be replaced. Philips further noted that because a large percentage of these lamps are operating in recessed can lights, it would be very difficult to access the ballasts for replacement. (Philips, Public Meeting Transcript, No. 29 at p. 78) Westinghouse agreed, noting that as the ballasts are typically not field replaceable, if standards made a certain wattage lamp unavailable, the consumer would be forced to replace the entire fixture. (Westinghouse, Public Meeting Transcript, No. 29 at p. 79) NEMA concluded that if the baseline non-integrated pin base CFL would be eliminated, the unique base and pin configurations would force consumers to replace entire fixtures resulting in stranded assets. (NEMA, No. 34 at p. 15)

DOE understands the concerns regarding lamp and ballast compatibility for non-integrated GSLs. DOE ensured that the more efficacious substitutes analyzed as representative in the Non-Integrated product class were compatible with the existing ballast paired with the baseline lamp. DOE used publicly available ballast specifications published by manufacturers to confirm compatibility and to ensure a ballast replacement would not be required. For the NOPR analysis, DOE also ensured that consumers with non-integrated GSLs installed typically would not be forced to switch to a lamp of a different base type by confirming that the vast majority of base types were still available at EL 1.[119] Additionally, DOE is not aware of a technological reason why the base type of a non-integrated CFL would prevent a lamp from achieving EL 1. Because DOE ensured that the vast majority of base types were available at EL 1 and is not aware of technological limitations for increasing the efficacy of the others, DOE does not believe that consumers would be forced to change fixtures. Therefore, DOE considered fixture replacement to be an unlikely replacement scenario. Consequently, DOE did not evaluate ballast or fixture replacement scenarios for this NOPR analysis. DOE requests comment on the assumption that the efficacy of non-integrated CFLs can be improved for those lamps with base types that potentially cannot meet EL 1.

NEMA also commented that pin base CFLs are available in either 2-pin or 4-pin bases, corresponding to a particular socket and ballast type. NEMA added that 2-pin lamps have an internal starter and are designed for preheat, magnetic operation, while 4-pin lamps are dimmable and designed for electronic ballast operation. NEMA concluded that removing a base type reduces utility. (NEMA, No. 34 at pp. 17–18) Westinghouse commented that there may not be 2-pin reduced wattage replacement options compatible with existing ballasts. Westinghouse noted there is more flexibility with 4-pin non-integrated CFLs because these lamps can be dimmed, however using reduced wattage 2-pin replacement options may not be technically feasible. (Westinghouse, Public Meeting Transcript, No. 29 at pp. 74–75)

As stated previously, DOE ensured that the vast majority of base types were maintained at EL 1, including 2-pin lamps. Further, DOE identified reduced wattage 2-pin replacement lamps. Therefore, it is technologically feasible for a 2-pin reduced wattage lamp to be manufactured and operated with an existing ballast, and consumers have the option to choose reduced wattage lamps in addition to full wattage lamps as replacements for currently installed systems when available.

NEMA further commented that non-integrated lamps must be paired with a unique ballast and a specific socket to electrically and mechanically operate, and noted that DOE selected only one of these systems to analyze despite dozens of other potential lamp and ballast combinations included in the scope. NEMA stated that analyzing different lamp and ballast combinations will produce different results and will likely result in no energy savings in most cases. NEMA also noted that non-integrated CFLs are not acceptable replacements for traditional GSLs, and concluded that DOE should remove these lamps from the scope of the rulemaking due to the complexity, maturity of this product line, and limited energy savings. NEMA further commented that while fixtures are available in configurations for various lamps types, a particular fixture is generally configured for a lamp of a particular base, length, and shape, with the exception or recessed cans. NEMA added that it cannot be assumed that the lamps complying with EL 1 will be the correct shape or have the correct base to fit into an existing fixture. In cases where the lamp no longer fits, consumers need to replace the entire fixture and are subsequently left with stranded assets. NEMA further stated that while many lamps are still available at CSL 1, these products have slightly higher lumen output at the same wattage as the baseline and therefore have no energy savings and the potential for over-illumination. (NEMA, No. 34 at pp. 16–18)

As discussed in section IV.C, DOE determined that the term ''compact fluorescent lamps'' is not limited to MBCFLs. DOE therefore concluded that both integrated and non-integrated CFLs could be considered in the GSL rulemaking. For the Non-Integrated product class, DOE selected the most common lamp type and ballast to analyze as representative in the engineering analysis based on manufacturer feedback and a survey of the market. While DOE agrees that different lamp and ballast combinations may produce varying results, DOE determined the lamp-and-ballast system analyzed is representative of a significant portion of the installed systems. Further, because DOE ensured that the vast majority of base types were available at EL 1 and that the impacts of EL 1 were consistent across lumen packages, DOE concluded the results would be fairly consistent across different lamp and ballast combinations. Regarding size issues, DOE analyzed the dimensions of lamps in the Non-Integrated product class and ensured that lamps that meet EL 1 with the same base type and shape have nearly

[119] DOE identified three base types that are potentially unable to meet EL 1 out of an original 26 base types. DOE believes these lamps were typically used in fixtures, such as desk lamps or fan fixtures, and have already transitioned to more efficacious technologies.

identical dimensions on average as the lamps they are replacing that do not comply with EL 1. Because the vast majority of base types are not being eliminated and the replacements are similar in size, DOE concluded that the comparable form factors of the more efficacious non-integrated GSL replacements will not require consumers to replace entire fixtures. DOE weighs the benefits and burdens of standards in section VI.A.

Table V–9 summarizes the efficacy requirements at EL 1 for the Non-Integrated product class in the NOPR analysis. DOE requests comment on the EL under consideration for the Non-Integrated product class, including the max-tech level.

TABLE V–9—SUMMARY OF ELS FOR GSL NON-INTEGRATED REPRESENTATIVE PRODUCT CLASS

Representative product class	Efficacy level	Efficacy (lm/W)
Non-Integrated (310 ≤ Initial Lumen Output ≤ 2,600)	EL 1	72.6–25.00*0.9989^Initial Lumen Output.

6. Scaling to Other Product Classes

As noted previously, DOE analyzes the representative product classes directly. DOE then scales the levels developed for the representative product classes to determine levels for product classes not analyzed directly. In the preliminary analysis, DOE analyzed all product classes as representative and therefore did not scale. In this NOPR analysis, DOE added a product class division for GSLs with standby mode functionality and did not directly analyze the Integrated Low-Lumen and Integrated High-Lumen product classes with standby mode functionality. Therefore, ELs developed for the Integrated Low-Lumen and Integrated High-Lumen product classes were scaled to obtain levels for the Integrated Low-Lumen Standby-Mode Functionality and Integrated High-Lumen Standby-Mode Functionality product classes.

DOE conducted standby testing and used the test data to calculate the appropriate scaling factor. Based on test data, DOE found that standby power consumption was 0.5 W or less for the vast majority of lamps. (See appendix 5A of the NOPR TSD for more information on the test results.) Therefore, DOE assumed a typical wattage constant for standby mode power consumption of 0.5 W. This wattage was added to the rated wattage of the non-standby mode representative units in the Integrated Low-Lumen product class to calculate the expected efficacy of lamps representative of the same design options but with the addition of standby mode functionality. DOE then applied a ratio of the recalculated efficacies (with standby mode power) divided by the representative units' efficacies (without standby mode power) to the A-values of the ELs for the Integrated Low-Lumen product class without standby mode to determine the scaled ELs. Because DOE selected A-values that resulted in continuous equations across the Integrated Low-Lumen and Integrated High-Lumen product classes, the scaled A-values were applicable for both product classes capable of operating in standby mode. (See Table V–10 for scaling factors and resulting scaled ELs.) DOE determined that for the Integrated Low-Lumen Standby-Mode Functionality product class slight adjustments to EL 1 were necessary to prevent backsliding from existing standard levels. DOE requests comment on the scaling factors determined. Table V–10 shows the ELs proposed for the Integrated Low-Lumen Standby-Mode Functionality and Integrated High-Lumen Standby-Mode Functionality product classes.

TABLE V–10—SUMMARY OF SCALED ELS FOR GSL STANDBY MODE NON-REPRESENTATIVE PRODUCT CLASS

Product class	Efficacy level	Lumens	Efficacy (lm/W)		A-value reduction
			No standby mode	Capable of operating in standby mode	
Integrated-Low Lumen.	EL 1	Initial Lumen Output < 877	67.6–29.42*0.9983^Initial Lumen Output.	65.1–29.42*0.9983^Initial Lumen Output.	3.7
		877 ≤ Initial Lumen Output < 900.	67.6–29.42*0.9983^Initial Lumen Output.	1/15 * Initial Lumen Output	N/A
		900 ≤ Initial Lumen Outputs ≤ 1030.	67.6–29.42*0.9983^Initial Lumen Output.	60	N/A
		1030 < Initial Lumen Output < 2,000.	67.6–29.42*0.9983^Initial Lumen Output.	65.1–29.42*0.9983^Initial Lumen Output.	3.7
	EL 2	310 ≤ Initial Lumen Output < 2,000.	73.4–29.42*0.9983^Initial Lumen Output.	70.5–29.42*0.9983^Initial Lumen Output.	4.0
	EL 3	310 ≤ Initial Lumen Output < 2,000.	101.6–29.42*0.9983^Initial Lumen Output.	96.0–29.42*0.9983^Initial Lumen Output.	5.6
	EL 4	310 ≤ Initial Lumen Output < 2,000.	108.6–29.42*0.9983^Initial Lumen Output.	102.2–29.42*0.9983^Initial Lumen Output.	5.9
Integrated-High Lumen.	EL 1	2,000 ≤ Initial Lumen Output ≤ 2,600.	67.6–29.42*0.9983^Initial Lumen Output.	65.1–29.42*0.9983^Initial Lumen Output.	3.7
	EL 2	2,000 ≤ Initial Lumen Output ≤ 2,600.	73.4–29.42*0.9983^Initial Lumen Output.	70.5–29.42*0.9983^Initial Lumen Output.	4.0

D. Product Price Determination

Typically, DOE develops manufacturing selling prices (MSPs) for covered products and applies markups to create consumer prices to use as inputs to the LCC analysis and NIA. Because GSLs are difficult to reverse-engineer (*i.e.,* not easily disassembled), DOE directly derives consumer prices for the lamps covered in this rulemaking. Consumer price refers to the product price a consumer pays before tax and installation. Because non-integrated CFLs operate with a ballast in practice, DOE also developed prices for ballasts that operate those lamps.

In the preliminary analysis, DOE reviewed and used publicly available retail prices to develop consumer prices for GSLs. In its review, DOE observed a range of consumer prices paid for a lamp, depending on the distribution channel through which the lamp was purchased. Specifically, DOE identified the following four main distribution channels: Small Consumer-Based Distributors (*i.e.,* Internet retailers); Large Consumer-Based Distributors: (*i.e.,* home centers); Electrical Distributors; and State Procurement.[120]

For each distribution channel, DOE calculated an aggregate price for the representative lamp unit at each EL using the average prices for the representative lamp unit and similar lamp models. Because the lamps included in the calculation were equivalent to the representative lamp unit in terms of performance and utility (*i.e.,* had similar wattage, CCT, bulb shape, base type, CRI), DOE considered the pricing of these lamps to be representative of the technology of the EL. DOE developed average consumer prices for the representative lamp units sold in each of the four main distribution channels identified. DOE then calculated an average weighted consumer price using estimated shipments through each distribution channel. To determine prices for CFL ballasts, DOE compared the blue book prices of CFL ballasts to comparable fluorescent lamp ballasts and developed a scaling factor to apply to the consumer prices of the fluorescent lamp ballasts developed in the 2011 Ballast Rule. DOE received several comments on its pricing methodology and results.

1. Price Weightings

DOE received several comments regarding the application of sales weightings and the assessment of lamps sold in multi-packs. NEEA noted that the per-lamp price is lower when lamps are sold in multi-packs and pointed out that if DOE had accounted for the higher shipment volumes of these products, DOE's consumer prices would be lower. (NEEA, Public Meeting Transcript, No. 29 at pp. 153–154) NWPCC and the Appliance Standards Awareness Project (ASAP) agreed that weighting prices using sales volume, instead of averaging prices based on the number of products on store shelves, would result in lower consumer prices. (NWPCC, Public Meeting Transcript, No. 29 at p. 154; ASAP, Public Meeting Transcript, No. 29 at p. 112–113) Westinghouse added that only averaging the prices of lamps sold in single- and multi-packs would allow outliers to disproportionately affect the results. Due to the frequency of large pricing disparities for the same lamp type, Westinghouse stated that outliers would need to be appropriately weighted. (Westinghouse, Public Meeting Transcript, No. 29 at pp. 114–115) EEAs and NRDC recommended that DOE modify its analysis to weight each lamp equally, meaning the cost of an individual lamp sold in a pack of four is counted four times and the cost of a lamp sold singly is counted once. While they did not have specific data, EEAs expected multi-packs to sell in higher volume than single-packs due to their increased value per bulb. (EEAs, No. 32 at p. 12; NRDC, Public Meeting Transcript, No. 29 at pp. 117–118) ASAP requested clarification on how DOE dealt with pricing from single- and multi-packs of the same lamp. (ASAP, Public Meeting Transcript, No. 29 at p. 112–113)

In the preliminary analysis, DOE did not weight the price per lamp by the number of lamps contained in its packaging or by sales data of that lamp. However, DOE agrees with the stakeholders' recommendation regarding package weighting, and in the NOPR analysis, DOE weighed each lamp price by the number of lamps with which it was sold. For example, if a lamp is sold in a single-pack for $1 and is sold also in a multi-pack of four lamps for $3, then one $1 lamp and four $0.75 lamps were used to create an average price. DOE did not include an additional weighting factor to reflect sales volume because the package-weighting factor described above already reflects sales volume; CFLs are most commonly offered in multi-packs, whereas LED lamps are most commonly offered in single-packs.

DOE also received comments on the distribution channel weightings used in the preliminary analysis. GE and CA IOUs agreed with DOE's approach of analyzing typical prices from different sales channels and weighting them according to the portion of the market that uses those channels. GE stated that they have not specifically reviewed distribution channel percentages or exact sales data, but agreed that DOE's estimated percentage of shipments through each channel seemed reasonable. (GE, Public Meeting Transcript, No. 29 at p. 111) CA IOUs agreed with DOE's decision to give the most weighting to the Large Consumer-Based Distributors channel. (CA IOUs, No. 33 at p. 5)

In the preliminary analysis, DOE identified four main distribution channels for GSLs and applied weightings based on estimated shipments through each channel. DOE used different shipment percentages for integrated lamps and non-integrated lamps because integrated lamps are more commonly residential products, while non-integrated lamps are more commonly commercial products. In the preliminary analysis, for the integrated lamps, DOE applied a 10 percent weighting to the Small Consumer-Based Distributors channel, 75 percent to the Large Consumer-Based Distributors channel, 10 percent to the Electrical Distributors channel, and 5 percent to the State Procurement channel.[121] In the NOPR analysis, DOE modified these percentages slightly by applying 80 percent to the Large Consumer-Based Distributors channel and 5 percent to the Electrical Distributors channel. As these lamps are sold mainly to the residential market, DOE determined the electrical distributors likely comprise a lesser share and the large consumer-based distributors likely have a higher share of shipments than estimated in the preliminary analysis.

2. CFL Prices in the Integrated Low-Lumen Product Class

DOE received comments regarding the consumer prices for ELs represented by CFLs in the Integrated Low-Lumen product class. NRDC questioned why DOE's consumer price for the baseline level representing a CFL was $6.00, when the price of such lamps is $1.50 or $2.00 when sold in multi-packs at big box stores, which are part of the highest weighted distribution channel in DOE's analysis. (NRDC, Public Meeting Transcript, No. 29 at p. 107) Southern Company stated that there are differences in utility between a covered and a bare CFL and suggested that DOE establish different product classes for the two lamp types in order to avoid having a baseline level more expensive than CSL1. (Southern Company, Public

[120] GSL preliminary analysis at 6–2.

[121] *Id.* at 6–3.

Meeting Transcript, No. 29 at pp. 108–109)

In the preliminary analysis, the representative lamp unit at the baseline was a 14 W covered CFL, and the representative lamp at CSL 1 was a 13 W bare (spiral) CFL in the Integrated Low-Lumen product class. Covered CFLs are priced higher than bare CFLs, resulting in a higher price in the preliminary analysis at the baseline than at CSL 1. In this NOPR analysis, DOE continued to not establish product classes based on lamp cover but evaluated a 14 W bare CFL as the representative lamp unit at the baseline. (See section V.A.1 for further details regarding product classes and section V.C.4 for further details on representative units.) With this update, in the NOPR analysis the consumer price at the baseline and CSL 1 are, respectively, $2.27 and $2.71.

3. LED Lamp Prices in the Integrated Low-Lumen Product Class

Southern Company suggested that the inclusion of different types of LEDs were causing confusion in the pricing analysis. Specifically, Southern Company noted that directional LED products tend to be more expensive than omnidirectional LED lamps, and comparing their prices directly would be problematic as directional LED lamp products might not be usable in all applications. (Southern Company, Public Meeting Transcript, No. 29 at pp. 154–155)

When determining consumer prices for an EL, DOE used prices for representative lamp units or similar lamps at that EL. DOE ensured that similar lamps had the same characteristics (*e.g.,* wattage, CCT, bulb shape, base type, CRI) that made them equivalent in terms of performance and utility. For the Integrated Low-Lumen product class, all representative lamp units were omnidirectional lamps, and therefore DOE did not use any prices for directional LED lamps in the pricing analysis.

For the Integrated Low-Lumen product class, DOE's preliminary analysis results showed prices of LED lamps decreasing as efficacy increased.[122] Stakeholders provided feedback on this price trend. NRDC and EEAs noted that LED lamps are becoming more efficacious and less expensive at the same time, which is not typical. NRDC explained that as an individual LED package becomes more efficacious, not as many of them are required to produce the needed light output and the size of the heat sink and other components can be reduced, allowing for a smaller form factor and lower overall cost. (NRDC, Public Meeting Transcript, No. 29 at pp. 98–99; EEAs, No. 32 at p. 4)

Several stakeholders pointed out that the rapid turnover in LED product offerings on the market may be affecting the LED price trend presented in the preliminary analysis. Philips stated that it did not make sense that products that were more efficacious would have a lower cost or that consumers would purchase less efficacious products at a higher cost. Philips suggested that because the LED market is so dynamic, robust data cannot be generated and DOE's use of older data points is skewing the analysis. (Philips, Public Meeting Transcript, No. 29 at pp. 188–189) NEMA explained that LED product development results in surges of new products rather than the continuous evolution that is more typical of other technologies. Therefore, even though an abundance of data might be available, lamps that are a year old are already obsolete. (NEMA, Public Meeting Transcript, No. 29 at pp. 155–156) EEAs noted that the prices shown in the examples for CSL 2 and CSL 3 reflected products that were being discontinued and replaced by new, more efficacious products that were also less expensive than the prior versions. (EEAs, No. 32 at p. 12) NRDC commented that the high price at CSL 2 could be because it was an older model. (NRDC, Public Meeting Transcript, No. 29 at pp. 160–161)

DOE uses the most current prices available at the time of analysis to develop average prices for each EL. Based on the data collected for the preliminary and NOPR analyses, DOE has noted a trend showing that lower wattage, more efficacious LED lamps have lower prices than higher wattage, less efficacious LED lamps. As stakeholders indicated, and manufacturers confirmed in interviews, manufacturers begin to phase out their less efficacious LED products as they introduce products that are more efficacious. The low volume and older technology of the less efficacious products likely results in higher prices. Hence, the trend of decreasing prices for more efficacious LED lamps results from the following combination of factors: (1) The ability to make LED lamps more efficacious at a lower cost and (2) the low volume and subsequently higher prices of the less efficacious lamps. DOE consistently found this decreasing LED lamp price trend in the pricing data collected for the preliminary analysis and in the updated pricing data collected for the NOPR analysis.

NEMA stated that the short market exposure and high rate of innovation for LED lamps has resulted in strong price reductions with large technology improvements, such that families of LED lamp products are only now evolving in a linear method similar to other mature lamp technologies. Hence, it is incorrect to compare prices of lamps for sale today with lamps for sale a few years ago because the latest lamp is a new design incomparable to the older version of the lamp. Noting that DOE's typical analysis model examined mature products with incremental improvements, NEMA suggested DOE redesign the price model for LED lamps to recognize this phenomenon. (NEMA, No. 34 at pp. 18–19)

CA IOUs also commented on DOE's pricing model, suggesting that, given the extremely fast rate of price reductions in the LED market, DOE should use forecasted 2020 pricing estimates, rather than utilizing current 2014 pricing. (CA IOUs, No. 33 at p. 5) CA IOUs stated that the prices DOE estimated for LED lamps were too high, especially when considering what the price of the lamps would be in 2020, the first year of compliance. To support this assertion, CA IOUs provided DOE with graphs of online retail price data[123] collected between December 2013 and January 2015 along with projections up to December 2017. CA IOUs stated that according to DOE's findings during the recent GSFL and IRL standards rulemaking (80 FR 4041 [Jan. 26, 2015]), on average, online pricing is generally higher than in-store pricing, suggesting that if anything, those average prices collected by CA IOUs should overestimate the prices for most end users. CA IOUs stated that DOE forecasted the consumer price to be $28.12 ($35.26/kilolumen[124]) for CSL 2,

[122] *Id.*

[123] CA IOUs collected over 40,000 unique price points, for LED replacement lamps over 300 lumens, retrieved at regular intervals between December 2013 and January 2015 from HomeDepot.com, Lowes.com, Acehardware.com, Costco.com, 1000bulbs.com, bulbs.com, and several others. CA IOUs provided three graphs of these data, presenting the average online pricing by EL, along with estimated future pricing developed by applying exponential growth to the data. One graph showed data for all LED replacement lamps over 300 lm (including A, G, PAR, BR, MR, decorative, and downlight lamp shapes), the second showed data for only A-shaped lamps over 300 lumens, and the third showed data for A-shaped lamps between 700 and 1100 lm. CA IOUs also provided a cross-section of price points collected on January 8, 2015, for LED A-shaped lamps between 700 and 1100 lm, with efficacies above 80 lm/W and price data from flikart.com of high and low power factor CFLs. These graphs are available in CA IOUs' public comment on regulations.gov under docket number EERE–2013–BT–STD–0051–0033.

[124] Derived by CA IOUs by dividing the consumer prices developed by DOE in the preliminary analysis by 0.8 based on an 800-lumen lamp.

when CA IOUs' data suggest that such products are currently below $30/kilolumen, and projected prices to be below $10/kilolumen within two years. Similarly, for CSL 3, CA IOUs stated that DOE forecasted the consumer price to be $18.02 ($22.53/kilolumen), when CA IOUs' data suggest that such products are currently approximately $17/kilolumen. For CSL 4 and CSL 5, CA IOUs stated that DOE's forecasted prices were around $13–14 ($17–18/kilolumen), when the CA IOUs' data suggest that they are currently that low. (CA IOUs, No. 33 at p. 8, 11–13) NRDC stated DOE's consumer price of $15.28 (with sales tax) at CSL 4, which hypothetically reflects a typical 60 W LED replacement lamp, is too high and such lamps are $10.00 or less at big box stores. (NRDC, Public Meeting Transcript, No. 29 at pp. 151–152) Further, CA IOUs projected that current prices will drop by 30 to 70 percent in the next two years and the most-efficacious products will see the fastest price reductions. They asked DOE to revisit their assumptions for LED lamp price forecasts and to lower them based on this information. (CA IOUs, No. 33 at p. 8, 11–13)

In the preliminary analysis, DOE did not modify prices in the product price determination based on developments in LED technology that have not yet occurred, but rather used the latest pricing data available at the time of the analysis to determine consumer prices. DOE determined the full price of lamps at each EL rather than pricing incremental design improvements. DOE understands that there may be differences in the design of an LED lamp from one year to the next. However, these changes in design, and the effect they have on the overall lamp price, is unknown. DOE is aware that LED technology is expected to improve over the next several years, but there is no guarantee that a reduction in the price of an LED will be immediately accompanied by a decrease in the price of the lamp in which it is incorporated. Manufacturers may change other aspects of the lamp at the same time, such as improving the light distribution or adding features to enable connectivity. DOE acknowledges that, during interviews, manufacturers indicated they were focusing their development efforts on reducing the price of LED lamps to encourage widespread adoption. To do so, manufacturers expected to eliminate features valued by consumers, such as the ability to dim and long lifetimes. In this rulemaking, DOE analyzes and determines corresponding prices for LED lamps that maintain consumer utility. As described in section V.C.5, DOE has ensured the availability of features valued by consumers at the highest analyzed EL.

DOE updated its pricing analysis for the NOPR using the most recent available prices for actual LED lamps being sold on the market. DOE also reviewed in detail the data and graphs provided by CA IOUs. In comparison to the price data CA IOUs collected, DOE's updated pricing analysis in the NOPR shows lower prices for levels represented by LED lamps. Specifically, DOE determined that the average weighted price for EL 2 (representing a 12 W LED lamp at 66.7 lm/W) is $14.10 (2015$) and the average weighted price decreases at higher efficacy levels with the max-tech lamp at $9.33. DOE also notes that the NIA applies a price-learning factor, which results in even lower prices in future years as shipments of LED lamps increase in volume. (See section V.H for further details.)

E. Energy Use Analysis

The purpose of the energy use analysis is to determine the annual energy consumption of GSLs at different efficacies in representative U.S. single-family homes, multi-family residences, and commercial buildings, and to assess the energy savings potential of increased GSL efficacy. To develop annual energy use estimates, DOE multiplied GSL input power by the number of hours of use (HOU) per year and a factor representing the impact of controls. The energy use analysis estimates the range of energy use of GSLs in the field (*i.e.,* as they are actually used by consumers) and provides the basis for other analyses DOE performs, particularly assessments of the energy savings and the savings in consumer operating costs that could result from adoption of new or amended standards.[125]

1. Operating Hours

a. Residential Sector

To determine the average HOU of GSLs in the residential sector, DOE collected data from a number of sources. Consistent with the approach taken in the preliminary analysis, DOE used data from various regional field-metering studies of GSL operating hours conducted across the U.S. DOE determined the regional variation in average HOU using average HOU data from the regional metering studies, all of which are listed in the energy use chapter (chapter 7 of the NOPR TSD). DOE determined the average HOU for each EIA Residential Energy Consumption Survey (RECS) reportable domain (*i.e.,* state, or group of states).[126] For regions without HOU metered data, DOE used data from adjacent regions.

In the preliminary analysis, DOE assumed that GSL operating hours do not vary by light source technology.[127] The reasoning was as follows: because section 313 of the Appropriations Rider states that none of the funds made available by the Act may be used to implement or enforce standards for GSILs, intermediate-base incandescent lamps and candelabra base incandescent lamps, DOE did not consider these lamps in its analyses. Furthermore, because these lamps are not included in the scope of this rulemaking, in the preliminary analysis DOE assumed that a potential GSL final rule would not yield sufficient energy savings to avoid triggering the EISA 2007 backstop. Therefore, DOE assumed that the EISA 2007 backstop will go into effect on January 1, 2020. DOE assumed that the compliance date for a potential final GSL rule would be concurrent with the compliance date for the EISA 2007 backstop. (*See* 42 U.S.C. 6295(i)(6)(A)(ii), (i)(6)(A)(iii) and (i)(6)(A)(v)) Thus, during the analysis period, DOE assumed that CFL and LED GSLs would fill all sockets currently filled by GSLs. Although some metering studies have observed higher hours of operation for CFL GSLs compared to incandescent/halogen GSLs—such as NMR Group, Inc.'s Northeast Residential Lighting Hours-of-Use Study[128]—DOE assumed that the higher HOU found for CFL GSLs is based on those lamps currently disproportionately filling sockets with higher HOU. This would not be the case during the analysis period, when CFL and LED GSLs are expected to fill all GSL sockets. This assumption was equivalent to assuming no rebound in operating hours as a result of more efficacious technologies filling sockets currently filled by less efficacious technologies prior to, or as a result of, the EISA 2007 backstop. Additionally, operating hours were assumed to be equivalent for CFL and LED GSLs in the reference scenario. In other words, the reference scenario assumed no rebound

[125] GSL preliminary analysis at 7–1.

[126] U.S. Department of Energy–Energy Information Administration. *2009 RECS Survey Data.* (Last accessed June 9, 2015.) *http://www.eia.gov/consumption/residential/data/2009/.*

[127] GSL preliminary analysis at 7–1.

[128] NMR Group, DNV GL. Northeast Residential Lighting Hours-of-Use Study. May 5, 2014. Prepared for Connecticut Energy Efficiency Board, Cape Light Compact, Massachusetts Energy Efficiency Advisory Council, National Grid Massachusetts, National Grid Rhode Island, New York State Energy Research and Development Authority. (Last Accessed August 22, 2014.)

as a result of a potential GSL energy conservation standard.

Regarding the set of lamps potentially subject to the backstop, Southern Company requested that DOE consider including exemptions for space-constrained products with high-lumen output because consumer utility will be eliminated unless LED technology improves fast enough to cover those applications by the time the backstop takes effect. (Southern Company, Public Meeting Transcript, No. 29 at pp. 131–132) Earthjustice stated that EPCA's backstop requirement applies to all lamps that DOE deems GSLs, even if said lamps are not covered in the scope of this rulemaking (*e.g.,* high-lumen lamps). (Earthjustice, No. 30 at pp. 3–4) EEAs and the California Investor-Owned Utilities (CA IOUs) disagreed with DOE's interpretation of the Appropriations Rider, but agreed with DOE's assumption that not including GSILs in the scope of this rulemaking will cause the backstop to come into effect. (EEAs, No. 32 at p. 2; CA IOUs, No. 33 at pp. 1–2) Conversely, NEMA disagreed with DOE's assumption that the backstop will be triggered, stating that rapid LED adoption and innovation will bring the energy consumption of the mix of GSLs by January 1, 2020 below that of the energy consumption assuming all GSLs at January 1, 2020 had an efficiency of 45 lm/W. (NEMA, No. 34 at pp. 20–21).

As discussed previously, due to the Appropriations Rider, DOE is not considering GSILs, including exclusions or exemptions, in this rulemaking. Under 42 U.S.C. 6295(i)(6)(A)(v), if DOE fails to (1) complete a rulemaking in accordance with clauses (i) through (iv), which includes determining whether the exemptions for certain incandescent lamps should be maintained or discontinued, or (2) publish a final rule that will meet or exceed the energy savings associated with the EISA 2007 45 lm/W backstop, then the backstop will be triggered beginning January 1, 2020. Therefore DOE assumes that the backstop will be triggered beginning January 1, 2020. Thus, as in the preliminary analysis, for the NOPR analysis DOE assumes that the compliance date for a potential final GSL rule would be simultaneous with the compliance date for the EISA 2007 backstop. DOE requests comment on its assumption that the EISA 2007 backstop will be triggered (see issue 25 in section VIII.E).

Southern Company disagreed with DOE's assumption that more efficacious GSLs do not have higher operating hours than less efficacious GSLs. (Southern Company, Public Meeting Transcript, No. 29 at p. 123) NEMA agreed with Southern Company, citing increased consumer convenience in using long-lived, more efficacious lamps in sockets with higher HOU (due to less lamp replacements), as well as the energy savings associated with using lower-wattage lamps in the most-used sockets. (NEMA, No. 34 at pp. 19–20) NRDC highlighted the complexity involved in estimating operating hours for GSLs and supported the 2.3 hours per day average estimated by DOE in the preliminary analysis. (NRDC, Public Meeting Transcript, No. 29 at pp. 130–131)

DOE agrees that, currently, consumers are likely to place more efficacious, longer-lived GSLs in the most-used sockets, especially if the efficacies or lifetimes of the lamps differ greatly. However, DOE does not believe this effect to be substantial in the case of replacing a CFL with an LED lamp. Because DOE's analyses assume no GSLs with efficacy below 45 lm/W are shipped during the analysis period, CFL and LED lamps represent the only GSLs on the market. Therefore, as in the preliminary analysis, for the NOPR analysis DOE assumed that GSL operating hours do not vary by light source technology. Based on the methodology described in this section and in further detail in chapter 7 of the NOPR TSD, DOE estimated the national weighted-average HOU of GSLs in the residential sector to be 2.3 hours per day.

To estimate the variability in GSL HOU by room type, DOE developed HOU distributions for each room type using data from NEEA's Residential Building Stock Assessment Metering Study (RBSAM),[129] a metering study of 101 single-family houses in the Northwest. DOE assumed that the shape of the HOU distribution for a particular room type would be the same across the United States, even if the average HOU for that room type varied by geographic location. To determine the distribution of GSLs by room type, DOE used data from NEEA's 2011 RBSAM for single-family homes,[130] which included GSL room-distribution data for more than 1,400 single-family homes throughout the Northwest.

For more details on the methodology DOE used to estimate the HOU for GSLs in the residential sector, see chapter 7 of the NOPR TSD. DOE requests comment on the data and methodology used to estimate operating hours for GSLs in the residential sector, as well as on the assumption that GSL operating hours do not vary by light source technology (see issue 26 in section VIII.E).

b. Commercial Sector

DOE determined the HOU for GSLs in commercial buildings using lighting data for 15 commercial building types obtained from the 2010 U.S. Lighting Market Characterization (LMC).[131] For each commercial building type presented in the LMC, DOE determined average HOU based on the fraction of installed lamps utilizing each of the light source technologies typically used in GSLs and the HOU for each of these light source technologies. DOE estimated the national-average HOU for the commercial sector by weighting the building-specific HOU for GSLs by the relative floor space of each building type as reported in in the 2003 EIA Commercial Buildings Energy Consumption Survey (CBECS).[132] The national weighted-average HOU for GSLs in the commercial sector were estimated at 10.7 hours per day.

To capture the variability in HOU for individual consumers in the commercial sector, DOE used data from NEEA's 2014 Commercial Building Stock Assessment (CBSA).[133] DOE invites comments and data on its approach to account for variability in HOU in the commercial sector (see issue 27 in section VIII.E). For further details on the commercial sector operating hours, see chapter 7 of the NOPR TSD.

2. Input Power

The input power used in the energy use analysis is the input power presented in the engineering analysis (chapter 5 of the NOPR TSD) for the representative lamps (or lamp-and-ballast systems) at each EL for each of

[129] Ecotope Inc. *Residential Building Stock Assessment: Metering Study.* 2014. Northwest Energy Efficiency Alliance: Seattle, WA. Report No. E14–283. (Last accessed June 15, 2015.) *http://neea.org/docs/default-source/reports/residential-building-stock-assessment—metering-study.pdf?sfvrsn=6.*

[130] Northwest Energy Efficiency Alliance. *2011 Residential Building Stock Assessment Single-Family Database.* (Last accessed June 29, 2015.) *http://neea.org/resource-center/regional-data-resources/residential-building-stock-assessment.*

[131] Navigant Consulting, Inc. *Final Report: 2010 U.S. Lighting Market Characterization.* 2012. U.S. Department of Energy. (Last accessed June 10, 2015.) *http://apps1.eere.energy.gov/buildings/publications/pdfs/ssl/2010-lmc-final-jan-2012.pdf*

[132] U.S. Department of Energy–Energy Information Administration. *2003 CBECS Survey Data.* (Last accessed June 9, 2015.) *http://www.eia.gov/consumption/commercial/data/2003/index.cfm?view=microdata.*

[133] Northwest Energy Efficiency Alliance. *Commercial Building Stock Assessment 2014.* (Last accessed June 26, 2015.) *http://neea.org/resource-center/regional-data-resources/commercial-building-stock-assessment.*

the three representative product classes considered in this rulemaking: Integrated Low-Lumen, Integrated High-Lumen, and Non-Integrated GSLs.

3. Lighting Controls

For GSLs that operate with controls, DOE assumed an average energy reduction of 30 percent in the preliminary analysis. This estimate was based on a meta-analysis of field measurements of energy savings from commercial lighting controls by Williams, *et al.*[134] Because field measurements of energy savings from controls in the residential sector are very limited, DOE assumed that controls would have the same impact as in the commercial sector.

NEEA suggested that lighting controls do not necessarily translate into real energy savings; however, DOE notes that its energy savings estimate from controls are based on a meta-analysis of commercial building controls studies indicating an average savings of 30 percent for lamps on controlled sockets. (NEEA, Public Meeting Transcript, No. 29 at pp. 125, 138–139)

NRDC contended that DOE's assumption of energy savings from controls in the residential sector should be lower, because DOE based this assumption on data collected on commercial buildings, which have different control systems. (NRDC, Public Meeting Transcript, No. 29 at p. 136) ASAP requested DOE review the data to see if manual and central control types were accounted for separately, and if so, to use the energy savings from manual controls for the residential sector. (ASAP, Public Meeting Transcript, No. 29 at p. 137) General Electric noted that residential dimming is in general much more variable than dimming in the commercial sector, where lights are not dimmed to very low levels. (General Electric Lighting, Public Meeting Transcript, No. 29 at pp. 139–140)

The meta-analysis DOE used to base its assumption of 30-percent energy savings from lighting controls does provide energy savings estimates for individual control types (including manual controls); however, it is unclear that manual lighting controls in commercial buildings would be used in the same manner as manual controls in residences. DOE was able to find a single study that looked at the energy savings of controls in the residential sector,[135] which suggested that energy savings from dimming may be larger than 30 percent in the residential sector. However, because of the very small sample size of this study (the findings were based on metered data from two houses in California), DOE did not base its analysis on the findings of this study.

NEMA supported DOE's assumption of 30-percent energy savings for GSLs on controls in the residential sector, but suggested DOE use 5-percent energy savings for pin base GSLs in the commercial sector. (NEMA, No. 34 at pp. 21–22) DOE found no data indicating the energy savings from controls for commercial pin base fluorescent GSLs is less than 30 percent. DOE also believes that the majority of the lamps measured in the studies considered by the lighting controls meta-analysis were pin base fluorescent lamps. The meta-analysis found an average energy savings from controls of approximately 30 percent; therefore, DOE does not believe the available data indicate only 5-percent energy savings from controls in the commercial sector for pin base fluorescent GSLs. Therefore, DOE has maintained its assumption of 30-percent energy savings from lighting controls in both the residential and commercial sectors for all lamp technologies. DOE requests comment on the energy reduction estimate of 30 percent, as well as data and information on the energy use implications of using dimmers in the residential sector (see issue 28 in section VIII.E).

Southern Company stated that the data on energy savings from controls are likely to come from regions with strong energy efficiency programs, which systematically biases estimated energy savings from controls to be larger than they actually are. (Southern Company, Public Meeting Transcript, No. 29 at pp. 141–142) In response, NEEA indicated that DOE's estimate may be appropriately representative. (NEEA, Public Meeting Transcript, No. 29 at pp. 142–143) The meta-analysis DOE used to estimate savings from controls does not provide information on the geographic representativeness of the analyzed data; however, DOE notes that even if the existence of requirements for controls is linked to regions with strong energy efficiency programs, it is not clear that this would translate into any impact on the usage of controls once installed or indicate that savings from controls in such regions are overestimated.

Philips expressed concern with DOE's assumption that the HOU for GSLs in 2020 will be the same as the current HOU, and highlighted building standards requiring more controls to support this concern. (Philips, Public Meeting Transcript, No. 29 at pp. 123–124) NEMA agreed with DOE's assumption that there are few dimmable CFLs and that the percentage of dimmable LEDs is expected to be higher. (NEMA, No. 34 at p. 21) NEMA added that because of building and energy codes, it is reasonable to assume that most commercial floor space will have controls of various types. (NEMA, No. 34 at p. 27)

In its reference scenario, DOE assumed an increase in commercial floor space utilizing controls, with the increase being driven by building codes. Furthermore, while DOE's reference scenario assumes a constant 14 percent of residential GSLs operate on controls external to the lamp for all light source technologies, DOE has also analyzed an alternative scenario in the LCC and national impact analyses in which the fraction of GSLs operated with such controls[136] increases to 50 percent by the end of the analysis period (see appendices 8B and 10E of the NOPR TSD). Rather than disaggregate the impact of controls between a reduction in HOU and a reduction in input power, DOE has attributed a 30-percent reduction in energy use for all GSLs that operate with controls. DOE also notes that in the NOPR analyses, although it continues to assume that 5 percent of CFLs are dimmable, the fraction of CFLs and LEDs that are used with controls external to the lamp is assumed to be the same (14 percent in the reference case) in the residential sector, due to residential code requirements for non-dimming lighting controls such as vacancy sensors.[137] DOE requests comment on this assumption (see issue 29 in section VIII.E). Chapter 7 of the NOPR TSD provides details on DOE's energy use analysis for GSLs.

F. Life-Cycle Cost and Payback Period Analysis

DOE conducted LCC and PBP analyses to evaluate the economic impacts on individual consumers of potential energy conservation standards

[134] Williams, A., B. Atkinson, K. Garbesi, E. Page, and F. Rubinstein. Lighting Controls in Commercial Buildings. *LEUKOS*. 2012. 8(3): pp. 161–180.

[135] Consortium for Energy Efficiency. Residential Lighting Controls Market Characterization. Available at: *http://library.cee1.org/sites/default/files/library/11458/CEE_LightingMarket Characterization.pdf.*

[136] In the energy use and LCC analyses, DOE did not consider smart lamps, as the product class containing such lamps is a non-representative product class and DOE presents energy use and LCC results for representative product classes only. Smart lamps are considered in the national impact analysis.

[137] Lutron Electronics Co., Inc. *Illuminating the Title 24 2013 Residential Lighting Requirements.* 2014. (Last accessed June 29, 2015.) *http://www.lutron.com/TechnicalDocumentLibrary/Illuminating_Title_24%20_2013_Resi_Lighting_Requirements.pdf.*

for GSLs. The effect of new or amended energy conservation standards on individual consumers usually involves a reduction in operating cost and an increase in purchase cost. DOE used the following two metrics to measure consumer impacts:

- The LCC is the total consumer expense of an appliance or product over the life of that product, consisting of total installed cost (product price, sales tax, and installation costs) plus operating costs (expenses for energy use, maintenance, and repair) and any applicable disposal costs. When computing operating costs or disposal costs, DOE discounts future costs to the time of purchase and sums them over the lifetime of the product. For products with lifetimes greater than the LCC analysis period (the lifetime of the shortest-lived product in each product class), DOE also accounts for their residual value, which is applied as a credit in the calculation of the LCC.
- The PBP (payback period) is the estimated amount of time (in years) it takes consumers to recover any increased purchase cost (including installation) of a more-efficient product through lower operating costs. DOE calculates the PBP by dividing the change in purchase cost at higher ELs by the change in annual operating cost for the year that amended or new standards are assumed to take effect.

For each EL developed in the engineering analysis, DOE first calculated the average LCC and PBP if a nationally representative consumer sample were to make a purchase at that EL. Separate calculations were conducted for the residential and commercial sectors. DOE developed consumer samples based on the 2009 RECS and the 2003 CBECS, for the residential and commercial sectors, respectively. For each consumer in the sample, DOE determined the energy consumption of the GSL purchased and the appropriate electricity price. By developing consumer samples, the analysis captured the variability in energy consumption and energy prices associated with the use of GSLs.

DOE added sales tax, which varied by state, and installation cost (for the commercial sector) to the cost of the product developed in the product price determination to determine the total installed cost. Inputs to the calculation of operating expenses include annual energy consumption, energy prices and price projections, lamp lifetimes, and discount rates. DOE created distributions of values for lamp lifetimes, discount rates, and sales taxes, with probabilities attached to each value, to account for their uncertainty and variability. For the Integrated Low-Lumen product class, DOE also developed and analyzed two non-representative lamp options for EL 2 (based on common lamp types with significant market share), as well as lamp options across three additional lumen ranges based on the 60 W equivalent lamp options.

For each GSL standards case (*i.e.,* case where a standard would be in place at a particular EL), DOE then measured the LCC savings resulting from the considered standard based on the estimated change in efficacy distribution in the standards case relative to the estimated efficacy distribution in the no-new-standards case. These efficacy distributions include market trends that can result in some lamps with efficacies that exceed the minimum efficacy associated with the standard under consideration. In contrast, the PBP only considers the average time required to recover any increased first cost associated with a purchase at a particular EL relative to the baseline product.

The computer model DOE uses to calculate the LCC and PBP results relies on a Monte Carlo simulation to incorporate uncertainty and variability into the analysis. The Monte Carlo simulations randomly sample input values from the probability distributions and GSL consumer user samples. The model calculated the LCC and PBP for a sample of 10,000 consumers per simulation run.

DOE calculated the LCC and PBP results for all consumers as if each were to purchase a new product in the expected year of compliance with new or amended standards. Any amended standards would apply to GSLs manufactured no earlier than three years after the date on which any amended standard is published. (42 U.S.C. 6295(i)(6)(A)(iii)) DOE assumed that the compliance date for any final GSL rule would be January 1, 2020.

Though DOE assumed the compliance date for any final GSL rule would be January 1, 2020 in the reference scenario, CEC asked DOE to consider phased-in effective dates, whereby the compliance date for a potential final GSL rule would instead be subsequent to the compliance date for the EISA 2007 backstop. (CEC, No. 31 at pp. 2–3) DOE has analyzed an alternative scenario in which the compliance date for a potential final GSL rule is 2022, or two years after the compliance date of the EISA 2007 backstop. This scenario aligns with the suggestion put forth by CEC, and the results can be found in the appendix 10E of this NOPR TSD.

Table V–11 summarizes the approach and data DOE used to derive inputs to the LCC and PBP calculations. The subsections that follow provide further discussion. DOE requests comment on the overall methodology and results of the LCC and PBP analyses (see issue 30 in section VIII.E). Details of the spreadsheet model, and of all the inputs to the LCC and PBP analyses, are contained in chapter 8 of the NOPR TSD and its appendices.

TABLE V–11—SUMMARY OF INPUTS AND METHODS FOR THE LCC AND PBP ANALYSIS*

Inputs	Source/method
Product Cost	Weighted-average consumer price determined in the product price determination. For the Integrated Low-Lumen product class, DOE developed and analyzed two non-representative lamp options for EL 2, as well as lamp options across three additional lumen ranges based on the 60W-equivalent lamp options. To project lamp prices to the compliance year, DOE used a price-learning analysis for both CFLs and LEDs.
Sales Tax	Derived 2019 population-weighted-average tax values for each state based on Census population projections and sales tax data from Sales Tax Clearinghouse.
Installation Costs	Used RSMeans and U.S. Bureau of Labor Statistics data to estimate an installation cost of $1.45 per installed GSL for the commercial sector.
Lumen Range Distribution	Residential sector: Used national sales data from the year 2000 for incandescent lamps. Commercial sector: Used lumen range distribution data from NEEA's 2014 CBSA.
Disposal Cost	Assumed 35 percent of commercial CFLs are disposed of at a cost of $0.70 per CFL. Assumptions based on industry expert feedback and a Massachusetts Department of Environmental Protection mercury lamp recycling rate report.

TABLE V–11—SUMMARY OF INPUTS AND METHODS FOR THE LCC AND PBP ANALYSIS*—Continued

Inputs	Source/method
Energy Use	Derived in the energy use analysis. Varies by geographic location and room type in the residential sector and by building type in the commercial sector.
Energy Prices	Electricity: Based on 2014 average and marginal electricity price data from the Edison Electric Institute. Variability: Electricity prices vary by season, U.S. region, and baseline electricity consumption level.
Energy Price Trends	Based on AEO 2015 price forecasts.
Residual Value	Represents the value of surviving lamps at the end of the LCC analysis period. DOE discounts the residual value to the start of the analysis period and calculates it based on the remaining lamp's lifetime and price at the end of the LCC analysis period.
Product Lifetime	A Weibull survival function is used to provide the survival probability as a function of GSL age, based on the GSL's rated lifetime and sector-specific HOU. On-time cycle length effects are included for residential CFLs.
Discount Rates	Approach involves identifying all possible debt or asset classes that might be used to purchase the considered appliances, or might be affected indirectly. Primary data source was the Federal Reserve Board's Survey of Consumer Finances.
Efficacy Distribution	Estimated by the market-share module of shipments model. See chapter 9 of the NOPR TSD for details.
Assumed Compliance Date	2020

* References for the data sources mentioned in this table are provided in the sections following the table or in chapter 8 of the NOPR TSD.

1. Product Cost

To derive the GSL product cost, DOE used the weighted-average consumer price determined in the product price determination. For the Integrated Low-Lumen product class, DOE also developed and analyzed two additional non-representative lamp options at EL 2 (a CFL and an LED lamp), in order to better reflect the current GSL market at that EL. For the same product class, which is the only product class that includes LED lamps, due to the high variability in LED lamp price by light output, DOE developed and analyzed lamp options across four lumen ranges (310–749 lm, 750–1049 lm, 1050–1489 lm, and 1490–1999 lm). For details on the methodology to derive product prices for the two non-representative lamp options and the lamp options in the three additional lumen ranges, see chapter 8 of the NOPR TSD.

DOE also used a price-learning analysis to account for changes in lamp prices that are expected to occur between the time for which DOE has data for lamp prices (2015) and the assumed compliance date of the rulemaking (2020). For details on the price-learning analysis, see section V.G.1.b.

DOE applied sales tax, which varies by geographic location, to the product cost. DOE collected sales tax data from the Sales Tax Clearinghouse [138] and used population projections from the Census Bureau [139] to develop population-weighted-average sales tax values for each state in 2020.

2. Installation Cost

In the preliminary analysis, DOE did not consider installation costs in the LCC and PBP analysis. NEMA suggested that many consumers will require an electrician, and therefore incur an installation cost, to replace a failed ballast or fixture on a non-integrated GSL. (NEMA, No. 34 at p. 23) The Northwest Power and Conservation Council agreed with NEMA, adding that installation costs should be included for any commercial lamps. (Northwest Power and Conservation Council, Public Meeting Transcript, No. 29 at p. 151) DOE agrees with NEMA and the Northwest Power and Conservation Council that commercial GSLs are likely to incur an installation cost. Therefore, DOE used RSMeans [140] and U.S. Bureau of Labor Statistics data [141] to estimate a commercial installation cost of $1.45 per installed GSL.

For details on the installation cost calculation, see chapter 8 of the NOPR TSD. DOE has continued to assume zero installation cost for the residential sector. DOE requests comment on the installation cost assumptions used in its analyses (see issue 31 in section VIII.E).

3. Lumen Range Distribution

In the preliminary analysis, DOE developed market-share estimates for each lumen range of integrated GSLs (310–749 lm, 750–1049 lm, 1050–1489 lm, and 1490–1999 lm for the Integrated Low-Lumen product class, and 2000–2600 lm for the Integrated High-Lumen product class) in the residential and commercial sectors.[142] In response to the lumen distribution presented in the preliminary analysis, NRDC commented that DOE should update its market estimate and cited available data sources. Specifically, NRDC provided national sales data across lumen ranges for screw base incandescent lamps from 2000 and 2006 and noted that given the relatively stable condition of the lighting market during that period, DOE should consider that CFL and LED replacements for screw base sockets would have similar market shares across lumen ranges. EEAs also pointed out that DOE's market-share estimates may be biased by specific lamp types included in the Cadeo Group data used by DOE in the preliminary analysis. (EEAs, No. 32 at pp. 10–12) NEMA expressed agreement with DOE's assumption that approximately 3 percent of all residential-sector GSLs with integrated ballasts or drivers are brighter than 2,000 lumens. (NEMA, No. 34 at p. 24)

DOE concurs with NRDC's assessment of available lumen-distribution information and thus, in the NOPR analyses, has updated its residential sector lumen-distribution estimate based on the data provided by NRDC. For the residential sector, DOE used

[138] Sales Tax Clearinghouse, Inc. *State Sales Tax Rates Along with Combined Average City and County Rates.* 2014. (Last accessed June 15, 2015.) *http://thestc.com/STrates.stm.*

[139] U.S. Census Bureau, Population Division, Interim State Population Projections, 2005. Table A1: Interim Projections of the Total Population for the United States and States: April 1, 2000 to July 1, 2030.

[140] RSMeans. *Facilities Maintenance and Repair Cost Data 2013.* 2012. RSMeans: Norwell, MA.

[141] U.S. Department of Labor. Bureau of Labor Statistics. *May 2014 Occupational Employment Statistics Survey. National Occupational and Wage Estimates.* (Last accessed June 30, 2015.) *http://www.bls.gov/oes/tables.htm.*

[142] GSL preliminary analysis at 8–18.

national sales data from the year 2000 [143] across lumen ranges for screw base incandescent lamps (because screw base lamps are used predominantly in the residential sector).[144] Based on DOE's updated approach, the fraction of residential-sector GSLs with integrated ballasts or drivers brighter than 2,000 lumens (*i.e.,* those residential-sector GSLs in the Integrated High-Lumen product class) is about 0.5 percent. DOE notes that this updated estimate is based on actual sales data, whereas the preliminary analysis estimate was based on the number of product offerings on the market. For the commercial sector, DOE has also updated its approach from the preliminary analysis and determined the lumen distribution using installed lamp data from NEEA's 2014 CBSA metering study.[145] For more details regarding the lumen range distributions, see chapter 8 of the NOPR TSD. DOE requests comment on the methodology and assumptions used to determine the market share of the lumen range distributions (see issue 32 in section VIII.E).

NEEA expressed concern with the lumen bins DOE used for parts of its analysis, specifically that an approximate range of 700–900 lumens was used in the engineering analysis to select an equivalent representative GSL for a 60 W incandescent bulb, whereas the EISA lumen bins were used to sample lamps for the LCC and PBP analysis. (NEEA, Public Meeting Transcript, No. 29 at pp. 231–232) Of the EISA lumen bins, the 750–1,049 lumen bin is divided between the 700–900 approximate lumen range DOE used in selecting representative units for the preliminary analysis. While DOE agrees with NEEA that using consistent lumen bins across analyses is important for analytical consistency, DOE notes that the discrepancy identified by NEEA has no actual impact on the analysis results. Furthermore, DOE is only aware of market-share data for GSLs broken out across the four EISA lumen bins. Therefore, for the NOPR analysis DOE continued to use the EISA lumen-binned GSL market-share data for its LCC and PBP analysis.

4. Electricity Prices

In the preliminary analysis, DOE used average retail electricity prices to conduct its analyses.[146] For the NOPR analyses, DOE used both marginal and average electricity prices to calculate the operating costs associated with each EL. Specifically, DOE used average electricity prices to characterize the baseline EL and marginal electricity prices to characterize incremental electricity cost savings associated with the other proposed ELs. The electricity prices used in the LCC analysis vary by season, region, and baseline electricity consumption level. DOE estimated these prices using data published with the Edison Electric Institute (EEI) Typical Bills and Average Rates reports for summer and winter 2014.[147] DOE assigned seasonal marginal and average prices to each household or commercial building in the LCC sample based on its location and its baseline monthly electricity consumption for an average summer or winter month. For a detailed discussion of the development of electricity prices, see appendix 8D of the NOPR TSD.

5. Electricity Price Trends

To arrive at electricity prices in future years, DOE multiplied the 2014 electricity prices by the forecast of annual residential or commercial electricity price changes for each Census division from EIA's *AEO 2015,* which has an end year of 2040.[148] To estimate the trends after 2040, DOE used the average rate of change during 2025–2040. For each purchase sampled, DOE applied the projection for the Census division in which the purchase was located. The AEO electricity price trends do not distinguish between marginal and average prices, so DOE used the same (*AEO 2015*) trends for both marginal and average prices. DOE reviewed the EEI data for the years 2007 to 2014 and determined that there is no systematic difference in the trends for marginal vs. average electricity prices in the data.

DOE used the electricity price trends associated with the AEO reference case, which is a business-as-usual estimate, given known market, demographic, and technological trends. DOE also included AEO High Growth and AEO Low-Growth scenarios in the analysis. The high- and low-growth cases show the projected effects of alternative economic growth assumptions on energy prices.

6. Product Lifetime

In the NOPR analyses, as in the preliminary analysis, DOE considered the GSL lifetime to be the service lifetime, *i.e.,* the age at which the GSL is retired from service.[149] In response to the lifetime scenarios presented in the preliminary analysis, Southern Company suggested DOE account for the possibility that some non-dimmable CFL GSLs are placed in dimmable sockets and experience very early failure. (Southern Company, Public Meeting Transcript, No. 29 at p. 170) DOE is unaware of any data indicating that a significant fraction of CFL GSLs experience immediate retirement due to being installed on sockets with dimmer switches. Therefore, in the reference scenario DOE has not assumed any immediate failures of this nature in the NOPR analyses. However, DOE did conduct an alternative NOPR analysis to account for the possibility of 5 percent of GSLs experiencing failure within the first year of use.

General Electric suggested that DOE cannot assume that every bulb of a specific type of GSL will have the same lifetime; some bulbs will be retired earlier than the average lifetime. (General Electric Lighting, Public Meeting Transcript, No. 29 at pp. 35–36) In response, NRDC stated that even if a GSL is retired prior to the average lifetime modeled by DOE, the lamp will most likely be replaced by a more efficacious, lower-cost lamp. (NRDC, Public Meeting Transcript, No. 29 at pp. 36–37) DOE notes that in both its preliminary and NOPR analyses, distributions were used to model GSL lifetimes. Therefore, not all GSLs of a specific type have identical lifetimes and some installed GSLs are retired earlier than indicated by the lamp's modeled median lifetime.

CEC, NEEA, and NRDC all suggested that DOE consider that long-life GSLs in the Early Replacement lifetime scenario will likely get rotated to less-used sockets, rather than being retired outright. (CEC, Public Meeting Transcript, No. 29 at pp. 171–172;

[143] ECOS Consulting, Davis Energy Group, and Energy Solutions. *Codes and Standards Enhancement Initiative for PY2004: Title 20 Standards Development: Analysis of Standards Options for General Service Incandescent Lamps.* 2004. Pacific Gas & Electric Company: San Francisco, CA. (Last accessed June 30, 2015.) *http://www.energy.ca.gov/appliances/2004rulemaking/documents/case_studies/CASE_Gen_Serv_Incand_Lamps.pdf.*

[144] Navigant Consulting, Inc. *Final Report: 2010 U.S. Lighting Market Characterization.* 2012. U.S. Department of Energy. (Last accessed June 10, 2015.) *http://apps1.eere.energy.gov/buildings/publications/pdfs/ssl/2010-lmc-final-jan-2012.pdf.*

[145] Northwest Energy Efficiency Alliance. *Commercial Building Stock Assessment 2014.* (Last accessed June 26, 2015.) *http://neea.org/resource-center/regional-data-resources/commercial-building-stock-assessment.*

[146] GSL preliminary analysis at 8–20.

[147] Edison Electric Institute. Typical Bills and Average Rates Report. Winter 2014 published April 2014, Summer 2014 published October 2014. See *http://www.eei.org/resourcesandmedia/products/Pages/Products.aspx.*

[148] U.S. Energy Information Administration. *Annual Energy Outlook 2015 with Projections to 2040.* 2015. Washington, DC Report No. DOE/EIA–0383(2015). *http://www.eia.gov/forecasts/aeo/pdf/0383(2015).pdf.*

[149] GSL preliminary analysis at 8–23.

NEEA, Public Meeting Transcript, No. 29 at p. 172; NRDC, Public Meeting Transcript, No. 29 at pp. 173–174) DOE acknowledges that long-lived, efficient lamps may currently be rotated from higher-use sockets, rather than retired outright, when a consumer purchases a new, more-efficient lamp. However, this phenomenon is more likely to occur with the current mix of lighting technologies used by GSLs in homes, and is less likely to occur if the majority of GSLs installed in homes are CFL and LED lamps, because the marginal efficacy increase in the latter case is much smaller than in the former case. Because DOE's analyses assume that CFL and LED lamps are the only GSLs on the market throughout the analysis period, DOE has not assumed that consumers will rotate lamps from higher-use sockets when more efficacious lamps are purchased.

NRDC also commented that the 5-year median lifetime for the Early Replacement lifetime scenario used in the preliminary analysis was too low. (NRDC, Public Meeting Transcript, No. 29 at p. 228) Southern Company and Philips expressed concern with the long GSL lifetimes modeled in the preliminary analysis, with Philips indicating that low-cost electronic components in the lamp may have shorter lifetimes than the lamp's lumen maintenance (for LED GSLs) performance indicates. (Southern Company, Public Meeting Transcript, No. 29 at p. 33; Philips, Public Meeting Transcript, No. 29 at p. 33) NEMA indicated agreement with the lifetime scenarios considered, but found fault with the underlying Weibull function DOE used to model GSL lifetimes, stating that the underlying function was derived for non-integrated linear fluorescent lamps, not CFL and LED GSLs. (NEMA, No. 34 at p. 23)

For the NOPR analysis, DOE made a number of updates to its three lifetime scenario models. In place of 5-year median lifetime used in the Early Replacement lifetime alternative scenario for the preliminary analysis, for the NOPR analyses DOE has assumed a 10-year median lifetime for the ''short lifetime'' alternative scenario. This scenario applies only to LED GSLs and is intended to account for the possibility that the future service lifetime of LED GSLs could be significantly shorter than expected today. DOE has maintained the ''rated lifetime'' and ''renovation-driven lifetime'' scenarios from the preliminary analysis, but DOE has updated the data upon which these models (and the ''short lifetime'' model) are based, in accordance with NEMA's observation. For the NOPR analysis, DOE used a report containing data on the cycle life characteristics of CFL GSLs that was published by the California Public Utilities Commission[150] in place of the underlying Weibull function used in the preliminary analysis. DOE also analyzed a scenario in which the renovation-driven lifetime scenario was modified to assume that five percent of GSLs fail within the first year of use (called ''immediate failures''). Further discussion of and results from these analyses are provided in appendix 8E. DOE invites comment on the three GSL service life scenarios in its analyses, as well as on the lifetime scenario accounting for GSL failure in the first year of use (see issue 33 in section VIII.E).

7. Residual Value

The residual value represents the remaining dollar value of surviving lamps at the end of the LCC analysis period (the lifetime of the shortest-lived GSL in each product class), discounted to the compliance year. To account for the value of any lamps with remaining life to the consumer, the LCC model applies this residual value as a ''credit'' at the end of the LCC analysis period. Because DOE estimates that GSLs undergo price learning, the residual value of these lamps is calculated based on the lamp price at the end of the LCC analysis period.

Philips expressed concern with DOE's residual value calculation in the preliminary analysis, stating that consumers typically dispose of their original lamp and purchase a newer lamp at a comparable price, rather than capturing any value from the original lamp by selling it. (Philips, Public Meeting Transcript, No. 29 at pp. 179–180). To clarify: When comparing products with differing lifetimes, DOE selected a common period over which to evaluate LCCs so that longer-lived lamps were not penalized for continuing to accrue operating costs over a longer operational life. DOE's residual value calculation does not consider the resale value of a lamp; rather, it calculates the value to a consumer of having a lamp that is still operational, instead of a lamp that has failed and must be replaced, at the end of the LCC analysis period.

The Northwest Power and Conservation Council suggested an alternative way for DOE to conduct the residual value analysis, which is to include the replacement cost of the shortest-lived lamp in its LCC. (Northwest Power and Conservation Council, Public Meeting Transcript, No. 29 at p. 181). The CEC commented that DOE needs to consider the remaining value of the energy savings associated with longer-lived lamps. (CEC, Public Meeting Transcript, No. 29 at pp. 193–194) Because consumers of lamps with shorter lives may choose to replace them with longer-lived or more efficacious lamps when they fail, DOE believes that it is inappropriate to make assumptions about the replacement costs borne or relative operating-cost savings accumulated by a consumer after the end of the LCC analysis period.

8. Disposal Cost

Disposal cost is the cost a consumer pays to dispose of their retired GSL. In the preliminary analysis, DOE assumed that 10 percent of commercial consumers pay $1 per lamp to dispose of CFL and LED lamps.[151] General Electric agreed with DOE's assumption that residential consumers do not pay for recycling their CFL lamps; however, General Electric indicated that up to 40 percent of CFL lamps are recycled in the commercial sector, at an average price of approximately $0.50 per lamp. (General Electric Lighting, Public Meeting Transcript, No. 29 at pp. 176–177) Westinghouse Lighting largely agreed with General Electric, stating that the disposal cost for commercial CFL lamps is below $1.00 per lamp, and estimating that the cost may actually be closer to $0.70 per lamp. (Westinghouse Lighting, Public Meeting Transcript, No. 29 at p. 177) NEMA cited the Universal Waste Rule to confirm that the lamp user is responsible for disposal, and also highlighted various approaches to lamp disposal taken by some states and retailers. (NEMA, No. 34 at pp. 23–24)

DOE reviewed the available data and agrees with GE and Westinghouse that a higher percentage of commercial fluorescent lamps are recycled, but at a lower cost than DOE assumed in the preliminary analysis. As discussed in the ceiling fan light kits energy conservation standards NOPR,[152] in 2004 and 2009 the estimated recycling rates for fluorescent lamps were approximately 29 percent and 33 percent, respectively. In the NOPR analyses, DOE assumed that by the

[150] James J. Hirsch and Associates and Erik Page & Associates, Inc. *CFL Laboratory Testing Report: Results from a CFL Switching Cycle and Photometric Laboratory Study*. 2015. California Public Utilities Commission—Energy Division: California. (Last accessed June 18, 2015.) *http://www.energydataweb.com/cpuc/search.aspx?did=1258.*

[151] GSL preliminary analysis at 8–25.

[152] The Ceiling Fan Light Kits Energy Conservation Standards docket can be accessed at: *http://www.regulations.gov/#!docketDetail;dct=FR%252BPR%252BN%252BO%252BSR%252BPS;rpp=25;po=25;D=EERE–2012–BT–STD–0045.*

compliance year 35 percent of CFLs are recycled, and this fraction was assumed to remain constant over the analysis period (for the NIA). DOE also received feedback from a lighting industry consultant indicating a recycling charge of $0.70 per lamp is reasonable; therefore, DOE has assumed for the NOPR analyses that it costs commercial consumers $0.70 per lamp to recycle CFLs. DOE has continued to assume no disposal cost for CFLs in the residential sector. Because LED lamps do not contain mercury, DOE has continued to assume no disposal costs for LED lamps in both the residential and commercial sectors.

DOE requests comment and relevant data on the disposal cost assumptions used in its analyses (see issue 34 in section VIII.E).

9. Discount Rates

In the calculation of LCC, DOE applies discount rates appropriate to consumers to estimate the present value of future operating costs.

To establish residential discount rates for the LCC analysis, DOE estimated a distribution of residential discount rates for GSLs based on consumer financing costs and opportunity cost of funds related to appliance energy cost savings. DOE identified all relevant household debt or asset classes to approximate a consumer's opportunity cost of funds related to GSL energy cost savings. It estimated the average percentage shares of the various types of debt and equity by household income group using data from the Federal Reserve Board's Survey of Consumer Finances [153] (SCF) for 1995, 1998, 2001, 2004, 2007, and 2010. Using the SCF and other sources, DOE developed a distribution of rates for each type of debt and asset by income group to represent the rates that may apply in the year in which amended standards would take effect. DOE assigned each sample household a specific discount rate drawn from one of the distributions. The average rate across all types of household debt and equity and income groups, weighted by the shares of each type, is 4.5 percent.

To establish commercial consumer discount rates for the LCC analysis, DOE estimated the cost of capital for companies that purchase GSLs. The weighted-average cost of capital is commonly used to estimate the present value of cash flows to be derived from a typical company project or investment. Most companies use both debt and equity capital to fund investments, so their cost of capital is the weighted average of the cost to the firm of equity and debt financing, as estimated from financial data for publicly traded firms in the sectors that purchase GSLs. For this analysis, DOE used Damodaran online [154] as the source of information about company debt and equity financing. The average rate across all types of companies that purchase GSLs, weighted by the total number of GSLs associated with each type, is 5.0 percent.

See chapter 8 of the NOPR TSD for further details on the development of consumer discount rates.

10. Efficacy Distributions

To accurately estimate the share of consumers that would be affected by a potential energy conservation standard at a particular EL, DOE's LCC analysis considered the projected distribution (*i.e.,* market shares) of product efficacies that consumers purchase under the no-new-standards case and each of the standards cases (*i.e.,* the cases where a standard would be set at each TSL) in the assumed compliance year. The estimated market shares for the no-new-standards case and each standards case are determined by the shipments analysis and are shown in Table V–12 and Table V–13. See section V.G.1 of this NOPR and chapter 9 of the NOPR TSD for further information on the derivation of the market efficacy distributions.

TABLE V–12—GSL MARKET EFFICACY DISTRIBUTION BY TRIAL STANDARD LEVEL IN 2020 FOR THE RESIDENTIAL SECTOR

Trial Standard Level	EL 0 (%)	EL 1 (%)	EL 2 (%)	EL 3 (%)	EL 4 (%)	Total (%)
Integrated Low-Lumen GSLs						
No-New-Standards	3.6	4.7	35.9	31.2	24.7	100
TSL 1	0	6.8	36.9	31.4	24.8	100
TSL 2	0	0	43.8	31.4	24.8	100
TSL 3	0	0	0	48.4	51.6	100
TSL 4	0	0	0	0	100	100
Integrated High-Lumen GSLs						
No-New-Standards	25.8	29.1	45.1	.....	.....	100
TSL 1	0	39.2	60.8	.....	.....	100
TSL 2	0	0	100	.....	.....	100
TSL 3	0	0	100	.....	.....	100
TSL 4	0	0	100	.....	.....	100

TABLE V–13—GSL MARKET EFFICACY DISTRIBUTION BY TRIAL STANDARD LEVEL IN 2020 FOR THE COMMERCIAL SECTOR

Trial standard level	EL 0 (%)	EL 1 (%)	EL 2 (%)	EL 3 (%)	EL 4 (%)	Total (%)
Integrated Low-Lumen GSLs						
No-New-Standards	1.8	3.7	25.7	36.3	32.6	100
TSL 1	0	4.9	26.1	36.4	32.6	100
TSL 2	0	0	31.0	36.4	32.6	100

[153] Board of Governors of the Federal Reserve System. Survey of Consumer Finances. 1995, 1998, 2001, 2004, 2007, and 2010. (Last accessed June 30, 2015.) *http://www.federalreserve.gov/econresdata/scf/scfindex.htm.*

[154] Damodaran, A. *Cost of Capital by Sector.* January 2014. (Last accessed September 25, 2014.) *http://people.stern.nyu.edu/adamodar/New_Home_Page/datafile/wacc.htm.*

TABLE V–13—GSL MARKET EFFICACY DISTRIBUTION BY TRIAL STANDARD LEVEL IN 2020 FOR THE COMMERCIAL SECTOR—Continued

Trial standard level	EL 0 (%)	EL 1 (%)	EL 2 (%)	EL 3 (%)	EL 4 (%)	Total (%)
TSL 3	0	0	0	43.7	56.3	100
TSL 4	0	0	0	0	100	100
Integrated High-Lumen GSLs						
No-New-Standards	16.9	23.5	59.6			100
TSL 1	0	28.3	71.7			100
TSL 2	0	0	100			100
TSL 3	0	0	100			100
TSL 4	0	0	100			100
Non-Integrated GSLs						
No-New-Standards	31.9	68.1				100
TSL 1	31.9	68.1				100
TSL 2	31.9	68.1				100
TSL 3	31.9	68.1				100
TSL 4	0	100				100

11. LCC Savings Calculation

In the reference scenario, DOE calculated the LCC savings at each TSL based on the change in LCC for each standards case compared to the no-new-standards case, considering the efficacy distribution of products derived by the shipments analysis. This approach allows consumers to choose more-efficient (and sometimes less expensive) products at higher ELs and is intended to more accurately reflect the impact of a potential standard on consumers.

In response to DOE's assumption that in a standards case consumers are assumed to purchase lamps that are at least as efficient as the ones they would purchase in the absence of standards, ASAP and NEEA expressed agreement while NEMA pointed out the possibility of manufacturers producing lamps with increased color rendering, long life, or other metrics, but lower efficiency in the no-new-standards case. (ASAP, Public Meeting Transcript, No. 29 at pp. 191–192; NEEA, Public Meeting Transcript, No. 29 at p. 192; NEMA, No. 34 at p. 22) Incorporating this could mean more consumers start with less efficient lamps in the no-new-standards case, but NEMA understands the difficulty in predicting future product development and acknowledged that DOE's assumption may be the most reasonable approach. (Id.)

DOE clarifies that the statement ''consumers are assumed to purchase lamps that are at least as efficient as the ones they would purchase in the absence of standards'' was not a constraint applied in determining the fraction of purchases made at each EL; rather, it was an attempt to describe how specific consumers in the LCC sample were assigned to ELs when a standard was assumed to be in place, where the fraction of consumers at each EL under a standard was determined by the consumer-choice model in the shipments analysis.

The consumer-choice model determines the fraction of consumers at each EL under a standard, but cannot track the purchasing decision for individual consumers in the LCC sample. Thus, in order to determine the fraction of consumers who experience a net cost, DOE must make a simplifying assumption to relate purchases for a particular consumer in a standards case and in the no-new-standards case. DOE assumed that the rank order of consumers, in terms of the efficacy of the product they purchase, is the same in the no-new-standards case as in the standards cases. In other words, DOE assumed that the consumers who purchased the most-efficacious products in the efficacy distribution in the no-new-standards case would continue to do so in standards cases, and similarly, those consumers who purchased the least efficacious products in the efficacy distribution in the no-new-standards case would continue to do so in standards cases. This assumption is only relevant in determining the fraction of consumers who experience a net cost in the LCC savings calculation, and has no effect on the estimated national impact of a potential standard. DOE has continued to make this simplifying assumption for the NOPR analysis.

CA IOUs indicated DOE should not assume that all products are barely compliant with the efficacy under consideration; instead, DOE should use a ''shift'' approach to model the likelihood of some consumers voluntarily exceeding the minimum efficiency standard. (CA IOUs, No. 33 at p. 8)

To clarify: In both the preliminary and the NOPR analyses, DOE has presented two sets of results in the LCC analysis per product class. The first set are the ''LCC results'', which represent the average costs a consumer is projected to pay for a product purchased at a particular ELs in the compliance year. These results are not intended to represent the impact of a standard. The second set of results are the ''LCC Savings'', which indicate the average change in LCC that consumers are projected to experience if a standard is set at a particular EL. In order to determine the LCC savings, DOE estimated the change to the efficacy distribution that would result from a standard set at each of the ELs under consideration. To do this DOE used a consumer-choice model, which allows for the possibility of consumers purchasing GSLs that exceed a given minimum efficiency standard under consideration.

For details on the LCC savings calculation, see chapter 8 of the NOPR TSD. For details on the consumer-choice model, see chapter 9 of the NOPR TSD.

12. Payback Period Analysis

The payback period is the amount of time it takes the consumer to recover any additional installed cost of more-efficient products, compared to the baseline product, through energy cost savings. Payback periods are expressed in years. Payback periods that exceed

the life of the product mean that the increased total installed cost is not recovered in reduced operating expenses.

The inputs to the PBP calculation for each EL are the change in total installed cost of the product and the change in the first year's annual operating expenditures relative to the baseline product. The PBP calculation uses the same inputs as the LCC analysis, except that discount rates and energy price trends are not needed.

As noted previously, EPCA, as amended, establishes a rebuttable presumption that a standard is economically justified if the Secretary finds that the additional cost to the consumer of purchasing a product complying with an energy conservation standard level will be less than three times the value of the first year's energy savings resulting from the standard, as calculated under the applicable test procedure. (42 U.S.C. 6295(o)(2)(B)(iii)) For each considered EL, DOE determined the value of the first year's energy savings by calculating the energy savings in accordance with the applicable DOE test procedure, and multiplying those savings by the average energy price forecast for the year in which compliance with the amended standards would be required.

G. Shipments Analysis

DOE uses projections of annual product shipments to calculate the national impacts of potential amended energy conservation standards on energy use, NPV, and future manufacturer cash flows.[155] The shipments model takes an accounting approach, tracking market shares of each product class and the vintage of units in the stock. Stock accounting uses product shipments as inputs to estimate the age distribution of in-service product stocks for all years. The age distribution of in-service product stocks is a key input to calculations of both the NES and NPV, because operating costs for any year depend on the age distribution of the stock.

1. Shipments Model

The shipments model projects shipments of GSLs over a thirty-year analysis period for the no-new-standards case and for all standards cases. Separate shipments projections are calculated for the residential sector and for the commercial and industrial sectors. The shipments model used to estimate GSL lamp shipments for this rulemaking has three main interacting elements: (1) A lamp demand module that estimates the demand for GSL lighting for each year of the analysis period; (2) a price-learning module, which projects future prices based on historic price trends; and (3) a market-share module that assigns shipments to the available lamp options.

a. Lamp Demand Module

The lamp demand module first estimates the national demand for GSLs in each year. The demand calculation assumes that sector-specific lighting capacity (maximum lumen output of installed lamps) remains fixed per square foot of floor space over the analysis period. Floor space changes over the analysis period according to the EIA's *AEO 2015* projections of residential and commercial floor space.[156] A lamp turnover calculation estimates demand for new lamps in each year given the growth of floor space in each year, the historical shipments of lamps in each product class, the expected lifetimes of the lamps, and sector-specific assumptions on operating hours and the distribution of per-lamp lumen output desired by consumers. (The assumed operating hours include the effect of rebound in the standards cases for the alternative scenario that includes rebound.) The lamp demand module also accounts for the adoption of integral LED luminaires into lighting applications traditionally served by GSLs; for the possibility that commercial consumers will transition between the non-integrated and integrated GSL product classes in the future; and for consumers' transitioning between GSILs and CFL or LED GSLs during the analysis period, either spontaneously or due to standards. Further details on the assumptions used to model these market transitions are presented in chapter 9 of the NOPR TSD.

CEC asked DOE to update the shipments analysis to reflect market changes that occurred between the preliminary analysis and the NOPR analyses. (CEC, No. 31 at p. 2). The shipments analysis in this NOPR accounted for shipments that occurred through the first calendar quarter of 2015 [157] and utilized inputs from the updated engineering analysis that considered 2015 market conditions. DOE requests relevant data on GSL shipments as they become available in order to improve the accuracy of the shipments analysis (see issue 35 in section VIII.E).

The demand module used in the preliminary analysis required assumptions about the breakdown of integrated GSLs between the Integrated Low-Lumen and Integrated High-Lumen product classes, as well as about the rate of transition between non-integrated and integrated GSLs. NEMA disagreed with DOE's assumption that non-integrated CFL GSLs will remain a constant fraction of the installed GSL stock in the commercial sector, indicating that non-integrated CFL GSLs will be significantly replaced by LEDs over the next 30 years (thereby significantly lowering the market share of non-integrated CFL GSLs). (NEMA, No. 34 at p. 24) General Electric and NEEA agreed with NEMA. (General Electric Lighting, Public Meeting Transcript, No. 29 at p. 224; NEEA, Public Meeting Transcript, No. 29 at pp. 225–226) DOE agrees that non-integrated CFL GSLs will have a shrinking market share during the analysis period for the reasons mentioned by the commenters. In the NOPR analysis, DOE has assumed that no non-integrated GSL systems are installed in new construction or in renovations, with systems removed for renovation being replaced either by integrated GSLs or by integrated LED fixtures. Because of this, the total shipments of integrated GSLs fall monotonically over the analysis period and eventually reach zero.

In the preliminary analysis, DOE assumed that some fraction of residential consumers currently utilizing GSILs will spontaneously adopt CFL or LED GSLs in each year before 2020. As discussed previously, DOE assumes that the EISA backstop provision will take effect in 2020; therefore, all GSL shipments in 2020 and after were assumed to be CFL or LED GSLs.

NEMA agreed that in each year prior to 2020 there will be some shift from incandescent lamps to CFL and LED lamps, as well as some shift from CFL lamps to LED lamps, and that these shifts will be increasing over time. (NEMA, No. 34 at p. 26) However, NEMA did not agree with DOE's assumption that a substantial fraction of the GSL market will shift from incandescent to CFL and LED in 2020, indicating that the dramatic sales increase presented in the preliminary analysis shipments results is an impractical assumption. (Id.) Given the

[155] DOE uses data on manufacturer shipments as a proxy for national sales, as aggregate data on sales are lacking. In general one would expect a close correspondence between shipments and sales.

[156] U.S. Energy Information Administration. *Annual Energy Outlook 2015 with Projections to 2040.* 2015. Washington, DC Report No. DOE/EIA–0383(2015). (Last accessed June 5, 2015.) *http://www.eia.gov/forecasts/aeo/pdf/0383(2015).pdf.*

[157] National Electrical Manufacturers Association. *Lamp Indices.* (Last accessed July 7, 2015.) *http://www.nema.org/Intelligence/Pages/Lamp-Indices.aspx.*

current, significant gap in efficacy between halogen incandescent lamps and the 45 lm/W efficacy level specified by the EISA 2007 backstop requirement, DOE believes that it is very unlikely that GSILs will be able to meet the EISA backstop requirement. Therefore, if the backstop takes effect in 2020, all remaining GSIL demand will shift out of necessity to CFL and LED GSLs. This NOPR modifies the assumptions about this shift that were utilized in the preliminary analysis by assuming that the shift will take place over a period of several years, rather than occurring largely in 2020, since some GSILs have low HOU, and, accordingly, longer lifetimes. DOE requests comment on the assumption that the shift to CFL and LED GSLs during the shipments analysis period will take place over several years (see issue 36 in section VIII.E). NEMA also requested that DOE consider an alternative scenario in which halogen lamps remain on the market. (NEMA, No. 34 at p. 27) As discussed previously, due to the Appropriations Rider, DOE did not analyze GSILs in this NOPR, and thus did not consider halogen lamps.

b. Price-Learning Module

The price-learning module estimates GSL prices in each year of the analysis period using a standard price-learning model,[158] which relates the price of a given technology to its cumulative production, as represented by total cumulative shipments. DOE applied experience curves to CFL and LED lamps separately according to recent studies on price and shipments trends for these technologies.[159] [160] Current cumulative shipments are determined for each technology at the start of the analysis period and are augmented in each subsequent year of the analysis based on the shipments determined for the prior year. New prices for each technology are calculated from the updated cumulative shipments according to the experience curve for each technology. The current year's shipments, in turn, affect the subsequent year's prices. As shown in chapter 9 of the NOPR TSD, because LED GSLs are a relatively young technology, their cumulative shipments increase rapidly and hence they undergo a substantial price decline during the shipments analysis period. By contrast, since CFL technology is more mature, CFL GSL prices decline by a relatively small amount.

CA IOUs indicated that the prices DOE used in the preliminary analysis for integrated low-lumen lamps at each EL in 2020 are too high. (CA IOUs, No. 33 at p. 5) DOE notes that the prices indicated by CA IOUs in their comment were the 2014 prices DOE used in the preliminary analysis, not the prices DOE projected for 2020. Due to price learning, the 2020 prices DOE used in the preliminary analysis were lower than the 2014 prices CA IOUs based their comment on. Discussion of the 2014 prices can be found in V.D.

Westinghouse Lighting stated that DOE should not assume any price learning for CFL lamps. (Westinghouse Lighting, Public Meeting Transcript, No. 29 at p. 209) The California IOUs suggested DOE account for price learning for all LED representative units considered in the analysis. (California IOUs, Public Meeting Transcript, No. 29 at p. 211) DOE believes that price learning will continue for any technologies on the market that are not obsolete and, further, that CFL GSLs are not an obsolete technology in general. Additionally, DOE believes that all of the LED GSL lamp options considered in this analysis represent lamps with an active presence in the current market. Therefore, DOE has assumed that price learning will occur for all lamp options considered in this NOPR. Further discussion on the price learning DOE applied for the NOPR analysis is in chapter 9 of the NOPR TSD. DOE invites comment on its approach to price learning (see issue 37 in section VIII.E).

The preliminary analysis assumed that there was no minimum price difference between lamps with different lumen outputs at a given EL.[161] Southern Company, NRDC, the California IOUs, Westinghouse Lighting, and NEMA suggested DOE ensure that its analyses assume a difference in the incremental price of LED lamps in different lumen bins (*i.e.,* lamps in higher lumen bins will never have exactly the same price as lamps in lower lumen bins). (Southern Company, Public Meeting Transcript, No. 29 at pp. 213–215; NRDC, Public Meeting Transcript, No. 29 at p. 216; California IOUs, Public Meeting Transcript, No. 29 at p. 217; Westinghouse Lighting, Public Meeting Transcript, No. 29 at pp. 218–219; NEMA, No. 34 at p. 25) DOE agrees that lamps in different lumen bins will continue to have a non-zero price difference. In this NOPR, DOE has assumed that lamps in brighter lumen bins have a fixed fractional price increment relative to lamps in dimmer lumen bins. With this approach, the absolute price difference between lumen bins will decline if lamp prices decline, but the difference will always remain greater than zero. DOE requests comment on the assumption that brighter lumen bins have a fixed fractional price increment relative to lamps in dimmer lumen bins (see issue 39 in section VIII.E).

NEMA commented that high efficiency standards could cause lamp prices to remain constant, as manufacturers are forced to focus more on efficiency than cost reduction; alternatively, NEMA believes that setting a lower efficiency standard would allow manufacturers to pursue cost savings, resulting in increased adoption of efficient GSLs. (NEMA, No. 34 at p. 25) DOE has observed that the prices of LED GSLs have fallen rapidly even as the efficacy of such lamps has improved in recent years. The price trends used in this analysis are based on these recent price declines that have occurred in tandem with increased efficacy. Based on this history, DOE believes that it is possible for efficacy to continue to improve even as prices decline for LED GSLs.

c. Market-Share Module

The market-share module apportions the lamp shipments in each year among the different lamp options developed in the engineering and LCC analyses, based on consumer sensitivity to lamp price, lifetime, energy savings, and mercury content, as measured in a recent market study,[162] as well as on consumer preferences for lighting technology (CFL or LED) as revealed in historical shipments data. The market-share module assumes that, when replacing a lamp, consumers will choose from among all of the available lamp options with a similar lumen output to the lamp being replaced. It also assumes that the distribution of lamp lumen outputs

[158] Taylor, M. and S. K. Fujita. *Accounting for Technological Change in Regulatory Impact Analyses: The Learning Curve Technique.* 2013. Lawrence Berkeley National Laboratory: Berkeley, CA. Report No. LBNL–6195E. (Last accessed June 23, 2015.) *http://eetd.lbl.gov/publications/accounting-for-technological-change-0.*

[159] Gerke, B., A. Ngo, A. Alstone, and K. Fisseha. *The Evolving Price of Household LED Lamps: Recent Trends and Historical Comparisons for the US Market.* 2014. Lawrence Berkeley National Laboratory: Berkeley, CA. Report No. LBNL–6854E. (Last accessed June 15, 2015.) *http://eetd.lbl.gov/publications/the-evolving-price-of-household-led-l.*

[160] Gerke, B. F., A. T. Ngo, and K. S. Fisseha. *Recent Price Trends and Learning Curves for Household LED Lamps from a Regression Analysis of Internet Retail Data.* 2015. Lawrence Berkeley National Laboratory: Berkeley, CA. Report No. LBNL–184075. (Last accessed June 24, 2015.) *http://eetd.lbl.gov/publications/recent-price-trends-and-learning-curv.*

[161] GSL preliminary analysis at 2–87.

[162] Krull, S. and D. Freeman. *Next Generation Light Bulb Optimization.* 2012. Pacific Gas and Electric Company. (Last accessed June 23, 2015.) *http://www.etcc-ca.com/sites/default/files/OLD/images/stories/Lighting_Conjoint_Study_v020712f.pdf.*

demanded for new construction and renovations is the same as the average distribution for all shipments. Substitution matrices were developed to specify the product choices available to consumers depending on the lumen output they require. The available options depend on the case under consideration; in each of the standards cases corresponding to the different TSLs, only those lamp options at or above the particular standard level in each product class are considered to be available. The market-share module also incorporates a limit on the diffusion of LED technology into the market using the widely accepted Bass adoption model,[163] the parameters of which are based on historic penetration rates of new lighting technologies into the market. In this way, the module assigns market shares to the different ELs based on observations of consumer preferences.

Westinghouse Lighting and the Northwest Power and Conservation Council highlighted the inverse relationship between GSL life and cost, indicating that GSL cost is a major driver of adoption. (Westinghouse Lighting, Public Meeting Transcript, No. 29 at p. 35; Northwest Power and Conservation Council, Public Meeting Transcript, No. 29 at p. 37) DOE notes that in the shipments analysis, the market-share module accounts for consumer sensitivity to cost, efficiency, and other metrics (see chapter 9 of the NOPR TSD for more details).

2. Rare Earth Oxides

Rare earth oxides (REOs) are used in CFL GSL phosphors to increase luminous efficacy, so affect CFL prices. Large increases in REO prices in 2010 and 2011 raised manufacturer concerns that future price increases could have adverse impacts on the market. DOE developed shipments scenarios in its preliminary analysis to reflect uncertainties in the prices of REOs. DOE's reference case assumed that REO prices would remain constant at the June 2014, level, but DOE acknowledged the uncertainty about prices and included a scenario with much higher REO prices.

Philips indicated that recent reports are suggesting the prices of REOs may increase, due to China's overwhelming control over their production quantities of REOs. (Philips, Public Meeting Transcript, No. 29 at p. 228) NEMA indicated that an increase in rare earth oxide prices impacts the industry as well as consumers. NEMA also referenced the comments they submitted to the GSFL and IRL standards rulemaking,[164] in which NEMA indicated that rare earth oxide prices are more likely to increase in the future than decrease, and that higher efficiency fluorescent lamps have more rare earth oxide contents (by weight). (NEMA, No. 34 at p. 25)

DOE has monitored the price of REOs since the publication of the preliminary analysis and found that their prices have declined over that time period.[165] Additionally, DOE's data show that the price of REOs remained relatively stable over the last half of 2014 and the first half of 2015. Therefore, DOE has maintained its reference scenario assumption from the preliminary analysis: Rare earth oxide prices remain constant at their June 2014 level. Moreover, because REO prices represent a very small portion of the total price of CFL GSLs, the alternative REO price scenario had a minimal impact on the outcome of the preliminary analyses. For this reason, and because REO prices have been stable or declining for several years, DOE did not analyze a scenario with higher REO prices for this NOPR.

H. National Impact Analysis

The NIA assesses the NES and the national NPV from a national perspective of total consumer costs and savings that would be expected to result from new or amended standards at specific ELs.[166] (''Consumer'' in this context refers to consumers of the product being regulated.) DOE calculates the NES and NPV based on projections of annual product shipments and prices, along with the HOU and energy prices from the energy use and LCC analyses.[167] For the present analysis, DOE projected the energy savings, operating-cost savings, product costs, and NPV of consumer benefits over the lifetime of GSLs sold from 2020 through 2049.

DOE evaluates the impacts of new and amended standards by comparing a case without such standards with standards-case projections. The no-new-standards case characterizes energy use and consumer costs for each analyzed product class in the absence of new or amended energy conservation standards. DOE compares the no-new-standards case with projections characterizing the market for each product class if DOE adopted new or amended standards at specific ELs (*i.e.,* the TSLs or standards cases) for that class. For the standards cases, DOE considers how a given standard would likely affect the market shares of products with efficacies greater than the standard.

DOE uses a spreadsheet model to calculate the energy savings and the national consumer costs and savings from each TSL. Interested parties can review DOE's analyses by changing various input quantities within the spreadsheet. The NIA spreadsheet model uses typical values (as opposed to probability distributions) as inputs.

Table V–14 summarizes the inputs and methods DOE used for the NIA analysis for the NOPR. Discussion of these inputs and methods follows the table. See chapter 10 of the NOPR TSD for further details.

TABLE V–14—SUMMARY OF INPUTS AND METHODS FOR THE NATIONAL IMPACT ANALYSIS

Inputs	Method
Shipments	Annual shipments for each lamp option from shipments model for the no-new standards case and each TSL analyzed.
Assumed compliance date of standard	January 1, 2020.
No-new-standards efficacy distribution	Estimated from market-share module of shipments analysis.
Standards-case efficacy distribution	Estimated by the market-share module of the shipments analysis.
Annual energy use per unit	Calculated for each lamp option based on inputs from the Energy Use Analysis.
Total installed cost per unit	Uses lamp prices, and for the commercial sector only, installation costs from the LCC analysis.

[163] Bass, F. M. A New Product Growth Model for Consumer Durables. *Management Science.* 1969. 15(5): pp. 215–227. (Last accessed June 23, 2015.) *http://pubsonline.informs.org/doi/abs/10.1287/mnsc.15.5.215.*

[164] For all materials related to this GSFL and IRL standards rulemaking, see regulations.gov under docket number EERE–2011–BT–STD–0006.

[165] Metal-Pages. *Historical Prices.* 2015. (Last accessed June 23, 2015.) *http://www.metal-pages.com/.*

[166] The NIA accounts for impacts in the 50 States and the U.S. territories.

[167] For the NIA, DOE adjusts the installed cost data from the LCC analysis to exclude sales tax, which is a transfer.

TABLE V–14—SUMMARY OF INPUTS AND METHODS FOR THE NATIONAL IMPACT ANALYSIS—Continued

Inputs	Method
Electricity prices	Estimated marginal electricity prices from the LCC analysis.
Energy price trends	AEO 2015 forecasts (to 2040) and extrapolation thereafter.
Annual operating cost per unit	Calculated for each lamp option using the energy use per unit, and electricity prices and trends.
Energy Site-to-Primary Conversion	A time-series conversion factor based on AEO 2015.
Discount rate	Three and seven percent real.
Present year	2015.

1. National Energy Savings

The NES analysis involves a comparison of national energy consumption of the considered products in each TSL with consumption in the case with no new or amended energy conservation standards. DOE calculated the annual national energy consumption by multiplying the number of units (stock) of each lamp option (by vintage or age) by the unit energy consumption (also by vintage) for each year in the analysis. The NES is based on the difference in annual national energy consumption for the no-new-standards case and each of the standards cases. DOE estimated the energy consumption and savings based on site energy and converted to the electricity consumption and savings at the power plant using annual conversion factors derived from *AEO 2015.* Cumulative energy savings are the sum of NES for each year over the analysis period, taking into account the full lifetime of lamps shipped in 2049.

DOE accounts for the direct rebound effect in its NES analyses. Direct rebound reflects the idea that as appliances become more efficient, consumers use more of their service because their operating cost is reduced. In the case of lighting, the rebound could be manifested in increased HOU or in increased lighting density (lamps per square foot). In the preliminary analysis DOE assumed no rebound in both the residential and commercial sectors. General Electric and Westinghouse Lighting suggested DOE assume some amount of rebound. (General Electric Lighting, Public Meeting Transcript, No. 29 at pp. 236–237; Westinghouse Lighting, Public Meeting Transcript, No. 29 at pp. 238–239) ASAP and NEEA commented that they do not expect a rebound effect associated with moving from a CFL lamp to an LED lamp. (ASAP, Public Meeting Transcript, No. 29 at p. 241; NEEA, Public Meeting Transcript, No. 29 at p. 241) NEMA expects little to no rebound effect in the commercial sector, but foresees an 8.5 percent to 15 percent rebound effect for LED lamps used in the residential sector. (NEMA, No. 34 at p. 27)

While some commenters believed that some degree of rebound would be expected in moving from incandescent GSLs to more efficacious CFL and LED GSLs, most commenters did not anticipate rebound when moving from CFLs to LED lamps (the case considered by this rulemaking) in the residential sector, and none anticipated rebound in the commercial sector. Due to the relatively small incremental increase in efficacy between CFLs and LED GSLs, DOE did not include any rebound in either the residential or commercial sectors in the reference scenario. Additionally, as discussed in more detail in appendix 10D of the NOPR TSD, examining DOE's 2001 and 2010 U.S. LMC studies [168] [169] indicates that there has been reduction in total lamp operating hours in the residential sector concomitant with increases in lighting efficiency. This operating hour reduction was derived from residential usage of incandescent, fluorescent, HID, and solid state GSL lamps and may be explained by a negative rebound effect or other economic factors such as the recent economic downturn.

The daily operating hours for residential incandescent GSL lamps from both 2001 and 2010 LMC reports indicate that incandescent lamps have lower operating hours, 1.9 hours per day when compared to lamps such as CFLs and LED lamps, which were reported to have usage rates as high at 2.2 hours per day. This could be construed to suggest that a positive rebound may result if a significant portion of the market moves from incandescent GSLs to more efficacious CFL or LED lamps. However, DOE's understanding is that the CFL and LED GSLs are currently preferentially installed in sockets with higher operating hours. NEMA's comments on the preliminary analysis corroborate this point. (NEMA, No. 34 at p. 19) The lower overall hours of use in 2010 suggests no positive rebound on a per-socket basis. Therefore DOE assumed that the overall hours of use for all GSLs when CFLs and LEDs fill all sockets during the analysis period will be the same as the current overall hours of use for all GSLs. DOE did consider an alternative scenario, in which there was 15 percent rebound in the residential sector, to illustrate the impact rebound would have. See appendix 10E of the NOPR TSD.

Consistent with what was stated above for the residential sector, DOE does not expect there to be any rebound effect associated with the commercial sector due to the relatively small incremental increase in efficacy between CFL and LED GSLs. NEMA agreed that rebound is not expected for the commercial sector in its response to the preliminary analysis. (NEMA, No. 34 at p. 27) However, DOE requests comment on the rebound assumptions for both the residential and commercial sectors and any data that can be used to further refine the rebound effect assumptions used in the shipments and NIA analyses (see issue 40 in section VIII.E).

In response to the recommendations of a committee on ''Point-of-Use and Full-Fuel-Cycle Measurement Approaches to Energy Efficiency Standards'' appointed by the National Academy of Sciences, DOE announced its intention to use FFC measures of energy use and greenhouse gas and other emissions in the national impact analyses and emissions analyses included in future energy conservation standards rulemakings. 76 FR 51281 (August 18, 2011). After evaluating the approaches discussed in the August 18, 2011 notice, DOE published a statement of amended policy in which DOE explained its determination that EIA's National Energy Modeling System (NEMS) is the most appropriate tool for its FFC analysis and its intention to use NEMS for that purpose. 77 FR 49701

[168] Navigant Consulting, Inc. *U.S. Lighting Market Characterization, Volume I: National Lighting Inventory and Energy Consumption Estimate.* 2002. U.S. Department of Energy. (Last accessed June 10, 2015.) *http://apps1.eere.energy.gov/buildings/publications/pdfs/corporate/lmc_vol1.pdf.*

[169] Navigant Consulting, Inc. *Final Report: 2010 U.S. Lighting Market Characterization.* 2012. U.S. Department of Energy. (Last accessed June 10, 2015.) *http://apps1.eere.energy.gov/buildings/publications/pdfs/ssl/2010-lmc-final-jan-2012.pdf.*

(August 17, 2012). NEMS is a public domain, multi-sector, partial equilibrium model of the U.S. energy sector that EIA uses to prepare its *AEO.*[170] The approach used for deriving FFC measures of energy use and emissions is described in appendix 10B of the NOPR TSD.

a. Smart Lamps

Integrated GSLs with standby functionality, henceforth referred to as smart lamps, were not explicitly analyzed in the shipments analysis. To account for the additional energy use due to standby for such lamps in the NIA, DOE assumed that smart lamps would make up an increasing fraction of integrated low-lumen lamps following a Bass adoption curve.

In the preliminary analysis, DOE considered a reference scenario in which penetration of smart lamps increased over the analysis period, reaching 50 percent by the end of the analysis period, as well as alternative scenarios in which the smart-lamp penetration in the residential sector never exceeded 0 percent and reached 100 percent by the end of the analysis period to gauge the impact of smart lamp penetration.[171]

NEMA agreed that the penetration of smart lamps into the residential sector will increase, but did not believe the market share for smart lamps will ever reach 100 percent, as there will always be a market for more basic, lower-cost lamps. (NEMA, No. 34 at p. 27) DOE agrees with NEMA that smart lamps are unlikely to ever achieve 100 percent market share in the residential sector, particularly given the existence of lighting controls that are external to the lamp. In the NOPR analyses, DOE considered three lighting-controls scenarios including a smaller range of penetration for smart lamps: 0 percent smart-lamp penetration in the residential sector by 2049, 50 percent penetration (the reference scenario), and a high residential-controls scenario which assumed that externally controlled sockets increase to 50 percent of all sockets in 2049 in addition to a 50 percent penetration of smart lamps in 2049. DOE invites comment on these scenarios (see issue 42 in section VIII.E).

In the preliminary analysis, DOE assumed that there was no standby power associated with smart lamps.[172] In response to this assumption, Westinghouse Lighting stated that smart lamps must have some associated standby power, otherwise they would not function as intended. (Westinghouse Lighting, Public Meeting Transcript, No. 29 at pp. 239–240) NEEA suggested smart lamps may have standby power on the order of 0.5 watts. (NEEA, Public Meeting Transcript, No. 29 at p. 243) For the NOPR analysis, DOE has estimated that smart lamps have a standby power consumption of 0.5 watts due to the receiver. This estimation was based on the findings from a 4E Electronic Devices & Networks Annex report (hereafter referred to as the ''EDNA report'') [173] as well as the maximum standby power allowed in the ENERGY STAR Luminaires Specification V2.0 [174] for luminaires with integral motion sensors, occupancy sensors or photosensors, or connected functionality. Furthermore, DOE attributed an additional 0.33 W of standby power for each smart lamp to account for the power draw of the hub for smart lamps that operate with one. This value is based on data indicating smart-lamp hubs consume approximately 2 W of power on average (from the EDNA report), as well as the assumption that 50 percent of smart lamps operate with a hub and three smart lamps, on average, are connected to each hub.

In the preliminary analysis, DOE assumed smart lamps would achieve the same 30 percent energy savings as lamps under other types of controls. NEEA and Southern Company commented that the enhanced convenience associated with smart lamps, even though the lamps are inherently controlled, means these lamps will not necessarily result in real energy savings. (NEEA, Public Meeting Transcript, No. 29 at pp. 240, 243; Southern Company, Public Meeting Transcript, No. 29 at pp. 242–243) DOE is unaware of any data suggesting how HOU or the impact of controls may differ for smart lamps compared to other GSLs that operate with controls; therefore, for the NOPR analysis DOE continued to assume 30 percent energy savings for smart lamps. DOE requests data and information on the assumption of 30 percent energy savings for smart lamps (see issue 43 in section VIII.E).

2. Net Present Value Analysis

The inputs for determining the NPV of the total costs and benefits experienced by consumers are: (1) Total annual installed cost; (2) total annual savings in operating costs; and (3) a discount factor to calculate the present value of costs and savings. DOE calculates net savings each year as the difference between the no-new-standards case and each standards case in terms of total savings in operating costs versus total increases in installed costs. DOE calculates operating-cost savings over the lifetime of each product shipped during the forecast period.

As discussed in section V.G.1.b of this notice, DOE developed GSL prices using a price-learning module incorporated in the shipments analysis. By 2049, which is the end date of the forecast period, the average LED GSL price is projected to drop 83 percent relative to 2015 and the average price of CFL GSLs is projected to drop 13 percent relative to 2015. DOE's projection of product prices is described in chapter 9 of the NOPR TSD.

The operating-cost savings are primarily energy cost savings, which are calculated using the estimated energy savings in each year and the projected price of electricity. To estimate energy prices in future years, DOE multiplied the average national marginal electricity prices by the forecast of annual national-average residential or commercial electricity price changes in the reference case from *AEO 2015,* which has an end year of 2040. To estimate price trends after 2040, DOE used the average annual rate of change in prices from 2020 to 2040.

To evaluate the impact of the economic assumptions used in the NIA, DOE considered two alternative scenarios; a low benefits scenario and a high benefits scenario. The low benefits scenario uses AEO 2015 Low Economic Growth scenario for energy price trends and floorspace growth, coupled with a high price decline rate for LED GSLs. The high benefits scenario uses AEO 2015 High Economic Growth scenario for energy price trends and floorspace growth, coupled with low price decline rate for LED GSLs. The benefits to consumers from GSL standards are lower if LED GSL prices decline faster because consumers convert to LED GSLs more quickly in the no-new-standards case; conversely, the benefits to consumers from GSL standards are higher if LED GSL prices decline slower because consumers are slow to convert to LED GSLs in the no-new-standards

[170] For more information on NEMS, refer to *The National Energy Modeling System: An Overview,* DOE/EIA–0581 (98) (Feb.1998) (Available at: *http://www.eia.gov/oiaf/aeo/overview/*).

[171] GSL preliminary analysis at 10–7.

[172] *Id.* at 10–8.

[173] *Smart Lamp Testing—Initial Results.* 2014. 4E Electronic Devices & Networks Annex. (Last accessed June 25, 2015.) *http://edna.iea-4e.org/files/otherfiles/0000/0100/Smart_Lights_Paper_for_EDNA_Website_v3.pdf.*

[174] ENERGY STAR. *ENERGY STAR Program Requirements: Product Specification for Luminaires (Light Fixtures): Eligibility Criteria, Version 2.0.* 2015. U.S. Environmental Protection Agency: Washington, DC (Last accessed July 7, 2015.) *https://www.energystar.gov/sites/default/files/Luminaires%20V2.0%20Final%20Specification.pdf.*

case. The high and low price trends are based on the 95-percent confidence interval of the learning rate for LED GSLs from a recent study of LED price trends.[175] DOE invites comments on the high and low benefits scenarios considered in its analysis (see issue 44 in section VIII.E). NIA results for the high and low benefits scenarios are presented in appendix 10E of the NOPR TSD.

In addition to the high and low benefits scenarios, DOE considered several other scenarios in its shipments and NIA analyses. DOE invites comments on whether there are other scenarios that should be considered (see issue 45 in section VIII.E). Results for the alternative scenarios can be found in appendix 10E of the NOPR TSD.

In calculating the NPV, DOE multiplies the net savings in future years by a discount factor to determine their present value. For this NOPR, DOE estimated the NPV of consumer benefits using both a 3-percent and a 7-percent real discount rate. DOE uses these discount rates in accordance with guidance provided by the Office of Management and Budget (OMB) to federal agencies on the development of regulatory analysis.[176] The discount rates for the determination of NPV are in contrast to the discount rates used in the LCC analysis, which are designed to reflect a consumer's perspective. The 7-percent real value is an estimate of the average before-tax rate of return to private capital in the U.S. economy. The 3-percent real value represents the ''social rate of time preference,'' which is the rate at which society discounts future consumption flows to their present value.

I. Consumer Subgroup Analysis

In analyzing the potential impact of new or amended standards on consumers, DOE evaluates the impact on identifiable subgroups of consumers that may be disproportionately affected by a new or amended national standard. DOE evaluates impacts on particular subgroups of consumers by analyzing the LCC impacts and PBP for those particular consumers from alternative standard levels. For this NOPR, DOE analyzed the impacts of the considered standard levels on low-income households and small businesses. DOE requests comment on the consumer subgroups selected for analysis in this NOPR (see issue 46 in section VIII.E). Chapter 11 in the NOPR TSD describes the consumer subgroup analysis.

NEMA stated that low-income consumers will be most affected if low-cost halogen or CFL lamps are no longer available in 2020. (NEMA, No. 34 at p. 27) In the NOPR, DOE analyzed the impacts of amended energy efficiency standards on low-income consumers and small businesses. The results of these analyses can be seen in section VI.B.1.b. DOE found that the average LCC savings and PBPs for low-income households at the considered ELs are not substantially different from the averages for all households.

J. Manufacturer Impact Analysis

1. Overview

DOE conducted an MIA for GSLs to estimate the financial impact of proposed standards on manufacturers of GSLs. The MIA has both quantitative and qualitative aspects. The quantitative part of the MIA relies on the GRIM, an industry cash-flow model customized for the GSLs covered in this rulemaking. The key GRIM inputs are data on the industry cost structure, manufacturer production costs (MPCs), shipments, and assumptions about manufacturer markups, and manufacturer conversion costs. The key MIA output is INPV. The GRIM calculates annual cash flows using standard accounting principles. DOE used the GRIM to compare changes in INPV between a no-new-standards case and various TSLs (the standards cases). The difference in INPV between the no-new-standards case and standards cases represents the financial impact of new and amended energy conservation standards on GSL manufacturers. Different sets of assumptions (scenarios) produce different INPV results. The qualitative part of the MIA addresses factors such as manufacturing capacity; characteristics of, and impacts on, any particular subgroup of manufacturers; the cumulative regulatory burden place on the GSL industry; and any impacts on competition.

DOE conducted the MIA for this rulemaking in three phases. In the first phase, DOE prepared an industry characterization based on the market and technology assessment, preliminary manufacturer interviews, and publicly available information. In the second phase, DOE estimated industry cash flows in the GRIM using industry financial parameters derived in the first phase and the shipment scenarios created in the shipment analysis. In the third phase, DOE conducted interviews with a variety of GSL manufacturers that account for the majority of domestic GSL sales covered by this rulemaking. During these interviews, DOE discussed engineering, manufacturing, procurement, and financial topics specific to each company and obtained each manufacturer's view of the GSL industry as a whole. The interviews provided information that DOE used to evaluate the impacts of new and amended standards on manufacturers' cash flows, manufacturing capacities, and direct domestic manufacturing employment levels. See section VI.B.2.b of this NOPR for the discussion on the estimated changes in the number of domestic employees involved in manufacturing GSLs covered by standards. See section V.J.4 of this NOPR for a description of the key issues that manufacturers raised during manufacturer interviews.

During the third phase, DOE also used the results of the industry characterization analysis in the first phase and feedback from manufacturer interviews to group manufacturers that exhibit similar production and cost structure characteristics. DOE identified one manufacturer subgroup for a separate manufacturer impact analysis—small businesses. DOE determined that GSL manufacturing falls under the North American Industry Classification System (NAICS) code of 335110, electric lamp bulb and part manufacturing. The Small Business Administration (SBA) defines a small business as having less than 1,000 total employees for manufacturers operating under this NAICS code. This threshold includes all employees in a business' parent company and any other subsidiaries. Based on this classification, DOE identified 41 GSL manufacturers that qualify as small businesses. The complete MIA is presented in chapter 12 of the NOPR TSD, and the analysis required by the Regulatory Flexibility Act, 5 U.S.C. 601, *et seq.*, is presented in section VII.B of this NOPR.

2. GRIM Analysis and Key Inputs

DOE uses the GRIM to quantify the changes in cash flows over time due to new and amended energy conservation standards. These changes in cash flows result in either a higher or lower INPV for the standards cases compared to the no-new-standards case. The GRIM uses a standard annual cash-flow analysis that incorporates MPCs, manufacturer markups, shipments, and industry financial parameters as inputs. It then models changes in MPCs, manufacturer investments, and shipments that result from new and amended energy conservation standards. The GRIM uses these inputs to calculate a series of annual cash flows beginning with the

[175] Gerke, et al. (2015), op. cit.

[176] United States Office of Management and Budget. Circular A–4: Regulatory Analysis,'' (Sept. 17, 2003), section E (Available at: *www.whitehouse.gov/omb/memoranda/m03-21.html*).

reference year of the analysis, 2015, and continuing to 2049. DOE computes INPV by summing the stream of annual discounted cash flows during the analysis period. DOE used a real discount rate of 6.1 percent for GSL manufacturers. This initial discount rate estimate was derived from industry corporate annual reports to the Securities and Exchange Commission (SEC 10-Ks). During manufacturer interviews, GSL manufacturers were asked to provide feedback on this discount rate. Most GSL manufacturers agreed that a 6.1 percent discount rate accurately reflected their typical rate of return on their investments.

Many inputs into the GRIM come from the engineering analysis, the shipment analysis, manufacturer interviews, and other research conducted during the MIA. The major GRIM inputs are described in detail in the following sections.

a. Capital and Product Conversion Costs

DOE expects new and amended energy conservation standards to cause manufacturers to incur conversion costs by bringing their tooling and product designs into compliance with new and amended standards. For the MIA, DOE classified these conversion costs into two major groups: (1) Capital conversion costs and (2) product conversion costs. Capital conversion costs are investments in property, plant, and equipment necessary to adapt, change, or expand existing tooling equipment such that new product designs can be fabricated and assembled. Product conversion costs are investments in research, development, testing, marketing, certification, and other non-capitalized costs necessary to make product designs comply with new and amended standards.

Using feedback from manufacturer interviews, DOE conducted a bottom-up analysis to calculate the capital and product conversion costs for GSL manufacturers for each product class at each EL. To conduct this bottom-up analysis, DOE used manufacturer input from manufacturer interviews regarding the types and dollar amounts of discrete capital and product expenditures that would be necessary to convert specific production lines and product designs for each GSL product class at each EL. Manufacturers frequently provided a range of potential conversion costs for each product class at each EL. DOE used this range to create a high and low conversion cost investment scenario due to the uncertainty of these costs across the entire industry. Each conversion cost investment scenario leads to different levels of investment by manufacturers, which, when used in the discounted cash flow model, results in varying free cash flow impacts on GSL manufacturers.

For ELs that can be met with CFLs, DOE assumed that capital conversion costs would be limited to tooling costs, since manufacturers would not need to significantly alter the production equipment used to product more efficacious CFLs. For ELs that require LED lamps, DOE assumed manufacturers would incur larger capital conversion costs since GSL manufacturers would need to make investments in production equipment to further expand their LED lamp manufacturing capacity to meet expected market demand for these products. Product conversion costs at all efficacy levels are based on the number of models that would require redesign, retesting, and recertification due to standards.

In addition to calculating the conversion costs manufacturers would be required to make at each efficacy level, DOE also estimated the capital and product conversion costs GSL manufacturers would have to make due to the implementation of the minimum 45 lm/W backstop stipulated in EISA 2007 in the no-new-standards case. It is assumed GSL manufacturers would be required to make these investments regardless of whether DOE proposes and ultimately sets further GSL standards as a result of this rulemaking. Therefore, these conversion costs caused by the EISA 2007 backstop are included in the no-new-standards case. Conversion costs at higher standards analyzed by this rulemaking are in addition to these no-new-standards case conversion costs.

Once DOE compiled capital and product conversion costs, DOE took average values (*i.e.,* average number of hours or average dollar amounts) based on the range of responses given by manufacturers for each type of capital and product conversion cost at each EL. See chapter 12 of the NOPR TSD for a complete description of DOE's assumptions for the capital and product conversion costs and section VI.B.2.a of this NOPR for the capital and product conversion costs estimates for each TSL.

b. Manufacturer Production Costs

Manufacturing more efficacious GSLs can result in changes in MPCs as a result of varying components and technology types required to meet ELs at each TSL. Changes in MPCs for these more efficacious components can impact the revenue, gross margin, and the cash flows of GSL manufacturers. Typically, DOE develops MPCs for the covered products using reverse-engineering. These costs are used as an input to the LCC analysis and NIA. However, because lamps are difficult to reverse-engineer, DOE directly derived end-user prices and then used those prices in conjunction with average distribution chain markups and manufacturer markups to calculate the MPCs of GSLs.

To determine MPCs of GSLs from the end-user prices, DOE divided the end-user price by the average distribution chain markup and then again by the average manufacturer markup of the representative GSLs at each EL. DOE determined the manufacturer markup by examining the SEC 10-Ks of all publicly traded GSL manufacturers to estimate an average GSL manufacturer markup of 1.55. DOE determined the distribution chain markup by examining the SEC 10–Ks of the major lighting retail manufacturers to estimate a distribution chain markup of 1.52 for all GSLs. Feedback from manufacturer interviews and previous lighting rulemakings (*i.e.,* GSFL and IRL standards rulemaking and CFLK rulemaking) indicated that the respective markups were appropriate for the GSL industry.

DOE requests comment on the use of 1.52 as an average distribution chain markup and 1.55 manufacturer markup for all GSLs. For a complete description of end-user prices, see the product price determination in section V.D of this NOPR.

c. Shipment Scenarios

INPV, which is the key GRIM output, depends on industry revenue, which depends on the quantity and prices of GSLs shipped in each year of the analysis period. Industry revenue calculations require forecasts of: (1) Total annual shipment volume of GSLs; (2) the distribution of shipments across product classes (because prices vary by product class); and, (3) the distribution of shipments across ELs (because prices vary with lamp efficacy).

DOE developed a consumer-choice-based model to estimate shipments of GSLs. The model projects consumer purchases (and hence shipments) based on sector-specific consumer sensitivities to first cost, energy savings, lamp lifetime, and lamp mercury content. For a complete description of the shipments, see the shipments analysis discussion in section V.G of this NOPR.

d. Markup Scenarios

As discussed in the previous manufacturer production costs section, the MPCs for GSLs are the manufacturers' costs for those units. These costs include materials, labor, depreciation, and overhead, which are

collectively referred to as the cost of goods sold (COGS). The MSP is the price received by GSL manufacturers from their consumers, typically a distributor, regardless of the downstream distribution channel through which the GSLs are ultimately sold. The MSP is not the cost the end-user pays for GSLs because there are typically multiple sales along the distribution chain and various markups applied to each sale. The MSP equals the MPC multiplied by the manufacturer markup. The manufacturer markup covers all the GSL manufacturer's non-production costs (*i.e.,* selling, general and administrative expenses (SG&A); research and development (R&D); interest) as well as profit. Total industry revenue for GSL manufacturers equals the MSPs at each EL multiplied by the number of shipments at that EL.

DOE only modeled one markup scenario, the preservation of gross margin markup scenario, for the MIA. DOE chose not to model additional manufacturer markup scenarios, since there are already significant market transformations taking place due to the implementation of the EISA 2007 backstop, which is included in the no-new-standards case. DOE finds that higher efficacy standards analyzed in the standards cases, above 45 lm/W, would not significantly alter the manufacturer markup modeled in the no-new-standards case for the GSL market.

The preservation of gross margin markup scenario assumes that the COGS for each product is marked up by a fixed percentage to cover SG&A expenses, R&D expenses, interest expenses, and profit. This allows manufacturers to preserve the same gross margin percentage in the standards cases as in the no-new-standards case. In this markup scenario GSL manufacturers are able to fully pass any additional MPC increase due to standards to their consumers.

To derive the preservation of gross margin markup percentages for GSLs, DOE examined the SEC 10-Ks of all publicly traded GSL manufacturers to estimate the industry average gross margin percentage. Manufacturers were then asked to verify the industry gross margin percentage derived from SEC 10–Ks during manufacturer interviews.

3. Discussion of Comments

During the January 2015 public meeting, interested parties commented on the assumptions and results of the preliminary analysis. These issues included, manufacturer investments, manufacturer subgroups, and ancillary benefits of specific standards.

NEMA stated that regulatory actions that force manufacturers to make incremental investments in mature lighting products that generate only modest energy-saving benefits can make it more difficult for manufacturers to invest in LED lamps. NEMA said it is unlikely that GSL manufacturers would invest in these more mature technologies. NEMA continued saying that mandatory investment in mature lighting technologies can hinder competition and competitiveness. (NEMA, No. 34 at p. 29) DOE understands that the majority of GSL manufacturers are focusing their investments and R&D on LED lamps and are unlikely to make significant investments in CFLs.

DOE acknowledges that for the Integrated High-Lumen and Non-Integrated product classes, any standards proposed for those product classes would require investments in CFL production from GSL manufacturers in order to comply with any potential standards set for those product classes. Since DOE is not proposing standards for the Non-Integrated product class, manufacturers would not be required to make any investments in that product class. DOE also recognizes the opportunity cost associated with any investment in CFLs, and agrees that manufacturers would need to spend capital on their CFL production for the Integrated High-Lumen product class to meet the proposed standards for that product class that they would not have to spend in the no-new-standards case. As a result, manufacturers must determine the extent to which they will balance investment in CFL technologies with investment in LED lamp technologies. GSL manufacturers will have to weigh trade-offs between abandoning CFL production and deploying additional capital to those technologies. DOE also acknowledges that manufacturers will have to make large investments to significantly expand their LED product offerings and production volumes for the Integrated Low-Lumen product class as a result of the proposed standards for this product class. These large investments could significantly strain manufacturers' free cash flow in the years leading up to the effective date of this rulemaking. See section VI.C.1 for a discussion of the benefits and burdens of the proposed TSL.

NRDC commented during the preliminary analysis public meeting that DOE should reach out to a variety of GSL manufacturers, including GSL manufacturers that only make LED lamps and GSL manufacturers that have a large percentage of the CFL market when conducting manufacturer interviews and developing the manufacturer subgroup analysis. (NRDC, Public Meeting Transcript, No. 29 at p. 250) DOE reached out to a variety of GSL manufacturers including manufacturers that exclusively sell LED lamps and manufacturers that have a large share of the CFL market when conducting manufacturer interviews for this NOPR analysis. Non-disclosure agreements (NDAs) were used when conducting these manufacturer interviews, which also cover which manufacturers agreed to participate. DOE was able to interview every GSL manufacturer that expressed a desire to be interviewed for this NOPR analysis.

DOE did not conduct a separate manufacturer subgroup analysis based on the types of GSL technologies that manufacturers produce. Based on DOE market research, DOE was not able to find any GSL manufacturer covered by this rulemaking whose GSL portfolio did not include LED lamps. DOE also did not analyze GSL manufacturers that only produce LED lamps as a separate manufacturer subgroup from GSL manufacturers that produce both LED lamps and CFLs, because manufacturers that only produce LED lamps would not be disproportionally negatively impacted by GSL standards compared to GSL manufacturers that produce both LED lamps and CFLs. DOE only identified one manufacturer subgroup that could be disproportionally impacted by potential standards: small businesses.

During the public meeting, NEEA questioned if the MIA, and specifically the employment impact analysis, would consider some of the potential benefits of standards on the ancillary enabling technology manufacturers associated with more efficacious lighting technologies. (NEEA, Public Meeting Transcript, No. 29 at p. 253) DOE has determined that the MIA, and domestic employment impact analysis, will only examine the direct impacts on GSL manufacturers. DOE will not include any potential ancillary benefits in industries not primarily involved in GSL manufacturing as part of the MIA. Typically, DOE does not examine other manufacturing industries that are not primarily involved in manufacturing of the covered products due to the speculative nature of the potential impacts on those industries.

4. Manufacturer Interviews

DOE conducted additional interviews with manufacturers following the preliminary analysis as part of this NOPR analysis. In these interviews, DOE asked manufacturers to describe

their major concerns with this GSL rulemaking. Manufacturers identified two major areas of concern: (1) Testing burden and (2) impacts of technology-neutral standards.

a. Testing Burden

Several manufacturers expressed concern over the testing burden associated with GSL energy conservation standards. Manufacturers expressed concern regarding new testing requirements for LED lamps and expanded scope of CFLs to comply with GSL standards. Instead of spending capital on R&D that could result in an increase in energy savings from these lamps, manufacturers stated that they would need to spend capital on testing and certifying already efficacious lamps to demonstrate compliance with GSL standards. Additionally, manufacturers claimed that standards covering LED lamps could present a barrier to entry for small LED lamp manufacturers due to the increase in testing and certification requirements caused by GSL standards. Manufacturers claim this could result in a potential decrease of product innovation and energy-saving potential for LED lamps.

DOE notes that both large and small LED lamp manufacturers would have to test and certify their products regardless of the standards set for this rulemaking due to the EISA 2007 mandate of 45 lm/W for all GSLs effective January 1, 2020. (42 U.S.C. 6295(i)(6)(A)(v)) Furthermore, DOE performed a separate MIA analysis for small business subgroups to analyze the financial impacts due to the increase in testing and certification requirements. Further discussion on the impacts to small businesses can be found in section VII.B.

b. Impacts of Technology-Neutral Standards

Manufacturers are concerned that technology-neutral standards for GSLs could have a disproportionate effect on the range of technologies covered by standards. If GSL standards are set at the highest ELs, manufacturers are concerned that they may experience a loss of product differentiation among their lighting offerings. Manufacturers claim that as premium products become the baseline offering to consumers, previously offered advantages in lighting utility could be eliminated in an attempt to meet these higher standards. DOE grouped CFLs and LED lamps in the same product classes for this NOPR analysis. The criteria used to create the product classes used in this analysis are discussed in more detail in section V.A.1 of this NOPR.

Several manufacturers also stated they are concerned that GSL standards could be set at unattainable ELs for CFLs. If CFLs are regulated out of the market, it could force CFL manufacturers to either make significant investments in converting their production lines to other lighting technologies, and cause them to incur a significant loss on the stranded assets associated with their existing CFL production, or exit the GSL lighting market altogether. Lastly, manufacturers claim that setting GSL standards at ELs that cannot be attained by CFLs would remove product utility from the market as consumers still value CFLs for certain applications and derive utility from these products due to their lower first cost.

DOE acknowledges that the proposed standards set for the Integrated Low-Lumen product class would eliminate CFLs from the market place. This would cause manufacturers to incur substantial capital and product conversion costs to significantly expand their LED product offerings and production volumes to replace their wide range of non-compliant CFLs product offerings and sales. The methodology for these manufacturer conversion costs are discussed in detail in section V.J.2.a and the values used for each TSL are displayed in section VI.B.2.a.

K. Emissions Analysis

The emissions analysis consists of two components. The first component estimates the effect of potential energy conservation standards on power sector and site (where applicable) combustion emissions of CO_2, NO_X, SO_2, and Hg. The second component estimates the impacts of potential standards on emissions of two additional greenhouse gases, CH_4 and N_2O, as well as the reductions to emissions of all species due to ''upstream'' activities in the fuel production chain. These upstream activities comprise extraction, processing, and transporting fuels to the site of combustion. The associated emissions are referred to as upstream emissions.

The analysis of power sector emissions uses marginal emissions factors that were derived from data in *AEO 2015,* as described in section V.M. The methodology is described in chapter 13 and chapter 15 of the NOPR TSD.

Combustion emissions of CH_4 and N_2O are estimated using emissions intensity factors published by the EPA, GHG Emissions Factors Hub.[177] The FFC upstream emissions are estimated based on the methodology described in chapter 15 of the NOPR TSD. The upstream emissions include both emissions from fuel combustion during extraction, processing, and transportation of fuel, and ''fugitive'' emissions (direct leakage to the atmosphere) of CH_4 and CO_2.

The emissions intensity factors are expressed in terms of physical units per MWh or MMBtu of site energy savings. Total emissions reductions are estimated using the energy savings calculated in the NIA.

For CH_4 and N_2O, DOE calculated emissions reduction in tons and also in terms of units of carbon dioxide equivalent (CO_2eq). Gases are converted to CO_2eq by multiplying each ton of gas by the gas' global warming potential (GWP) over a 100-year time horizon. Based on the Fifth Assessment Report of the Intergovernmental Panel on Climate Change,[178] DOE used GWP values of 28 for CH_4 and 265 for N_2O.

The *AEO* incorporate the projected impacts of existing air quality regulations on emissions. *AEO 2015* generally represents current legislation and environmental regulations, including recent government actions, for which implementing regulations were available as of October 31, 2014. DOE's estimation of impacts accounts for the presence of the emissions control programs discussed in the following paragraphs.

SO_2 emissions from affected electric generating units (EGUs) are subject to nationwide and regional emissions cap-and-trade programs. Title IV of the Clean Air Act sets an annual emissions cap on SO_2 for affected EGUs in the 48 contiguous States and the District of Columbia (DC). (42 U.S.C. 7651 *et seq.*) SO_2 emissions from 28 eastern states and DC were also limited under the Clean Air Interstate Rule (CAIR). 70 FR 25162 (May 12, 2005). CAIR created an allowance-based trading program that operates along with the Title IV program. In 2008, CAIR was remanded to EPA by the U.S. Court of Appeals for the District of Columbia Circuit, but it remained in effect.[179] In 2011, EPA

[177] Available at: *http://www.epa.gov/climateleadership/inventory/ghg-emissions.html.*

[178] Intergovernmental Panel on Climate Change. Chapter 8: Anthropogenic and Natural Radiative Forcing. In *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change.* T. F. Stocker, D. Qin, G.-K. Plattner, M. M. B. Tignor, S. K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex, and P. M. Midgley, Editors. 2013. Cambridge University Press: Cambridge, United Kingdom and New York, NY, USA. (Last accessed June 22, 2015.) *http://www.ipcc.ch/pdf/assessment-report/ar5/wg1/WG1AR5_Chapter08_FINAL.pdf.*

[179] See *North Carolina* v. *EPA,* 550 F.3d 1176 (D.C. Cir. 2008); *North Carolina* v. *EPA,* 531 F.3d 896 (D.C. Cir. 2008).

issued a replacement for CAIR, the Cross-State Air Pollution Rule (CSAPR). 76 FR 48208 (August 8, 2011). On August 21, 2012, the D.C. Circuit issued a decision to vacate CSAPR,[180] and the court ordered EPA to continue administering CAIR. On April 29, 2014, the U.S. Supreme Court reversed the judgment of the D.C. Circuit and remanded the case for further proceedings consistent with the Supreme Court's opinion.[181] On October 23, 2014, the D.C. Circuit lifted the stay of CSAPR.[182] Pursuant to this action, CSAPR went into effect (and CAIR ceased to be in effect) as of January 1, 2015.

EIA was not able to incorporate CSAPR into *AEO 2015,* so it assumes implementation of CAIR. Although DOE's analysis used emissions factors that assume that CAIR, not CSAPR, is the regulation in force, the difference between CAIR and CSAPR is not relevant for the purpose of DOE's analysis of emissions impacts from energy conservation standards.

The attainment of emissions caps is typically flexible among EGUs and is enforced through the use of emissions allowances and tradable permits. Under existing EPA regulations, any excess SO_2 emissions allowances resulting from the lower electricity demand caused by the adoption of an efficiency standard could be used to permit offsetting increases in SO_2 emissions by any regulated EGU. In past rulemakings, DOE recognized that there was uncertainty about the effects of efficiency standards on SO_2 emissions covered by the existing cap-and-trade system, but it concluded that negligible reductions in power sector SO_2 emissions would occur as a result of standards.

Beginning in 2016, however, SO_2 emissions will fall as a result of the Mercury and Air Toxics Standards (MATS) for power plants. 77 FR 9304 (Feb. 16, 2012). In the MATS rule, EPA established a standard for hydrogen chloride as a surrogate for acid gas hazardous air pollutants (HAP), and also established a standard for SO_2 (a non-HAP acid gas) as an alternative equivalent surrogate standard for acid gas HAP. The same controls are used to reduce HAP and non-HAP acid gas; thus, SO_2 emissions will be reduced as a result of the control technologies installed on coal-fired power plants to comply with the MATS requirements for acid gas. *AEO 2015* assumes that, in order to continue operating, coal plants must have either flue gas desulfurization or dry sorbent injection systems installed by 2016. Both technologies, which are used to reduce acid gas emissions, also reduce SO_2 emissions. Under the MATS, emissions will be far below the cap established by CAIR, so it is unlikely that excess SO_2 emissions allowances resulting from the lower electricity demand would be needed or used to permit offsetting increases in SO_2 emissions by any regulated EGU.[183] Therefore, DOE believes that energy conservation standards will generally reduce SO_2 emissions in 2016 and beyond.

CAIR established a cap on NO_X emissions in 28 eastern States and the District of Columbia.[184] Energy conservation standards are expected to have little effect on NO_X emissions in those states covered by CAIR because excess NO_X emissions allowances resulting from the lower electricity demand could be used to permit offsetting increases in NO_X emissions from other facilities. However, standards would be expected to reduce NO_X emissions in the states not affected by the caps, so DOE estimated NO_X emissions reductions from the standards considered in this NOPR for these states.

The MATS limit mercury emissions from power plants, but they do not include emissions caps and, as such, DOE's energy conservation standards would likely reduce Hg emissions. DOE estimated mercury emissions reduction using emissions factors based on *AEO 2015,* which incorporates the MATS. DOE requests comment on its approach to conducting the emissions analysis for GSLs (see issue 47 in section VIII.E).

L. Monetizing Carbon Dioxide and Other Emissions Impacts

As part of the development of this proposed rule, DOE considered the estimated monetary benefits from the reduced emissions of CO_2 and NO_X that are expected to result from each of the TSLs considered. To make this calculation analogous to the calculation of the NPV of consumer benefit, DOE considered the reduced emissions expected to result over the lifetime of products shipped in the forecast period for each TSL. This section summarizes the basis for the monetary values used for each of these emissions and presents the values considered in this NOPR.

For this NOPR, DOE relied on a set of values for the SCC that was developed by a federal interagency process. The basis for these values is summarized in the next section, and a more detailed description of the methodologies used is provided in appendices 14A and 14B of the NOPR TSD. DOE invites input on its approach to estimating monetary benefits associated with emissions reductions (see issue 52 in section VIII.E).

1. Social Cost of Carbon

The SCC is an estimate of the monetized damages associated with an incremental increase in carbon emissions in a given year. It is intended to include (but is not limited to) climate-change-related changes in net agricultural productivity, human health, property damages from increased flood risk, and the value of ecosystem services. Estimates of the SCC are provided in dollars per metric ton of CO_2. A domestic SCC value is meant to reflect the value of damages in the United States resulting from a unit change in CO_2 emissions, while a global SCC value is meant to reflect the value of damages worldwide.

Under section 1(b) of Executive Order 12866, ''Regulatory Planning and Review,'' 58 FR 51735 (Oct. 4, 1993), agencies must, to the extent permitted by law, ''assess both the costs and the benefits of the intended regulation and, recognizing that some costs and benefits are difficult to quantify, propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs.'' The purpose of the SCC estimates presented here is to allow agencies to incorporate the monetized social benefits of reducing CO_2 emissions into cost-benefit analyses of regulatory actions. The estimates are presented with an acknowledgement of the many

[180] See *EME Homer City Generation, LP* v. *EPA,* 696 F.3d 7, 38 (D.C. Cir. 2012), *cert. granted,* 81 U.S.L.W. 3567, 81 U.S.L.W. 3696, 81 U.S.L.W. 3702 (U.S. June 24, 2013) (No. 12–1182).

[181] *See EPA* v. *EME Homer City Generation,* 134 S.Ct. 1584, 1610 (U.S. 2014). The Supreme Court held in part that EPA's methodology for quantifying emissions that must be eliminated in certain States due to their impacts in other downwind States was based on a permissible, workable, and equitable interpretation of the Clean Air Act provision that provides statutory authority for CSAPR.

[182] *See Georgia* v. *EPA,* Order *(D.C. Cir. filed October 23, 2014)* (*No. 11–1302).*

[183] DOE notes that the Supreme Court recently remanded EPA's 2012 rule regarding national emission standards for hazardous air pollutants from certain electric utility steam generating units. See *Michigan* v. *EPA* (Case No. 14–46, 2015). DOE has tentatively determined that the remand of the MATS rule does not change the assumptions regarding the impact of energy efficiency standards on SO_2 emissions. Further, while the remand of the MATS rule may have an impact on the overall amount of mercury emitted by power plants, it does not change the impact of the energy efficiency standards on mercury emissions. DOE will continue to monitor developments related to this case and respond to them as appropriate.

[184] CSAPR also applies to NO_X and it would supersede the regulation of NO_X under CAIR. As stated previously, the current analysis assumes that CAIR, not CSAPR, is the regulation in force. The difference between CAIR and CSAPR with regard to DOE's analysis of NO_X emissions is slight.

uncertainties involved and with a clear understanding that they should be updated over time to reflect increasing knowledge of the science and economics of climate impacts.

As part of the interagency process that developed these SCC estimates, technical experts from numerous agencies met on a regular basis to consider public comments, explore the technical literature in relevant fields, and discuss key model inputs and assumptions. The main objective of this process was to develop a range of SCC values using a defensible set of input assumptions grounded in the existing scientific and economic literatures. In this way, key uncertainties and model differences transparently and consistently inform the range of SCC estimates used in the rulemaking process.

a. Monetizing Carbon Dioxide Emissions

When attempting to assess the incremental economic impacts of CO_2 emissions, the analyst faces a number of challenges. A report from the National Research Council [185] points out that any assessment will suffer from uncertainty, speculation, and lack of information about: (1) Future emissions of GHGs; (2) the effects of past and future emissions on the climate system; (3) the impact of changes in climate on the physical and biological environment; and (4) the translation of these environmental impacts into economic damages. As a result, any effort to quantify and monetize the harms associated with climate change will raise questions of science, economics, and ethics and should be viewed as provisional.

Despite the limits of both quantification and monetization, SCC estimates can be useful in estimating the social benefits of reducing CO_2 emissions. The agency can estimate the benefits from reduced (or costs from increased) emissions in any future year by multiplying the change in emissions in that year by the SCC values appropriate for that year. The NPV of the benefits can then be calculated by multiplying each of these future benefits by an appropriate discount factor and summing across all affected years.

It is important to emphasize that the interagency process is committed to updating these estimates as the science and economic understanding of climate change and its impacts on society improves over time. In the meantime, the interagency group will continue to explore the issues raised by this analysis and consider public comments as part of the ongoing interagency process.

b. Development of Social Cost of Carbon Values

In 2009, an interagency process was initiated to offer a preliminary assessment of how best to quantify the benefits from reducing carbon dioxide emissions. To ensure consistency in how benefits are evaluated across federal agencies, the Administration sought to develop a transparent and defensible method, specifically designed for the rulemaking process, to quantify avoided climate change damages from reduced CO_2 emissions. The interagency group did not undertake any original analysis. Instead, it combined SCC estimates from the existing literature to use as interim values until a more comprehensive analysis could be conducted. The outcome of the preliminary assessment by the interagency group was a set of five interim values: global SCC estimates for 2007 (in 2006$) of $55, $33, $19, $10, and $5 per metric ton of CO_2. These interim values represented the first sustained interagency effort within the U.S. government to develop an SCC for use in regulatory analysis. The results of this preliminary effort were presented in several proposed and final rules.

c. Current Approach and Key Assumptions

After the release of the interim values, the interagency group reconvened on a regular basis to generate improved SCC estimates. Specially, the group considered public comments and further explored the technical literature in relevant fields. The interagency group relied on three integrated assessment models commonly used to estimate the SCC: the FUND, DICE, and PAGE models. These models are frequently cited in the peer-reviewed literature and were used in the last assessment of the Intergovernmental Panel on Climate Change (IPCC). Each model was given equal weight in the SCC values that were developed.

Each model takes a slightly different approach to model how changes in emissions result in changes in economic damages. A key objective of the interagency process was to enable a consistent exploration of the three models, while respecting the different approaches to quantifying damages taken by the key modelers in the field. An extensive review of the literature was conducted to select three sets of input parameters for these models: climate sensitivity, socio-economic and emissions trajectories, and discount rates. A probability distribution for climate sensitivity was specified as an input into all three models. In addition, the interagency group used a range of scenarios for the socio-economic parameters and a range of values for the discount rate. All other model features were left unchanged, relying on the model developers' best estimates and judgments.

In 2010, the interagency group selected four sets of SCC values for use in regulatory analyses. Three sets of values are based on the average SCC from the three integrated assessment models, at discount rates of 2.5, 3, and 5 percent. The fourth set, which represents the 95th percentile SCC estimate across all three models at a 3-percent discount rate, was included to represent higher-than-expected impacts from climate change further out in the tails of the SCC distribution. The values grow in real terms over time. Additionally, the interagency group determined that a range of values from 7 percent to 23 percent should be used to adjust the global SCC to calculate domestic effects,[186] although preference is given to consideration of the global benefits of reducing CO_2 emissions. Table V–15 presents the values in the 2010 interagency group report,[187] which is reproduced in appendix 14A of the NOPR TSD.

[185] National Research Council, *Hidden Costs of Energy: Unpriced Consequences of Energy Production and Use,* National Academies Press: Washington, DC (2009).

[186] It is recognized that this calculation for domestic values is approximate, provisional, and highly speculative. There is no *a priori* reason why domestic benefits should be a constant fraction of net global damages over time.

[187] *Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866.* Interagency Working Group on Social Cost of Carbon, United States Government (February 2010) (Available at: *www.whitehouse.gov/sites/default/files/omb/inforeg/for-agencies/Social-Cost-of-Carbon-for-RIA.pdf*).

TABLE V–15—ANNUAL SCC VALUES FROM 2010 INTERAGENCY REPORT, 2010–2050

[2007$ per metric ton CO_2]

Year	Discount rate			
	5%	3%	2.5%	3%
	Average	Average	Average	95th percentile
2010	4.7	21.4	35.1	64.9
2015	5.7	23.8	38.4	72.8
2020	6.8	26.3	41.7	80.7
2025	8.2	29.6	45.9	90.4
2030	9.7	32.8	50.0	100.0
2035	11.2	36.0	54.2	109.7
2040	12.7	39.2	58.4	119.3
2045	14.2	42.1	61.7	127.8
2050	15.7	44.9	65.0	136.2

The SCC values used for this notice were generated using the most recent versions of the three integrated assessment models that have been published in the peer-reviewed literature, as described in the 2013 update from the interagency working group (revised July 2015).[188] Table V–16 shows the updated sets of SCC estimates from the latest interagency update in 5-year increments from 2010 to 2050. The full set of annual SCC values between 2010 and 2050 is reported in appendix 14B of the NOPR TSD. The central value that emerges is the average SCC across models at the 3-percent discount rate. However, for purposes of capturing the uncertainties involved in regulatory impact analysis, the interagency group emphasizes the importance of including all four sets of SCC values.

TABLE V–16—ANNUAL SCC VALUES FROM 2013 INTERAGENCY UPDATE (REVISED JULY 2015), 2010–2050

[2007$ per metric ton CO_2]

Year	Discount rate			
	5%	3%	2.5%	3%
	Average	Average	Average	95th percentile
2010	10	31	50	86
2015	11	36	56	105
2020	12	42	62	123
2025	14	46	68	138
2030	16	50	73	152
2035	18	55	78	168
2040	21	60	84	183
2045	23	64	89	197
2050	26	69	95	212

It is important to recognize that a number of key uncertainties remain, and that current SCC estimates should be treated as provisional and revisable because they will evolve with improved scientific and economic understanding. The interagency group also recognizes that the existing models are imperfect and incomplete. The National Research Council report mentioned previously points out that there is tension between the goal of producing quantified estimates of the economic damages from an incremental ton of carbon and the limits of existing efforts to model these effects. There are a number of analytical challenges that are being addressed by the research community, including research programs housed in many of the federal agencies participating in the interagency process to estimate the SCC. The interagency group intends to periodically review and reconsider those estimates to reflect increasing knowledge of the science and economics of climate impacts, as well as improvements in modeling.

In summary, in considering the potential global benefits resulting from reduced CO_2 emissions, DOE used the values from the 2013 interagency report (revised July 2015), adjusted to 2014$ using the implicit price deflator for gross domestic product (GDP) from the Bureau of Economic Analysis. For each of the four sets of SCC cases specified, the values for emissions in 2015 were $12.2, $40.0, $62.3, and $117 per metric ton avoided (values expressed in 2014$). DOE derived values after 2050 using the relevant growth rates for the 2040–2050 period in the interagency update.

DOE multiplied the CO_2 emissions reduction estimated for each year by the SCC value for that year in each of the four cases. To calculate a present value of the stream of monetary values, DOE discounted the values in each of the four cases using the specific discount rate that had been used to obtain the SCC values in each case.

2. Social Cost of Other Air Pollutants

As noted previously, DOE has estimated how the considered energy conservation standards would reduce site NO_X emissions nationwide and

[188] *Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866,* Interagency Working Group on Social Cost of Carbon, United States Government (May 2013; revised July 2015) (Available at: *http://www.whitehouse.gov/sites/default/files/omb/inforeg/scc-tsd-final-july-2015.pdf.*

decrease power sector NO_X emissions in those 22 States not affected by the CAIR.

DOE estimated the monetized value of NO_X emissions reductions using benefit per ton estimates from the Regulatory Impact Analysis titled, ''Proposed Carbon Pollution Guidelines for Existing Power Plants and Emission Standards for Modified and Reconstructed Power Plants,'' published in June 2014 by EPA's Office of Air Quality Planning and Standards. The report includes high and low values for NO_X (as $PM_{2.5}$) for 2020, 2025, and 2030 discounted at 3 percent and 7 percent,[189] which are presented in chapter 14 of the NOPR TSD. DOE assigned values for 2021–2024 and 2026–2029 using, respectively, the values for 2020 and 2025. DOE assigned values after 2030 using the value for 2030.

DOE multiplied the emissions reduction (tons) in each year by the associated $/ton values, and then discounted each series using discount rates of 3 percent and 7 percent as appropriate. DOE will continue to evaluate the monetization of avoided NO_X emissions and will make any appropriate updates of the current analysis for the final rulemaking.

DOE is evaluating appropriate monetization of avoided SO_2 and Hg emissions in energy conservation standards rulemakings. DOE has not included monetization of those emissions in the current analysis.

NEMA stated that because of the uncertainty in modeling the value of emissions reductions, DOE should use manufacturer impacts, consumer impacts, employment impacts, energy savings, and competition as the sole metrics for justifying an energy efficiency standard. (NEMA, No. 34 at p. 28) DOE acknowledges that there is uncertainty regarding the value of emissions reductions, and it uses a wide range of SCC values to estimate the value of CO_2 emissions reductions. Regarding the inclusion of emissions impacts, the need for national energy and water conservation is one of the factors that DOE must evaluate in determining whether a potential energy conservation standard is economically justified. (42 U.S.C. 6295(o)(2)(B)(i)(VI)) Given the threats posed by global climate change to the economy, public health, and national security, combined with the well-recognized potential of many energy conservation measures to reduce emissions of greenhouse gases, DOE believes that evaluation of the potential benefits from slowing anthropogenic climate change must be part of the consideration of the need for national energy conservation.

M. Utility Impact Analysis

The utility impact analysis estimates several effects on the electric power industry that would result from the adoption of new or amended energy conservation standards. The utility impact analysis estimates the changes in installed electrical capacity and generation that would result for each TSL. The analysis is based on published output from the NEMS associated with *AEO 2015.* NEMS produces the *AEO* reference case, as well as a number of side cases that estimate the economy-wide impacts of changes to energy supply and demand. DOE uses published side cases to estimate the marginal impacts of reduced energy demand on the utility sector. These marginal factors are estimated based on the changes to electricity sector generation, installed capacity, fuel consumption and emissions in the *AEO* reference case and various side cases. Details of the methodology are provided in the appendices to Chapters 13 and 15 of the NOPR TSD.

The output of this analysis is a set of time-dependent coefficients that capture the change in electricity generation, primary fuel consumption, installed capacity and power sector emissions due to a unit reduction in demand for a given end use. These coefficients are multiplied by the stream of electricity savings calculated in the NIA to provide estimates of selected utility impacts of new or amended energy conservation standards. DOE seeks comment on its approach to conducting the utility impact analysis (see issue 53 in section VIII.E).

N. Employment Impact Analysis

DOE considers employment impacts in the domestic economy as one factor in selecting a proposed standard. Employment impacts from new or amended energy conservation standards include both direct and indirect impacts. Direct employment impacts are any changes in the number of employees of manufacturers of the products subject to standards, their suppliers, and related service firms. The MIA addresses those impacts. Indirect employment impacts are changes in national employment that occur due to the shift in expenditures and capital investment caused by the purchase and operation of more-efficient appliances. Indirect employment impacts from standards consist of the net jobs created or eliminated in the national economy, other than in the manufacturing sector being regulated, caused by: (1) Reduced spending by end users on energy; (2) reduced spending on new energy supply by the utility industry; (3) increased consumer spending on new products to which the new standards apply; and (4) the effects of those three factors throughout the economy.

One method for assessing the possible effects on the demand for labor of such shifts in economic activity is to compare sector employment statistics developed by the Labor Department's Bureau of Labor Statistics (BLS).[190] BLS regularly publishes its estimates of the number of jobs per million dollars of economic activity in different sectors of the economy, as well as the jobs created elsewhere in the economy by this same economic activity. Data from BLS indicate that expenditures in the utility sector generally create fewer jobs (both directly and indirectly) than expenditures in other sectors of the economy.[191] There are many reasons for these differences, including wage differences and the fact that the utility sector is more capital-intensive and less labor-intensive than other sectors. Energy conservation standards have the effect of reducing consumer utility bills. Because reduced consumer expenditures for energy likely lead to increased expenditures in other sectors of the economy, the general effect of efficiency standards is to shift economic activity from a less labor-intensive sector (*i.e.,* the utility sector) to more labor-intensive sectors (*e.g.,* the retail and service sectors). Thus, based on the BLS data alone, DOE believes net national employment may increase due to shifts in economic activity resulting from energy conservation standards.

DOE estimated indirect national employment impacts for the standard levels considered in this NOPR using an input/output model of the U.S. economy

[189] For the monetized NO_X benefits associated with $PM_{2.5}$, the related benefits (derived from benefit-per-ton values) are based on an estimate of premature mortality derived from the ACS study (Krewski et al., 2009), which is the lower of the two EPA central tendencies. Using the lower value is more conservative when making the policy decision concerning whether a particular standard level is economically justified so using the higher value would also be justified. If the benefit-per-ton estimates were based on the Six Cities study (Lepuele et al., 2012), the values would be nearly two-and-a-half times larger. (See chapter 14 of the NOPR TSD for further description of the studies mentioned above.)

[190] Data on industry employment, hours, labor compensation, value of production, and the implicit price deflator for output for these industries are available upon request by calling the Division of Industry Productivity Studies (202–691–5618) or by sending a request by email to *dipsweb@bls.gov*.

[191] U.S. Department of Commerce: Bureau of Economic Analysis. *Regional Multipliers: A User Handbook for the Regional Input-Output Modeling System (RIMS II).* 1992. U.S. Government Printing Office: Washington, DC (Last accessed June 22, 2015.) *https://ia801602.us.archive.org/5/items/regionalmultipl00unit/regionalmultipl00unit.pdf.*

called Impact of Sector Energy Technologies Version 3.1.1 (ImSET).[192] ImSET is a special-purpose version of the ''U.S. Benchmark National Input-Output'' (I–O) model, which was designed to estimate the national employment and income effects of energy-saving technologies. The ImSET software includes a computer-based I–O model having structural coefficients that characterize economic flows among 187 sectors most relevant to industrial, commercial, and residential building energy use.

DOE notes that ImSET is not a general equilibrium forecasting model, and understands the uncertainties involved in projecting employment impacts, especially changes in the later years of the analysis. Because ImSET does not incorporate price changes, the employment effects predicted by ImSET may overestimate actual job impacts over the long run for this rule. Therefore, DOE generated results for near-term timeframes, where these uncertainties are reduced. DOE welcomes input on its approach to assessing national employment impacts (see issue 54 in section VIII.E). For more details on the employment impact analysis, see chapter 16 of the NOPR TSD.

VI. Analytical Results and Conclusions

The following section addresses the results from DOE's analyses with respect to the considered energy conservation standards for GSLs. It addresses the TSLs examined by DOE, the projected impacts of each of these levels if adopted as energy conservation standards for GSLs, and the standards levels that DOE is proposing to adopt in this NOPR. Additional details regarding DOE's analyses are contained in the NOPR TSD supporting this notice.

A. Trial Standard Levels

DOE analyzed the benefits and burdens of four TSLs for GSLs. These TSLs were developed by combining specific ELs for each of the product classes analyzed by DOE. DOE presents the results for the TSLs in this document, while the results for all efficacy levels that DOE analyzed are in the NOPR TSD. TSL 4 is composed of the max-tech ELs. TSL 3 is composed of the ELs that yield the maximum NPV with any energy savings for products currently available on the market. TSL 2 is composed of the ELs that would minimize manufacturer impacts and allow for a continuous standard for all integrated GSLs. TSL 1 corresponds to the lowest standard level with any energy savings.

DOE used data on the representative product classes from the engineering and pricing analyses described in section V.C.2 to evaluate the benefits and burdens of each of the TSLs. DOE analyzed the benefits and burdens by conducting the analyses described in section III.E.1 for each TSL. Table VI–1 presents the TSLs and the corresponding ELs for GSLs.

TABLE VI–1—COMPOSITION OF TSLS FOR GSLS BY EFFICACY LEVEL

TSL	Representative product class		
	Integrated low-lumen	Integrated high-lumen	Non-integrated
1	EL 1	EL 1	EL 0.
2	EL 2	EL 2	EL 0.
3	EL 3	EL 2	EL 0.
4	EL 4	EL 2	EL 1.

B. Economic Justification and Energy Savings

1. Economic Impacts on Individual Consumers

DOE analyzed the economic impacts on GSL consumers by looking at the effects potential new or amended standards at each TSL would have on the LCC and PBP. DOE also examined the impacts of potential standards on consumer subgroups. These analyses are discussed below.

a. Life-Cycle Cost and Payback Period

In general, higher efficiency products affect consumers in two ways: (1) purchase price increases, and (2) annual operating costs decrease. In the case of GSLs, however, DOE projects that higher efficacy GSLs will sometimes have a lower purchase price than less efficacious lamps. Inputs used for calculating the LCC and PBP include total installed costs (*i.e.,* product price plus installation costs), and operating costs (*i.e.,* annual energy use, energy prices, energy price trends, repair costs, and maintenance costs). The LCC calculation also uses product lifetime and a discount rate. Chapter 8 of the NOPR TSD provides detailed information on the LCC and PBP analyses.

Table VI–2 through Table VI–7 show the LCC and PBP results for the ELs considered for each product class. The results in the first of each pair of tables represent the average values if all consumers in the sample make a purchase at the specified EL, and the simple payback for each EL is measured relative to the baseline product (EL 0). In addition, the lifetime operating cost of each EL is calculated for the LCC analysis period, which is the lifetime of the baseline product (EL 0) in each product class. In the second table of each pair, the impact of a potential standard is measured based on the change in the efficacy distribution under the specified TSL in the compliance year compared to the distribution in no-new-standards case (see section V.F.11 of this notice). The savings refer only to consumers who are affected by a standard at a given TSL. Those whose purchasing decision is not affected are not included in the calculation. Consumers for whom the LCC increases under a given TSL experience a net cost.

[192] Scott, M., J. Roop, O. Livingston, R. Schultz, and P. Balducci. *ImSET 3.1: Impact of Sector Energy Technologies Model Description and User's Guide.* 2009. Pacific Northwest National Laboratory: Richland, WA. (Last accessed June 10, 2015.) *http://www.pnl.gov/main/publications/external/technical_reports/PNNL-18412.pdf.*

TABLE VI–2—AVERAGE LCC AND PBP RESULTS BY EFFICACY LEVEL FOR INTEGRATED LOW-LUMEN GSLS

EL	Average costs (2014$)				Simple payback (years)	Average lifetime (years)
	Installed cost	First year's operating cost	Lifetime operating cost*	LCC		
Residential Sector						
0	2.55	2.18	3.65	6.19	—	5.5
1	3.04	2.03	3.39	5.95	3.32	6.8
2	5.15	1.62	2.67	5.44	4.59	6.8**, 18.0**
3	4.31	1.36	2.23	4.49	2.14	18.0
4	4.05	1.28	2.10	4.23	1.68	18.0
Commercial Sector						
0	3.94	6.39	10.56	14.71	—	2.6
1	4.42	5.96	9.84	13.79	1.12	3.2
2	6.27	4.58	7.57	11.15	1.29	3.2**, 7.7**
3	5.62	3.99	6.59	9.73	0.70	7.7
4	5.37	3.77	6.23	9.22	0.55	7.7

Note: The results for each EL represent the average value if all purchasers use products at that EL.
The PBP is measured relative to the baseline (EL 0) product.
* Calculated over the LCC analysis period, which is the lifetime of the EL 0 lamp.
** The two lifetimes correspond to the CFL (shorter) and LED (longer) lamp options at each EL.

TABLE VI–3—AVERAGE LCC SAVINGS RELATIVE TO THE NO-NEW-STANDARDS CASE FOR INTEGRATED LOW-LUMEN GSLS

TSL	EL	Average LCC savings* (2014$)	Percent of consumers that experience net cost
Residential Sector			
1	1	0.32	1.4
2	2	0.32	1.4
3	3	0.75	1.3
4	4	0.88	1.0
Commercial Sector			
1	1	1.33	0.2
2	2	1.33	0.2
3	3	1.32	0
4	4	1.40	0

* The savings represent the average LCC for affected consumers.

TABLE VI–4—AVERAGE LCC AND PBP RESULTS BY EFFICACY LEVEL FOR INTEGRATED HIGH-LUMEN GSLS

EL	Average Costs 2014$				Simple payback years	Average lifetime years
	Installed cost	First year's operating cost	Lifetime operating cost *	LCC		
Residential Sector						
0	9.14	3.95	8.42	17.57	—	6.6
1	9.92	3.71	7.89	17.81	3.20	6.6
2	10.55	3.58	7.63	16.79	3.86	7.7
Commercial Sector						
0	10.58	12.53	24.85	35.64	—	3.1
1	11.36	11.77	23.33	34.91	1.02	3.1
2	11.99	11.39	22.58	33.21	1.23	3.8

Note: The results for each EL represent the average value if all purchasers use products at that EL. The PBP is measured relative to the baseline (EL 0) product.
* Calculated over the LCC analysis period, which is the lifetime of the EL 0 lamp.

TABLE VI–5—AVERAGE LCC SAVINGS RELATIVE TO THE NO-NEW-STANDARDS CASE FOR INTEGRATED HIGH-LUMEN GSLS

TSL	EL	Average LCC savings * (2014$)	Percent of consumers that experience net cost
Residential Sector			
1	1	0.24	23.2
2	2	0.94	8.9
3	2	0.96	8.7
4	2	0.96	8.7
Commercial Sector			
1	1	1.13	3.3
2	2	2.00	4.9
3	2	2.02	4.9
4	2	2.02	4.9

* The savings represent the average LCC for affected consumers.

TABLE VI–6—AVERAGE LCC AND PBP RESULTS BY EFFICACY LEVEL FOR NON-INTEGRATED GSLS

EL	Average costs (2014$)				Simple payback (years)	Average lifetime (years)
	Installed cost	First year's operating cost	Lifetime operating cost *	LCC		
Commercial Sector						
0	9.00	10.21	20.17	29.38	.....	3.1
1	9.69	10.11	19.97	28.44	6.73	3.8 ** 5.0 **

Note: The results for each EL represent the average value if all purchasers use products at that EL.
The PBP is measured relative to the baseline (EL 0) product.
* Calculated over the LCC analysis period, which is the lifetime of the EL 0 lamp.
** The two lifetimes correspond to the two different lamp options at this EL.

TABLE VI–7—AVERAGE LCC SAVINGS RELATIVE TO THE NO-NEW-STANDARDS CASE FOR NON-INTEGRATED GSLS

TSL	EL	Average LCC savings* (2014$)	Percent of consumers that experience net cost
Commercial Sector			
4	1	0.95	6.1

* The savings represent the average LCC for affected consumers.

b. Consumer Subgroup Analysis

In the consumer subgroup analysis, DOE estimated the impact of the considered TSLs on low-income households and small businesses. Table VI–8 through Table VI–12 compares the average LCC savings and PBP at each EL for the two consumer subgroups, along with the average LCC savings for the entire sample. In most cases, the average LCC savings and PBPs for low-income households and small businesses at the considered ELs are not substantially different from the averages for all households and all buildings. Chapter 11 of the NOPR TSD presents the complete LCC and PBP results for the subgroups.

TABLE VI–8—COMPARISON OF LCC SAVINGS AND PBP FOR LOW-INCOME HOUSEHOLDS AND ALL HOUSEHOLDS FOR INTEGRATED LOW-LUMEN GSLS

TSL	EL	Average life-cycle cost savings (2014$)		Simple payback period (years)	
		Low-income households	All households	Low-income households	All households
1	1	0.37	0.32	3.28	3.32
2	2	0.37	0.32	4.53	4.59
3	3	0.73	0.75	2.11	2.14

TABLE VI–8—COMPARISON OF LCC SAVINGS AND PBP FOR LOW-INCOME HOUSEHOLDS AND ALL HOUSEHOLDS FOR INTEGRATED LOW-LUMEN GSLS—Continued

TSL	EL	Average life-cycle cost savings (2014$)		Simple payback period (years)	
		Low-income households	All households	Low-income households	All households
4	4	0.85	0.88	1.65	1.68

TABLE VI–9—COMPARISON OF LCC SAVINGS AND PBP FOR SMALL BUSINESSES AND ALL BUILDINGS FOR INTEGRATED LOW-LUMEN GSLS

TSL	EL	Average life-cycle cost savings (2014$)		Simple payback period (years)	
		Small businesses	All businesses	Small businesses	All businesses
1	1	1.26	1.33	1.10	1.12
2	2	1.26	1.33	1.27	1.29
3	3	1.30	1.32	0.69	0.70
4	4	1.38	1.40	0.54	0.55

TABLE VI–10—COMPARISON OF LCC SAVINGS AND PBP FOR LOW-INCOME HOUSEHOLDS AND ALL HOUSEHOLDS FOR INTEGRATED HIGH-LUMEN GSLS

TSL	EL	Average life-cycle cost savings (2014$)		Simple payback period (years)	
		Low-income households	All households	Low-income households	All households
1	1	0.20	0.24	3.18	3.20
2	2	0.88	0.94	3.84	3.86

TABLE VI–11—COMPARISON OF LCC SAVINGS AND PBP FOR SMALL BUSINESSES AND ALL BUILDINGS FOR INTEGRATED HIGH-LUMEN GSLS

TSL	EL	Average life-cycle cost savings (2014$)		Simple payback period (years)	
		Small businesses	All businesses	Small businesses	All businesses
1	1	1.06	1.13	1.02	1.02
2	2	1.89	2.00	1.23	1.23

TABLE VI–12—COMPARISON OF LCC SAVINGS AND PBP FOR SMALL BUSINESSES AND ALL BUILDINGS FOR NON-INTEGRATED GSLS

TSL	EL	Average life-cycle cost savings (2014$)		Simple payback period (years)	
		Small businesses	All businesses	Small businesses	All businesses
4	1	0.93	0.95	6.68	6.73

c. Rebuttable-Presumption Payback

As discussed in section V.F.12, EPCA establishes a rebuttable presumption that an energy conservation standard is economically justified if the increased purchase cost for a product that meets the standard is less than three times the value of the first-year energy savings resulting from the standard. In calculating a rebuttable-presumption payback period for each of the considered ELs, DOE used discrete values, and, as required by EPCA, based the energy use calculation on the DOE test procedure for GSLs. In contrast, the PBPs presented in section VI.B.1.a were calculated using distributions for input values, with energy use based on field studies and RECS data.

Table VI–13 through Table VI–15 presents the rebuttable-presumption payback periods for the considered ELs in each product class. While DOE examined the rebuttable-presumption criterion, it considered whether the standard levels considered for the NOPR are economically justified through a more detailed analysis of the economic impacts of those levels, pursuant to 42

U.S.C. 6295(o)(2)(B)(i), that considers the full range of impacts to the consumer, manufacturer, nation, and environment. The results of that analysis serve as the basis for DOE to definitively evaluate the economic justification for a potential standard level, thereby supporting or rebutting the results of any preliminary determination of economic justification.

TABLE VI–13—REBUTTABLE-PRESUMPTION PAYBACK PERIOD RESULTS FOR INTEGRATED LOW-LUMEN GSLS

EL	Residential sector	Commercial sector
1	3.18	0.95
2	4.39	1.10
3	2.05	0.60
4	1.60	0.47

TABLE VI–14—REBUTTABLE-PRESUMPTION PAYBACK PERIOD RESULTS FOR INTEGRATED HIGH-LUMEN GSLS

EL	Residential sector	Commercial sector
1	3.06	0.87
2	3.69	1.05

TABLE VI–15—REBUTTABLE-PRESUMPTION PAYBACK PERIOD RESULTS FOR NON-INTEGRATED GSLS

EL	Commercial sector
1	5.74

2. Economic Impacts on Manufacturers

DOE performed an MIA to estimate the impact of new and amended energy conservation standards on manufacturers of GSLs. The following sections describe the expected impacts on manufacturers at each TSL. Chapter 12 of the NOPR TSD explains the analysis in further detail.

a. Industry Cash-Flow Analysis Results

Table VI–16 through Table VI–17 present the estimated financial impacts (represented by changes in INPV) of the analyzed new and amended energy conservation standards on GSL manufacturers, as well as the conversion costs that DOE estimates GSL manufacturers would incur at each TSL. To evaluate the range of cash-flow impacts on the GSL industry, DOE used the preservation of gross margin markup scenarios to estimate the impacts on manufacturers. This preservation of gross margin markup scenario assumes that in the standards cases, manufacturers would be able to pass along any higher production costs required for more efficacious products to their consumers. Specifically, the industry would be able to maintain its average no-new-standards case gross margin (as a percentage of revenue) despite any potential higher production costs in the standards cases.

DOE also modeled a low investment scenario and a high investment scenario for manufacturers that correspond to the range of potential investments manufacturers must make in order to comply with the analyzed new and amended standards. Each investment scenario results in a unique set of cash flows and corresponding industry values at each TSL.

In the following discussion, the INPV results refer to the difference in industry value between the no-new-standards case and the standards cases that result from the sum of discounted cash flows from the reference year (2015) through the end of the analysis period (2049). The results also discuss the difference in cash flows between the no-new-standards case and the standards cases in the year before the compliance date for proposed standards. This difference in cash flow represents the size of the required conversion costs relative to the cash flow generated by the GSL industry in the absence of new and amended energy conservation standards.

To assess the upper (less severe) end of the range of potential impacts on GSL manufacturers, DOE modeled a low investment conversion cost scenario and to assess the lower (more severe) end of the range of potential impacts on GSL manufacturers, DOE modeled a high investment conversion cost scenario. Table VI–16 and Table VI–17 present the projected range of potential results for GSL manufacture for the low investment and high investment scenarios. DOE examined results for all product classes together.

TABLE VI–16—MANUFACTURER IMPACT ANALYSIS FOR GENERAL SERVICE LAMPS—LOW INVESTMENT SCENARIO

	Units	No-new-standards case	Trial standard levels			
			1	2	3	4
INPV	*2014$ millions*	911.0	894.3	877.3	753.3	731.3
Change in INPV	*2014$ millions*		(16.7)	(33.7)	(157.7)	(179.6)
	%		(1.8)	(3.7)	(17.3)	(19.7)
Product Conversion Costs	*2014$ millions*	50.3	74.2	96.7	178.7	184.8
Capital Conversion Costs	*2014$ millions*	201.4	204.4	205.2	245.5	253.1
Total Conversion Costs	*2014$ millions*	251.7	278.6	301.9	424.1	437.9

TABLE VI–17—MANUFACTURER IMPACT ANALYSIS FOR GENERAL SERVICE LAMPS—HIGH INVESTMENT SCENARIO

	Units	No-new-standards case	Trial standard levels			
			1	2	3	4
INPV	*2014$ millions*	911.0	886.6	862.2	690.0	665.9
Change in INPV	*2014$ millions*		(24.4)	(48.8)	(221.0)	(245.1)
	%		(2.7)	(5.4)	(24.3)	(26.9)
Product Conversion Costs	*2014$ millions*	50.3	85.9	119.6	242.6	250.8
Capital Conversion Costs	*2014$ millions*	201.4	204.8	206.0	266.4	274.1
Total Conversion Costs	*2014$ millions*	251.7	290.7	325.7	509.0	525.0

For the no-new-standards case DOE typically assumes conversion costs are zero, because manufacturers typically do not need to make additional investments beyond their normal capital expenditures and investments in research and development if no-new-standards are prescribed by a rulemaking. However, DOE included conversion costs in the no-new-standards case since manufacturers would have to make significant one-time investments to comply with the EISA 2007 45 lm/W backstop. DOE estimates manufacturers will incur product conversion costs of $50.3 million and capital conversion costs of $201.4 million to comply with the efficacy requirements prescribed by the EISA 2007 backstop. Product conversion costs include investments in research, development, testing, marketing, and certification that manufacturers must make to create new GSL designs intended to replace the product offering eliminated by the EISA 2007 backstop efficacy requirements. Capital conversion costs include investments in production equipment that GSL manufacturers would be required to make in order to significantly expand their LED manufacturing capacity to meet expected market demand for LED lamps caused by the EISA 2007 backstop.

TSL 1 sets the efficacy level at baseline for the Non-Integrated product class and EL 1 for Integrated Low-Lumen and Integrated High-Lumen product classes. At TSL 1, DOE estimates impacts on INPV to range from −$24.4 million to −$16.7 million, or a change in INPV of −2.4 percent to −1.8 percent. At TSL 1, industry free cash flow (operating cash flow minus capital expenditures) is expected to range from −$37.4 million to −$33.3, which is a decrease of approximately $13.5 million and $9.4 million respectively, compared to the no-new-standards case value of −$24.0 million in 2019, the year leading up to standards.

Percentage impacts on INPV are slightly negative at TSL 1. DOE estimates that 96 percent of integrated low-lumen shipments, 78 percent of integrated high-lumen shipments, and 100 percent of non-integrated shipments will meet the ELs required at TSL 1 in 2020, the expected compliance year of standards.

DOE expects product conversion costs will rise from $50.3 million at the no-new-standards case to $74.2 million in the low investment scenario and to $85.9 million in the high investment scenario at TSL 1. Product conversion costs are driven primarily by manufacturers redesigning CFLs to meet standards. DOE expects capital conversion costs to increase from $201.4 million in the no-new-standards case to $204.4 million in the low investment scenario and to $204.8 million in the high investment scenario at TSL 1. The additional capital conversion consists of minor retooling costs necessary to accommodate the redesigned CFLs. DOE does not estimate any manufacturers would be required to make any additional major production equipment expenditures not made in the no-new-standards case, since manufacturers would either simply remove product offering of non-compliant CFLs or make minor modifications requiring retooling expenditures to existing CFL production lines to comply with standards set at this TSL.

At TSL 1, the shipment-weighted average MPC increases by 1 percent relative to the no-new-standards case MPC in 2020, the expected year of compliance. In both the high and low investment scenarios, manufacturers are not able to recover their conversion costs through the slight increase in MPC over the course of the analysis period resulting in a slightly negative INPV for each investment scenario.

TSL 2 sets the efficacy level at baseline for the Non-Integrated product class and EL 2 for Integrated Low-Lumen and Integrated High-Lumen product classes. EL 2 represents max tech for the Integrated High-Lumen product class. At TSL 2, DOE estimates impacts on INPV to range from −$48.8 million to −$33.7 million, or a change in INPV of −5.4 percent to −3.7 percent. At TSL 2, industry free cash flow is expected to range from −$49.3 million to −$41.3, which is a decrease of approximately $25.4 million to $17.3 million respectively, compared to the no-new-standards case value of −$24.0 million in 2019, the year leading up to standards.

Percentage impacts on INPV range from slightly negative to moderately negative at TSL 2. DOE estimates that 94 percent of integrated low-lumen shipments, 52 percent of integrated high-lumen shipments, and 100 percent of non-integrated shipments will meet the ELs required at TSL 2 in 2020.

DOE expects product conversion costs will rise from $74.2 million at TSL 1 to $96.7 million at TSL 2 in the low investment scenario and from $85.9 million at TSL 1 to $119.6 million at TSL 2 in the high investment scenario. This increase is primarily driven by more CFL models needing to be redesigned to meet this analyzed TSL. DOE expects capital conversion costs to increase from $204.4 million at TSL 1 to $205.2 million at TSL 2 in the low investment scenario and from $204.8 million at TSL 1 to $206.0 million at TSL 2 in the high investment scenario. This increase is driven by an expected increase in the number of CFL models that would require new tooling due to their redesign. Again, DOE does not estimate any manufacturers would be required to make any additional major production equipment expenditures at this TSL that are not made in the no-new-standards case.

At TSL 2, the shipment-weighted average MPC increases by 1 percent relative to the no-new-standards case MPC in 2020. In both the high and low investment scenarios, manufacturers are not able to recover their conversion costs through the slight increase in MPC over the course of the analysis period resulting in a slightly negative INPV for the low investment scenario and a moderately negative INPV for the high investment scenario.

TSL 3 sets the efficacy level at baseline for the Non-Integrated product class, EL 2 for the Integrated High-Lumen product class, and EL 3 for the Integrated Low-Lumen product class. EL 3 is the first efficacy level to require the use of LED lamps for the Integrated Low-Lumen product class. At TSL 3, DOE estimates impacts on INPV to range from −$221.0 million to −$157.7 million, or a change in INPV of −24.3 percent to −17.3 percent. At TSL 3, industry free cash flow is expected range from −$126.4 million to −$88.8, which is a decrease of approximately $102.4 million and $64.8 million respectively, compared to the no-new-standards case value of −$24.0 million in 2019, the year leading up to standards.

Percentage impacts on INPV are moderately negative at TSL 3. DOE estimates that 57 percent of integrated low-lumen shipments, 52 percent of integrated high-lumen shipments, and 100 percent of non-integrated shipments will meet the ELs required at TSL 3 in 2020.

DOE expects product conversion costs will significantly rise from $96.7 million at TSL 2 to $178.7 million at TSL 3 in the low investment scenario and from $119.6 million at TSL 2 to $242.6 million at TSL 3 in the high investment scenario. At this TSL, manufacturers would have to abandon CFL production for the Integrated Low-Lumen product class and spend a considerable amount of R&D to introduce replacement LED lamps for those CFLs being removed from the market. DOE expects capital conversion costs to significantly increase from $205.2 million at TSL 2 to $245.5 million at TSL 3 in the low

investment scenario and from $206.0 million at TSL 2 to $266.4 million at TSL 3 in the high investment scenario. This increase is driven by an expected increase in the number of production lines for LED lamps to accommodate the increase in demand for LED lamps.

At TSL 3, the shipment-weighted average MPC decreases by 1 percent relative to the no-new-standards case MPC in 2020. The slight decrease in MPC and increase in conversion costs incurred by manufacturers result in a moderately negative INPV in the low investment scenario and a significantly negative INPV in the high investment scenario at TSL 3.

TSL 4 sets the efficacy level at EL 1 for the Non-Integrated product class, EL 2 for the Integrated High-Lumen product class, and EL 4 for the Integrated Low-Lumen product class. TSL 4 represents max tech for all product classes. At TSL 4, DOE estimates impacts on INPV to range from −$245.1 million to −$179.6 million, or a change in INPV of −26.9 percent to −19.7 percent. At TSL 4, industry free cash flow is expected to range from −$133.5 million to −$94.9, which is a decrease of approximately $109.5 million and $70.9 million respectively, compared to the no-new-standards case value of −$24.0 million in 2019, the year leading up to standards.

Percentage impacts on INPV range from moderately negative to significantly negative at TSL 4. DOE estimates that 25 percent of integrated low-lumen shipments, 52 percent of integrated high-lumen shipments, and 68 percent of non-integrated shipments will meet the ELs required at TSL 4 in 2020.

DOE expects product conversion costs will slightly rise from $178.7 million at TSL 3 to $184.8 million at TSL 4 in the low investment scenario and from $242.6 million at TSL 3 to $250.8 million at TSL 4 in the high investment scenario. At this TSL, manufacturers would have to improve the efficacy of CFLs in the Non-Integrated product class, which would result in an increase in R&D, testing, and certification costs. DOE expects capital conversion costs to slightly increase from $245.5 million at TSL 3 to $253.1 million at TSL 4 in the low investment scenario and from $266.4 million at TSL 3 to $274.1 million at TSL 4 in the high investment scenario. DOE does not expect manufacturers to have to make significant additional production equipment expenditures at TSL 4 compared to the production equipment expenditures made at TSL 3 to make the more efficacious non-integrated CFLs required at TSL 4. DOE only assumes that there would be some increase in tooling costs associated with the redesign of some LED models for the Integrated Low-Lumen product classes as well as some increase in tooling costs associated with the redesign of some of the CFL models for the Non-Integrated product class required at TSL 4 that would not be incurred at TSL 3.

At TSL 4, the shipment-weighted average MPC decreases by 3 percent relative to the no-new-standards case MPC in 2020. The slight decrease in MPC and increase in conversion costs incurred by manufacturers result in a moderately negative INPV in the low investment scenario and a significantly negative INPV in the high investment scenario at TSL 4.

b. Impacts on Employment

DOE determined that there was only one GSL manufacturer that manufactured lamps or lamp components covered by this rulemaking domestically. During manufacturing interviews, manufacturers stated that the vast majority of LED manufacturing, and all CFL manufacturing, is done abroad. Some of these facilities are owned by the GSL manufacturer and others outsource their GSL production to original equipment manufacturers located primarily in Asia. However, several CFL manufacturers have domestic employees responsible for the R&D, marketing, sales, and distribution of CFLs.

Based on manufacturer interviews, DOE estimates that there are approximately 100 domestic employees dedicated to the non-production aspects of CFLs. Since the majority of CFLs are in the Integrated Low-Lumen product class, DOE believes there would be a sizable reduction in this number of domestic non-production employees at the proposed TSL. Manufacturers claim that the market disruption caused by eliminating CFLs from the Integrated Low-Lumen product class, would cause some manufacturers to reduce the number of domestic non-production employees.

DOE also limited the employment impact analysis to the domestic production of CFLs and LED lamps covered by this rulemaking and did not analyze the impact of the EISA 2007 45 lm/W backstop on the domestic production of other lamps, since they are outside the scope of this rulemaking.

Overall, based on DOE's market research, manufacturer feedback, and the scope of the employment impact analysis, DOE anticipates a limited impact on domestic employment, due to the elimination of domestic employees responsible for R&D, marketing, sales, and distribution of CFLs, caused by the proposed standard in this NOPR.

DOE seeks comment on the assumption that there is only one GSL manufacturer with domestic production of LED lamps and none with domestic production of CFLs. DOE also requests comment on the assumption that approximately 100 employees are involved in the R&D, marketing, sales, and distribution of CFLs. Additionally, DOE seeks comment on any potential domestic employment impacts as a result of the proposed new and amended energy conservation standards for GSLs in this NOPR.

c. Impacts on Manufacturing Capacity

During manufacturer interviews several GSL manufacturers expressed concern over the potential LED manufacturing capacity of any standards that could only be met by LED lamps for the Integrated Low-Lumen product class. These manufacturers stated that as other countries and regions adopt more-stringent lighting efficiency standards, especially Europe, around the compliance date of this rulemaking, worldwide LED manufacturing capacity would be severely strained if LED lamps are required to meet DOE's GSL energy conservation standards.

Manufacturers stated that if DOE sets energy conservation standards that only LED lamps could meet (*i.e.,* TSL 3 or 4), the demand for LED lamps would increase by 2 or 3 times over the course of a single year. This is supported by DOE shipment analysis which projects Integrated Low-Lumen LED shipments rising from approximately 242 million units in 2019 in the no-new-standards case to over 675 million units in 2020 at TSLs 3 and 4. Manufacturers further claimed that they would not be willing to invest significantly to increase LED manufacturing capacity, because the LED market would shrink over the following 10 years since LED lamps have extremely long lifetimes. This is again supported by DOEs shipment analysis which projects Integrated Low-Lumen LED shipments declining from over 675 million units in 2020 to approximately 172 million units in 2030 at TSLs 3 and 4.

Manufacturers stated that any manufacturer that significantly increased their LED manufacturing capacity could face the possibility of going out of business before they were able to recover their investments required to increase their LED manufacturing capacity due to this decline in future LED shipments. Therefore, it would be difficult for GSL manufacturers to meet the GSL demand for any standards that could only be met

by using LED lamps for the Integrated Low-Lumen product class.

DOE is proposing standards that require the use of LED lamps to meet the Integrated Low-Lumen product class and acknowledges that manufacturers would have to face a difficult decision of whether to invest in the required production equipment necessary to supply the market with LED lamps in the compliance year and the years immediately following that, given that they may not be able to recover all of those investments due to the long-term drop in LED lamp shipments. DOE also acknowledges that as other nations and regions implement their own general service lighting regulations that require the use of LED lamps there could be a potential global supply chain shortage of LEDs around the effective date of this rulemaking. However, DOE believes that GSL manufacturers are capable of meeting the U.S. demand for LED lamps at proposed standard, TSL 3, given the three year time frame between the announcement of a final rule and the implementation of that final rule.

d. Impacts on Subgroups of Manufacturers

Using average cost assumptions to develop an industry cash-flow estimate may not be adequate for assessing differential impacts among manufacturer subgroups. Small manufacturers, niche product manufacturers, and manufacturers exhibiting cost structures substantially different from the industry average could be disproportionately affected. DOE only identified one manufacturer subgroup that it believes could be disproportionally impacted by energy conservation standards and would require a separate analysis in the MIA, small businesses. DOE analyzes the impacts on small businesses in a separate analysis in section VII.B of this NOPR as part of the Regulatory Flexibility Analysis. DOE did not identify any other adversely impacted manufacturer subgroups for GSLs for this rulemaking based on the results of the industry characterization. DOE seeks comment on any other potential manufacturer subgroups that could be disproportionally impacted by new and amended energy conservation standards for GSLs.

e. Cumulative Regulatory Burden

While any one regulation may not impose a significant burden on manufacturers, the combined effects of recent or impending regulations may have serious consequences for some manufacturers, groups of manufacturers, or an entire industry. Assessing the impact of a single regulation may overlook this cumulative regulatory burden. Multiple regulations affecting the same manufacturer can strain profits and lead companies to abandon product lines or markets with lower expected future returns than competing products. For these reasons, DOE conducts a cumulative regulatory burden analysis as part of its rulemakings for GSLs.

DOE identified a number of requirements, in addition to new and amended energy conservation standards for GSLs, that GSL manufacturers will face for products they manufacture approximately three years prior to and three years after the estimated compliance date of these new and amended standards. The following section addresses key related concerns that manufacturers raised during interviews regarding cumulative regulatory burden.

Manufacturers raised concerns about other DOE energy conservation standards that lighting manufacturers must comply with. In addition to the proposed new and amended energy conservation standards on GSLs, several other existing and pending federal regulations may apply to other products produced by GSL manufacturers. These lighting regulations include the finalized metal halide lamp fixture standards (79 FR 7746 [Feb. 10, 2014]), the finalized GSFL standards (80 FR 4042 [Jan. 26, 2015]), the finalized ceiling fan light kit standards (81 FR 580 [Jan. 6, 2016]), and the ongoing fluorescent lamp ballast standards (80 FR 35886 [Jun. 23, 2015]).

DOE acknowledges that each regulation can impact a manufacturer's financial operations. Multiple regulations affecting the same manufacturer can strain manufacturers' profit and possibly cause them to exit particular markets. Table VI–18 lists other DOE energy conservation standards that could also affect GSL manufacturers in the three years leading up to and after the estimated compliance date of the new and amended energy conservation standards for GSLs. On December 9, 2015 DOE published a final determination for high-intensity discharge lamps that determined standards were not technologically feasible or economically justified based in part on manufacturers concerns regarding costs asscociated to meet more stringent efficacy levels. (80 FR 76355)

TABLE VI–18—OTHER DOE REGULATIONS POTENTIALLY AFFECTING GENERAL SERVICE LAMP MANUFACTURERS

Regulation	Approximate compliance date	Estimated industry total conversion expenses
Metal Halide Lamp Fixtures	2017	$25 million (2012$).[193]
General Service Fluorescent Lamps	2018	$26.6 million (2013$).[194]
Ceiling Fan Light Kits	2019	$17.0–$18.9 million (2014$).[195]
Fluorescent Lamp Ballast	*2022	N/A†.
Candelabra Base Incandescent Lamps and Intermediate-Base Incandescent Lamps	βN/A	N/A†.
Other Incandescent Reflector Lamps	βN/A	N/A†.

* The dates listed are an approximation. The exact dates are pending final DOE action.

† For energy conservation standards for rulemakings awaiting DOE final action, DOE does not have a finalized estimated total industry conversion cost.

β These rulemakings are placed on hold due to the Consolidated and Further Continuing Appropriations Act, 2015 (Public Law 113–235, Dec. 16, 2014).

Manufacturers also stated that they must comply with other Federal and state regulations and certifications, separate from DOE's energy conservation standards, which cover the GSLs they manufacture. These include California Title 20, which has energy conservation standards identical to DOE's existing medium base CFL standards, but requires an additional certification; Interstate Mercury Education and Reduction Clearinghouse (IMERC) labeling requirements for CFLs; FTC's labeling requirements for all GSLs; and the Federal Communications Commission's electromagnetic interference verification for LEDs. Lastly, as described in EISA 2007, all lamps classified as GSL, regardless of whether standards are set for those products in this rulemaking, will have to meet a minimum of 45 lm/W by January 1, 2020. (42 U.S.C. 6295(i)(6)(A)(v)) DOE included the significant conversion costs that GSL manufacturers would have to make to comply with the EISA 2007 backstop in the no-new-standards case to more accurately reflect the total investments GSL manufacturers would have to make at the analyzed standard levels. These EISA 2007 backstop conversion costs are included in the cash flow analyses described in section VI.B.2.a.

Manufacturers also stated that several of their models sold in the U.S. are also sold in other international markets and therefore must also comply with a handful of other international standards. Manufacturers stated that there are standards that GSLs must comply with in order to be sold in Canada and Mexico.

DOE discusses these and other requirements in chapter 12 of the NOPR TSD. DOE seeks comment on the compliance costs of any other regulations GSL manufacturers must make, especially if compliance with those regulations is required three years before or after the estimated compliance date of these proposed standards (2020).

3. National Impact Analysis

a. Significance of Energy Savings

To estimate the energy savings attributable to potential standards for GSLs, DOE compared the energy consumption of those products under the no-new-standards case to their anticipated energy consumption under each TSL. The savings are measured over the entire lifetime of products purchased in the 30-year period that begins in the year of anticipated compliance with amended standards (2020–2049). Table VI–19 present DOE's projections of the NES for each TSL considered for GSLs. The savings were calculated using the approach described in section V.H of this NOPR.

TABLE VI–19—CUMULATIVE NATIONAL ENERGY SAVINGS FOR GSLS SHIPPED IN 2020–2049

	Trial standard level (quads)			
	1	2	3	4
Primary Energy	0.039	0.055	0.81	1.05
FFC Energy	0.041	0.058	0.85	1.09

OMB Circular A–4 [196] requires agencies to present analytical results, including separate schedules of the monetized benefits and costs that show the type and timing of benefits and costs. Circular A–4 also directs agencies to consider the variability of key elements underlying the estimates of benefits and costs. For this rulemaking, DOE undertook a sensitivity analysis using nine, rather than 30, years of product shipments. The choice of a nine-year period is a proxy for the timeline in EPCA for the review of certain energy conservation standards and potential revision of and compliance with such revised standards.[197] The review timeframe established in EPCA is generally not synchronized with the product lifetime, product manufacturing cycles, or other factors specific to GSLs. Thus, such results are presented for informational purposes only and are not indicative of any change in DOE's analytical methodology. The NES sensitivity analysis results based on a nine-year analytical period are presented in Table VI–20. The impacts are counted over the lifetime of GSLs purchased in 2020–2028.

TABLE VI–20—CUMULATIVE NATIONAL ENERGY SAVINGS FOR GSLS; NINE YEARS OF SHIPMENTS (2020–2028)

	Trial standard level (quads)			
	1	2	3	4
Primary Energy	0.023	0.027	0.444	0.562
FFC Energy	0.024	0.028	0.464	0.587

[193] Estimated industry conversion expenses were published in the TSD for the February 2014 metal halide lamp fixtures final rule. 79 FR 7746 The TSD for the 2014 metal halide lamp fixture final rule can be found at *http://www1.eere.energy.gov/buildings/appliance_standards/rulemaking.aspx/ruleid/16.*

[194] Estimated industry conversion expenses were published in the TSD for the January 2015 general service fluorescent lamps final rule. 80 FR 4042 The TSD for the 2015 general service fluorescent lamps final rule can be found at *http://www1.eere.energy.gov/buildings/appliance_standards/rulemaking.aspx/ruleid/24.*

[195] Estimated industry conversion expenses were published in the TSD for the January 2016 celing fan light kit final rule. 81 FR 580 The TSD for the 2016 ceiling fan light kit final rule can be found at *https://www1.eere.energy.gov/buildings/appliance_standards/rulemaking.aspx/ruleid/66.*

[196] U.S. Office of Management and Budget. *Circular No. A–4, Regulatory Analysis.* 2003. Washington, DC (Last accessed June 15, 2015.) *http://www.whitehouse.gov/sites/default/files/omb/assets/regulatory_matters_pdf/a-4.pdf.*

[197] Section 325(m) of EPCA requires DOE to review its standards at least once every 6 years, and requires, for certain products, a 3-year period after any new standard is promulgated before compliance is required, except that in no case may any new standards be required within 6 years of the compliance date of the previous standards. While adding a 6-year review to the 3-year compliance period adds up to 9 years, DOE notes that it may undertake reviews at any time within the 6 year period and that the 3-year compliance date may yield to the 6-year backstop. A 9-year analysis period may not be appropriate given the variability that occurs in the timing of standards reviews and the fact that for some consumer products, the compliance period is 5 years rather than 3 years.

b. Net Present Value of Consumer Costs and Benefits

DOE estimated the cumulative NPV of the total costs and savings for consumers that would result from the TSLs considered for GSLs. In accordance with OMB's guidelines on regulatory analysis,[198] DOE calculated NPV using both a 7-percent and a 3-percent real discount rate. Table VI–21 shows the consumer NPV results with impacts counted over the lifetime of products purchased in 2020–2049. Table VI–21 implicitly includes a negative total incremental installed cost of $0.9 billion and $1.4 billion dollars at seven and three percent discount rates, respectively. The negative total cost increment is explained by the reduction in product costs that occurs because (1) more efficacious lamps have longer average lifetimes than less efficacious lamps, resulting in fewer replacement purchases, (2) the purchase price of more efficacious LED lamps is lower than the price of less efficacious LED lamps, and (3) the purchase price of LED lamps declines faster than the price of CFLs during the analysis period, resulting in LED lamps becoming less expensive than CFLs. However, negative compliance costs run counter an economic theory that assumes a perfect capital market with perfect rationality of agents having complete information. In such a market, because the more efficacious GSLs are less expensive and longer lived than the baseline product, consumers would have an incentive to purchase them even in the absence of standards. For these reasons, DOE requests comment on various aspects of the inputs to the installed cost analysis, such as assumptions about consumers' response to first cost versus long-term operating cost, the price structure developed for LED lamps, the application of learning curves that yield declining prices over the analysis period, the increased lifetime of the more efficacious products, assumptions for manufacturer capital and product conversion costs, and other factors. In addition, DOE requests comment and information on any other factors that might be more difficult to quantify, such as any lessening of utility of the more efficient product or consumer welfare losses due to the more stringent standards.

TABLE VI–21—CUMULATIVE NET PRESENT VALUE OF CONSUMER BENEFITS FOR GSLS SHIPPED IN 2020–2049

	Trial standard level (billion 2014$)			
	1	2	3	4
3%	0.34	0.53	9.05	11.66
7%	0.15	0.24	4.41	5.69

The NPV results based on the aforementioned 9-year analytical period are presented in Table VI–22. The impacts are counted over the lifetime of products purchased in 2020–2028. As mentioned previously, such results are presented for informational purposes only and are not indicative of any change in DOE's analytical methodology or decision criteria.

TABLE VI—22 CUMULATIVE NET PRESENT VALUE OF CONSUMER BENEFITS FOR GSLS; NINE YEARS OF SHIPMENTS (2020–2028)

Discount rate	Trial standard level (billion 2014$)			
	1	2	3	4
3%	0.23	0.27	5.75	7.33
7%	0.12	0.15	3.36	4.31

The above results utilize the reference economic and price assumptions in the shipments and NIA analyses. DOE also conducted a number of alternative analyses, results of which can be found in appendix 10E of the NOPR TSD.

c. Indirect Impacts on Employment

DOE expects energy conservation standards for GSLs to reduce energy bills for consumers of those products, with the resulting net savings being redirected to other forms of economic activity. These expected shifts in spending and economic activity could affect the demand for labor. As described in section V.N of this document, DOE used an input/output model of the U.S. economy to estimate indirect employment impacts of the TSLs that DOE considered in this rulemaking. DOE understands that there are uncertainties involved in projecting employment impacts, especially changes in the later years of the analysis. Therefore, DOE generated results for near-term timeframes (2020–2025), where these uncertainties are reduced.

The results suggest that the proposed standards are likely to have a negligible impact on the net demand for labor in the economy. The net change in jobs is so small that it would be imperceptible in national labor statistics and might be offset by other, unanticipated effects on employment. Chapter 16 of the NOPR TSD presents detailed results regarding anticipated indirect employment impacts.

4. Impact on Utility or Performance of Products

DOE has tentatively concluded that the standards proposed in this NOPR would not reduce the utility or performance of GSLs under consideration in this rulemaking. Manufacturers of these products currently offer units that meet or exceed the proposed standards.

[198] U.S. Office of Management and Budget, ''Circular A–4: Regulatory Analysis,'' section E, (Sept. 17, 2003) (Available at: *http://www.whitehouse.gov/omb/circulars_a004_a-4/*).

5. Impact of Any Lessening of Competition

As discussed in section III.E.1.e, the Attorney General determines the impact, if any, of any lessening of competition likely to result from a proposed standard, and transmits such determination in writing to the Secretary, together with an analysis of the nature and extent of such impact. To assist the Attorney General in making such determination, DOE has provided DOJ with copies of this NOPR and the accompanying TSD for review. DOE will consider DOJ's comments on the proposed rule in determining whether to proceed to a final rule. DOE will publish and respond to DOJ's comments in that document.

6. Need of the Nation To Conserve Energy

Enhanced energy efficiency, where economically justified, improves the Nation's energy security, strengthens the economy, and reduces the environmental impacts (costs) of energy production. Reduced electricity demand due to energy conservation standards is also likely to reduce the cost of maintaining the reliability of the electricity system, particularly during peak-load periods. As a measure of this reduced demand, chapter 15 in the NOPR TSD presents the estimated reduction in generating capacity, relative to the no-new-standards case, for the TSLs that DOE considered in this rulemaking.

Energy conservation from new or amended standards for GSLs is expected to yield environmental benefits in the form of reduced emissions of air pollutants and greenhouse gases. Table VI–23 provides DOE's estimate of cumulative emissions reductions expected to result from the TSLs considered in this rulemaking. The table includes both power sector emissions and upstream emissions. The emissions were calculated using the multipliers discussed in section V.K. DOE reports annual emissions reductions for each TSL in chapter 13 of the NOPR TSD.

TABLE VI–23—CUMULATIVE EMISSIONS REDUCTION FOR GSLS SHIPPED IN 2020–2049

	Trial standard level			
	1	2	3	4
Power Sector Emissions				
CO_2 (*million metric tons*)	2.390	3.334	49.043	63.306
SO_2 (*thousand tons*)	1.496	2.060	30.593	39.457
NO_X (*thousand tons*)	2.594	3.634	53.280	68.795
Hg (*tons*)	0.006	0.008	0.114	0.147
CH_4 (*thousand tons*)	0.213	0.294	4.362	5.627
N_2O (thousand tons)	0.030	0.042	0.619	0.798
Upstream Emissions				
CO_2 (*million metric tons*)	0.129	0.182	2.670	3.449
SO_2 (*thousand tons*)	0.024	0.034	0.497	0.642
NO_X (*thousand tons*)	1.848	2.609	38.234	49.394
Hg (*tons*)	0.000	0.000	0.001	0.001
CH_4 (*thousand tons*)	10.190	14.395	210.958	272.547
N_2O (thousand tons)	0.001	0.002	0.025	0.032
Total FFC Emissions				
CO_2 (*million metric tons*)	2.520	3.517	51.713	66.755
SO_2 (*thousand tons*)	1.521	2.094	31.090	40.099
NO_X (*thousand tons*)	4.442	6.244	91.514	118.189
Hg (*tons*)	0.006	0.008	0.115	0.148
CH_4 (*thousand tons*)	10.403	14.689	215.319	278.173
CH_4 (thousand *tons* CO_{2eq})*	291.287	411.299	6028.941	7788.852
N_2O (thousand tons)	0.031	0.043	0.643	0.830
N_2O (*thousand tons* CO_2*eq*)*	8.327	11.491	170.517	219.961

* CO_2eq is the quantity of CO_2 that would have the same GWP.
Negative values refer to an increase in emissions.

As part of the analysis for this proposed rule, DOE estimated monetary benefits likely to result from the reduced emissions of CO_2 and NO_X that DOE estimated for each of the considered TSLs for GSLs. As discussed in section V.L of this document, for CO_2, DOE used the most recent values for the SCC developed by an interagency process. The four sets of SCC values for CO_2 emissions reductions in 2015 resulting from that process (expressed in 2014$) are represented by $12.2/metric ton (the average value from a distribution that uses a 5-percent discount rate), $40.0/metric ton (the average value from a distribution that uses a 3-percent discount rate), $62.3/metric ton (the average value from a distribution that uses a 2.5-percent discount rate), and $117/metric ton (the 95th-percentile value from a distribution that uses a 3-percent discount rate). The values for later years are higher due to increasing damages (public health, economic and environmental) as the projected magnitude of climate change increases.

Table VI–24 presents the global value of CO_2 emissions reductions at each TSL. For each of the four cases, DOE calculated a present value of the stream of annual values using the same discount rate as was used in the studies upon which the dollar-per-ton values are based. DOE calculated domestic values as a range from 7 percent to 23 percent of the global values; these results are presented in chapter 14 of the NOPR TSD.

TABLE VI–24 ESTIMATES OF GLOBAL PRESENT VALUE OF CO_2 EMISSIONS REDUCTION FOR PRODUCTS SHIPPED IN 2020–2049

TSL	SCC case * (million 2014$)			
	5% discount rate, average	3% discount rate, average	2.5% discount rate, average	3% discount rate, 95th ercentile
Power Sector Emissions				
1	16.9	76.5	121	232
2	23.3	106	168	323
3	344	1562	2478	4747
4	443	2017	3200	6130
Upstream Emissions				
1	0.89	4.1	6.5	12.3
2	1.2	5.7	9.1	17.4
3	18.2	83.8	133.32	255
4	23.6	108	172.29	330
Total FFC Emissions				
1	17.8	80.5	128	244
2	24.6	112	178	340
3	362	1646	2612	5002
4	467	2125	3372	6459

* For each of the four cases, the corresponding SCC value for emissions in 2015 is $12.2, $40.0, $62.3, and $117 per metric ton (2014$). The values are for CO_2 only (i.e., not CO_{2eq} of other greenhouse gases).

DOE is well aware that scientific and economic knowledge about the contribution of CO_2 and other GHG emissions to changes in the future global climate and the potential resulting damages to the world economy continues to evolve rapidly. Thus, any value placed on reduced CO_2 emissions in this rulemaking is subject to change. DOE, together with other federal agencies, will continue to review various methodologies for estimating the monetary value of reductions in CO_2 and other GHG emissions. This ongoing review will consider the comments on this subject that are part of the public record for this and other rulemakings, as well as other methodological assumptions and issues. However, consistent with DOE's legal obligations, and taking into account the uncertainty involved with this particular issue, DOE has included in this proposed rule the most recent values and analyses resulting from the interagency review process.

DOE also estimated the cumulative monetary value of the economic benefits associated with NO_X emissions reductions anticipated to result from the considered TSLs for GSLs. The dollar-per-ton value that DOE used is discussed in section V.L of this document. Table VI–25 presents the cumulative present values for NO_X emissions for each TSL calculated using 7-percent and 3-percent discount rates.

TABLE VI–25—ESTIMATES OF PRESENT VALUE OF NO_X EMISSIONS REDUCTION FOR GSLS SHIPPED IN 2020–2049

TSL	Million 2014$	
	3% discount rate	7% discount rate
Power Sector Emissions		
1	8.66	3.90
2	12.00	5.22
3	176.27	76.68
4	227.63	98.76
Upstream Emissions		
1	6.02	2.62
2	8.43	3.55
3	123.78	52.22
4	159.99	67.35
Total FFC Emissions		
1	14.67	6.52
2	20.43	8.77
3	300.06	128.90
4	387.62	166.11

7. Other Factors

The Secretary of Energy, in determining whether a standard is economically justified, may consider any other factors that the Secretary deems to be relevant. (42 U.S.C. 6295(o)(2)(B)(i)(VII)) No other factors were considered in this analysis.

8. Summary of National Economic Impacts

The NPV of the monetized benefits associated with emissions reductions can be viewed as a complement to the NPV of the consumer savings calculated for each TSL considered in this rulemaking. Table VI–26 presents the NPV values that result from adding the estimates of the potential economic benefits resulting from reduced CO_2 and NO_X emissions in each of four valuation scenarios to the NPV of consumer savings calculated for each TSL considered in this rulemaking, at both a 7-percent and 3-percent discount rate. The CO_2 values used in the columns of each table correspond to the four sets of SCC values discussed above.

TABLE VI–26—NET PRESENT VALUE OF CONSUMER SAVINGS COMBINED WITH PRESENT VALUE OF MONETIZED BENEFITS FROM CO_2 AND NO_X EMISSIONS REDUCTIONS

TSL	Billion 2014$ Consumer NPV at 3% Discount Rate added with:			
	SCC Case $12.2/metric ton and 3% NO_X value	SCC Case $40.0/metric ton and 3% NO_X value	SCC Case $62.3/metric ton and 3% NO_X value	SCC Case $117/metric ton and 3% NO_X value
1	0.372	0.434	0.481	0.598
2	0.579	0.667	0.732	0.895
3	9.715	10.999	11.964	14.355
4	12.519	14.177	15.424	18.511
TSL	Consumer NPV at 7% Discount Rate added with:			
	SCC Case $12.2/metric ton and 7% NO_X value	SCC Case $40.0/metric ton and 7% NO_X value	SCC Case $62.3/metric ton and 7% NO_X value	SCC Case $117/metric ton and 7% NO_X value
1	0.176	0.239	0.286	0.402
2	0.269	0.356	0.421	0.584
3	4.904	6.189	7.154	9.545
4	6.320	7.979	9.225	12.312

In considering the above results, two issues are relevant. First, the national operating-cost savings are domestic U.S. monetary savings that occur as a result of market transactions, while the value of CO_2 reductions is based on a global value. Second, the assessments of operating-cost savings and the SCC are performed with different methods that use different time frames for analysis. The national operating-cost savings is measured for the lifetime of products shipped in 2020 to 2049. Because CO_2 emissions have a very long residence time in the atmosphere,[199] the SCC values in future years reflect future CO_2-emissions impacts that continue beyond 2100.

C. Conclusion

When considering proposed standards, the new or amended energy conservation standards that DOE adopts for any type (or class) of covered product must be designed to achieve the maximum improvement in energy efficiency that the Secretary determines is technologically feasible and economically justified. (42 U.S.C. 6295(o)(2)(A)) In determining whether a standard is economically justified, the Secretary must determine whether the benefits of the standard exceed its burdens by, to the greatest extent practicable, considering the seven statutory factors discussed previously. (42 U.S.C. 6295(o)(2)(B)(i)) The new or amended standard must also result in significant conservation of energy. (42 U.S.C. 6295(o)(3)(B))

For this NOPR, DOE considered the impacts of amended standards for GSLs at each TSL, beginning with the maximum technologically feasible level, to determine whether that level was economically justified. Where the max-tech level was not justified, DOE then considered the next most efficient level and undertook the same evaluation until it reached the highest efficacy level that is both technologically feasible and economically justified and saves a significant amount of energy.

To aid the reader as DOE discusses the benefits and/or burdens of each TSL, tables in this section present a summary of the results of DOE's quantitative analysis for each TSL. In addition to the quantitative results presented in the tables, DOE also considers other burdens and benefits that affect economic justification. These include the impacts on identifiable subgroups of consumers who may be disproportionately affected by a national standard and impacts on employment.

DOE also notes that the economics literature provides a wide-ranging discussion of how consumers trade off upfront costs and energy savings in the absence of government intervention. Much of this literature attempts to explain why consumers appear to undervalue energy efficiency improvements. There is evidence that consumers undervalue future energy savings as a result of: (1) A lack of information; (2) a lack of sufficient salience of the long-term or aggregate benefits; (3) a lack of sufficient savings to warrant delaying or altering purchases; (4) excessive focus on the short term, in the form of inconsistent weighting of future energy cost savings relative to available returns on other investments; (5) computational or other difficulties associated with the evaluation of relevant trade-offs; and (6) a divergence in incentives (for example, between renters and owners, or builders and purchasers). Having less than perfect foresight and a high degree of uncertainty about the future, consumers may trade off these types of investments at a higher-than-expected rate between current consumption and uncertain future energy cost savings.

In DOE's current regulatory analysis, potential changes in the benefits and costs of a regulation due to changes in consumer purchase decisions are included in two ways. First, if consumers forego the purchase of a product in the standards case, this decreases sales for product manufacturers, and the impact on manufacturers attributed to lost revenue is included in the MIA. Second, DOE accounts for energy savings attributable only to products actually used by consumers in the standards case; if a regulatory option decreases the number of products purchased by consumers, this decreases the potential energy savings from an energy conservation standard. DOE provides estimates of shipments and changes in the volume of product purchases in chapter 9 of the NOPR TSD. However, DOE's current analysis does not explicitly control for

[199] The atmospheric lifetime of CO_2 is estimated of the order of 30–95 years. Jacobson, MZ, ''Correction to 'Control of fossil-fuel particulate black carbon and organic matter, possibly the most effective method of slowing global warming,''' *J. Geophys. Res.* 110. pp. D14105 (2005).

heterogeneity in consumer preferences, preferences across subcategories of products or specific features, or consumer price sensitivity variation according to household income.[200]

While DOE is not prepared at present to provide a fuller quantifiable framework for estimating the benefits and costs of changes in consumer purchase decisions due to an energy conservation standard, DOE is committed to developing a framework that can support empirical quantitative tools for improved assessment of the consumer welfare impacts of appliance standards. DOE has posted a paper that discusses the issue of consumer welfare impacts of appliance energy conservation standards, and potential enhancements to the methodology by which these impacts are defined and estimated in the regulatory process.[201] DOE welcomes comments on how to more fully assess the potential impact of energy conservation standards on consumer choice and how to quantify this impact in its regulatory analysis in future rulemakings (see issue 55 in section VIII.E).

1. Benefits and Burdens of TSLs Considered for GSL Standards

Table VI–27 and Table VI–28 summarize the quantitative impacts estimated for each TSL for GSLs. The national impacts are measured over the lifetime of GSLs purchased in the 30-year period that begins in the anticipated year of compliance with amended standards (2020–2049). The energy savings, emissions reductions, and value of emissions reductions refer to FFC results. The ELs contained in each TSL are described in section VI.A of this NOPR.

TABLE VI–27—SUMMARY OF ANALYTICAL RESULTS FOR GSL TSLS: NATIONAL IMPACTS

Category	TSL 1	TSL 2	TSL 3	TSL 4
Cumulative FFC National Energy Savings (*quads*)				
	0.041	0.058	0.847	1.093
NPV of Consumer Costs and Benefits (*2014$ billion*)				
3% discount rate	0.339	0.53	9.05	11.66
7% discount rate	0.151	0.235	4.41	5.69
Cumulative FFC Emissions Reduction (Total FFC Emission)				
CO_2 (*million metric tons*)	2.520	3.517	51.713	66.755
SO_2 (*thousand tons*)	1.521	2.094	31.090	40.099
NO_X (*thousand tons*)	4.442	6.244	91.514	118.189
Hg (*tons*)	0.006	0.008	0.115	0.148
CH_4 (*thousand tons*)	10.403	14.689	215.319	278.173
CH_4 (*thousand tons CO_2eq*)*	291.287	411.299	6028.941	7788.852
N_2O (*thousand tons*)	0.031	0.043	0.643	0.830
N_2O (*thousand tons CO_2eq*)*	8.327	11.491	170.517	219.961
Value of Emissions Reduction (Total FFC Emissions)				
CO_2 (*2014$ billion*)**	0.018 to 0.244	0.025 to 0.340	0.362 to 5.002	0.467 to 6.459
NO_X—3% discount rate (*2014$ million*)	14.7 to 32.9	20.4 to 45.6	300.1 to 669.8	387.6 to 865.0
NO_X—7% discount rate (*2014$ million*)	6.5 to 14.5	8.8 to 19.5	128.9 to 287.2	166.1 to 370.1

Parentheses indicate negative (−) values.
* CO_2eq is the quantity of CO_2 that would have the same GWP.
** Range of the economic value of CO_2 reductions is based on estimates of the global benefit of reduced CO_2 emissions.

TABLE VI–28—SUMMARY OF ANALYTICAL RESULTS FOR GSL TSLS: MANUFACTURER AND CONSUMER IMPACTS

Category	TSL 1*	TSL 2*	TSL 3*	TSL 4*
Manufacturer Impacts				
Industry NPV (2014$ million) (No-new-standards case INPV = $911.0 million)	886.6–894.3	862.2–877.3	690.0–753.3	665.9–731.3
Industry NPV (*% change*)	(2.7)–(1.8)	(5.4)–(3.7)	(24.3)–(17.3)	(26.9)–(19.7)
Residential Sector				
Consumer Average LCC Savings (*2014$*):				
Integrated Low-Lumen	0.32	0.32	0.75	0.88
Integrated High-Lumen	0.24	0.94	0.96	0.96
Consumer Simple PBP (*years*):				
Integrated Low-Lumen	3.32	4.59	2.14	1.68
Integrated High-Lumen	3.20	3.86	3.86	3.86
Percentage of Consumers that Experience Net Cost:				
Integrated Low-Lumen	1.4	1.4	1.3	1.0

[200] P.C. Reiss and M.W. White, Household Electricity Demand, Revisited, *Review of Economic Studies* (2005) 72, 853–883.

[201] Alan Sanstad, Notes on the Economics of Household Energy Consumption and Technology Choice. Lawrence Berkeley National Laboratory (2010) (Available online at: *www1.eere.energy.gov/buildings/appliance_standards/pdfs/consumer_ee_theory.pdf*).

TABLE VI–28—SUMMARY OF ANALYTICAL RESULTS FOR GSL TSLS: MANUFACTURER AND CONSUMER IMPACTS—Continued

Category	TSL 1 *	TSL 2 *	TSL 3 *	TSL 4 *
Integrated High-Lumen	23.2	8.9	8.7	8.7
Commercial Sector				
Consumer Average LCC Savings (*2014$*):				
Integrated Low-Lumen	1.33	1.33	1.32	1.40
Integrated High-Lumen	1.13	2.00	2.02	2.02
Non-Integrated	0	0	0	0.95
Consumer Simple PBP (*years*)				
Integrated Low-Lumen	1.12	1.29	0.70	0.55
Integrated High-Lumen	1.02	1.23	1.23	1.23
Non-Integrated				6.73
Percentage of Consumers that Experience Net Cost				
Integrated Low-Lumen	0.2	0.2	0	0
Integrated High-Lumen	3.3	4.9	4.9	4.9
Non-Integrated	0	0	0	6.1

* Parentheses indicate negative (−) values. The entry "n.a." means not applicable because there is no change in the standard at certain TSLs.

DOE first considered TSL 4, which represents the max-tech EL. TSL 4 would save 1.1 quads of energy, an amount DOE considers significant. Under TSL 4, the NPV of consumer benefit would be 5.7 billion using a discount rate of 7 percent, and 11.7 billion using a discount rate of 3 percent.

The cumulative emissions reductions at TSL 4 are 66.8 Mt of CO_2, 40.1 thousand tons of SO_2, 118.2 thousand tons of NO_X, 0.15 ton of Hg, 278 thousand tons of CH_4, and 0.83 thousand tons of N_2O. The estimated monetary value of the CO_2 emissions reduction at TSL 4 ranges from 476 million to 6,459 million.

At TSL 4, the average LCC impact in the residential sector is a savings of $0.88 in the Integrated Low-Lumen product class and savings of $0.96 in the Integrated High-Lumen product class. In the commercial sector, the average LCC impact is a savings of $1.40 in the Integrated Low-Lumen product class, a savings of $2.02 in Integrated High-Lumen product class, and a savings of $0.95 in the Non-Integrated product class. The simple payback period in the residential sector is 1.68 years in the Integrated Low-Lumen product class and 3.86 years in the Integrated High-Lumen product class. The simple payback period in the commercial sector is 0.55 years in the Integrated Low-Lumen product class, 1.23 years in the Integrated High-Lumen product class, and 6.73 in the Non-Integrated product class. The fraction of consumers experiencing a net LCC cost in the residential sector is 1.0 percent in the Integrated Low-Lumen product class and 8.7 percent in the Integrated High-Lumen product class. The fraction of consumers experiencing a net LCC cost in the commercial sector is 0 percent in the Integrated Low-Lumen product class, 4.9 percent in the Integrated High-Lumen product class, and 6.1 percent in the Non-Integrated product class.

At TSL 4, the projected change in INPV ranges from a decrease of $245.1 million to a decrease of $179.6 million, which represent decreases of 26.9 percent and 19.7 percent, respectively. As discussed in section V.C.4, the representative lamp unit at TSL 4 in the Integrated Low-Lumen product class is a modeled LED lamp. DOE modeled the lamp based on a commercially available 3-way LED lamp that, when tested at its middle setting of 8 W, was more efficacious than other commercially available LED lamps that could be considered an adequate replacement for the baseline lamp. DOE concluded that the efficacy achieved by the 8 W setting of this lamp demonstrated the potential for a standard, non 3-way 8 W LED lamp to achieve the same efficacy level. Because TSL 4 is based on a modeled product, a commercially available lamp suitable for a direct lamp replacement that complies with TSL 4 is not currently commercially available. Although new LED products are introduced into the market at a rapid pace, DOE is uncertain as to whether such a lamp would be commercially available at the time manufacturers must comply with the proposed standard.

Additionally, DOE identified only one level of efficacy for the Non-Integrated product class. TSL 4, which represents the max-tech level, proposes a standard for the Non-Integrated product class. Although there are LCC savings associated with the efficacy level for the Non-Integrated product class, the simple payback period is longer than the lifetime of the representative units. Further, DOE anticipates minimal energy savings for the product class based on the choices consumers are expected to make when purchasing at a higher level of efficacy.

The Secretary tentatively concludes that at TSL4 for GSLs, the benefits of energy savings, positive NPV of consumer benefits, emission reductions, and the estimated monetary value of the emissions reductions would be outweighed by the potential reduction in industry value, the potentially limited availability of compliant lamps in the Low-Lumen Integrated product class, and the long payback period and limited energy savings associated with the Non-Integrated product class. Consequently, the Secretary has tentatively concluded that TSL 4 is not justified.

DOE then considered TSL 3 which would save an estimated 0.85 quads of energy, an amount DOE considers significant. Under TSL 3, the NPV of consumer benefit would be 4.4 billion using a discount rate of 7 percent, and 9.1 billion using a discount rate of 3 percent.

The cumulative emissions reductions at TSL 3 are 51.7 Mt of CO_2, 31.1 thousand tons of SO_2, 91.5 thousand tons of NO_X, 0.12 ton of Hg, 215 thousand tons of CH_4, and 0.64 thousand tons of N_2O. The estimated monetary value of the CO_2 emissions reduction at TSL 3 ranges from 362 million to 5,002 million.

At TSL 3, the average LCC impact in the residential sector is a savings of $0.75 in the Integrated Low-Lumen product class and savings of $0.96 in the

Integrated High-Lumen product class. In the commercial sector, the average LCC impact is a savings of $1.32 in the Integrated Low-Lumen product class and a savings of $2.02 in Integrated High-Lumen product class. The simple payback period in the residential sector is 2.14 years in the Integrated Low-Lumen product class and 3.86 years in the Integrated High-Lumen product class. The simple payback period in the commercial sector is 0.70 years in the Integrated Low-Lumen product class and 1.23 years in the Integrated High-Lumen product class. The fraction of consumers experiencing a net LCC cost in the residential sector is 1.3 percent in the Integrated Low-Lumen product class and 8.7 percent in the Integrated High-Lumen product class. The fraction of consumers experiencing a net LCC cost in the commercial sector is 0 percent in the Integrated Low-Lumen product class and 4.9 percent in the Integrated High-Lumen product class.

At TSL 3, the projected change in INPV ranges from a decrease of $221.0 million to a decrease of $157.7 million, which represent decreases of 24.3 percent and 17.3 percent, respectively. For the Integrated Low-Lumen product class, the largest product class by volume, manufacturers would have to abandon CFL production for LED lamps. This would cause manufacturers to spend a considerable amount of R&D to introduce replacement LED lamps for those CFLs being removed from the market and make a sizable investment to increase their production equipment required to significantly expand their existing LED capacity.

After considering the analysis and weighing the benefits and burdens, the Secretary has tentatively concluded that at TSL 3 for GSLs, the benefits of energy savings, positive NPV of consumer benefits, emission reductions, the estimated monetary value of the emissions reductions, and positive average LCC savings would outweigh the reduction in industry value, the size of manufacturer investments, and the potentially limited availability of LED lamps due to manufacturer capacity constraints. Accordingly, the Secretary has tentatively concluded that TSL 3 would offer the maximum improvement in efficiency that is technologically feasible and economically justified, and would result in the significant conservation of energy.

Therefore, based on the above considerations, DOE proposes to adopt the energy conservation standards for GSLs at TSL 3. The proposed amended energy conservation standards for GSLs are shown in Table VI–29.

TABLE VI–29—PROPOSED ENERGY CONSERVATION STANDARDS FOR GSLS

Representative product class	Efficacy level	Efficacy (lm/W)
Integrated Low-Lumen (310 ≤ Initial Lumen Output < 2,000)	EL 3	101.6–29.42*0.9983^Initial Lumen Output.
Integrated High-Lumen (2,000 ≤ Initial Lumen Output ≤ 2,600 lumens).	EL 2	73.4–29.42*0.9983^Initial Lumen Output.
Non-Integrated (310 ≤ Initial Lumen Output ≤ 2,600)	EL 0	N/A.

2. Summary of Annualized Benefits and Costs of the Proposed Standards

The benefits and costs of the proposed standards can also be expressed in terms of annualized values. The annualized net benefit is the sum of: (1) The annualized national economic value (expressed in 2014$) of the benefits from operating products that meet the proposed standards (consisting primarily of operating-cost savings from using less energy, minus increases in product purchase costs, and (2) the annualized monetary value of the benefits of CO_2 and NO_X emission reductions.[202]

Table VI–30 shows the annualized values for GSLs under TSL 3, expressed in 2014$. The results under the primary estimate are as follows.

Using a 7-percent discount rate for benefits and costs other than CO_2 reductions (for which DOE used a 3-percent discount rate along with the average SCC series corresponding to a value of $40.0/ton in 2015 (2014$)), the estimated cost of the proposed standards for GSLs is $−93 million per year in increased equipment costs, while the estimated benefits are $373 million per year in reduced equipment operating costs, $95 million per year in CO_2 reductions, and $13.6 million per year in reduced NO_X emissions. In this case, the net benefit amounts to $574 million per year.

Using a 3-percent discount rate for all benefits and costs and the average SCC series corresponding to a value of $40.0/ton in 2015 (2014$), the estimated cost of the proposed standards for GSLs is $-82 million per year in increased equipment costs, while the estimated annual benefits are $438 million in reduced operating costs, $95 million in CO_2 reductions, and $17.2 million in reduced NO_X emissions. In this case, the net benefit amounts to $632 million per year.

TABLE VI–30—ANNUALIZED BENEFITS AND COSTS OF PROPOSED ENERGY CONSERVATION STANDARDS FOR GENERAL SERVICE LAMPS (TSL 3)

	Discount rate	Million 2014$/year		
		Primary estimate *	Low net benefits estimate *	High net benefits estimate *
Benefits				
Consumer Operating-Cost Savings	7%	373	334	404
	3%	438	386	481

[202] To convert the time-series of costs and benefits into annualized values, DOE calculated a present value in 2014, the year used for discounting the NPV of total consumer costs and savings. For the benefits, DOE calculated a present value associated with each year's shipments in the year in which the shipments occur (2020, 2030, *etc.*), and then discounted the present value from each year to 2015. The calculation uses discount rates of 3 and 7 percent for all costs and benefits except for the value of CO_2 reductions, for which DOE used case-specific discount rates. Using the present value, DOE then calculated the fixed annual payment over a 30-year period, starting in the compliance year that yields the same present value.

TABLE VI–30—ANNUALIZED BENEFITS AND COSTS OF PROPOSED ENERGY CONSERVATION STANDARDS FOR GENERAL SERVICE LAMPS (TSL 3)—Continued

	Discount rate	Million 2014$/year		
		Primary estimate *	Low net benefits estimate *	High net benefits estimate *
CO_2 Reduction Value ($12.2/t) **	5%	29	26	31
CO_2 Reduction Value ($40.0/t) **	3%	95	86	101
CO_2 Reduction Value ($62.3/t) **	2.5%	138	125	148
CO_2 Reduction Value ($117/t) **	3%	287	262	308
NO_X Reduction Value †	7%	13.6	12.6	32.2
	3%	17.2	15.8	41.1
Total Benefits ††	7% plus CO_2 range	415 to 674	373 to 608	467 to 744
	7%	481	433	537
	3% plus CO_2 range	483 to 742	428 to 663	552 to 829
	3%	549	488	623
Costs				
Consumer Incremental Product Costs ‡	7%	−93	−81	−105
	3%	−82	−70	−95
Total ††	7% plus CO_2 range	508 to 767	453 to 689	571 to 849
	7%	574	513	642
	3% plus CO_2 range	566 to 824	498 to 733	647 to 924
	3%	632	558	718

* This table presents the annualized costs and benefits associated with GSLs shipped in 2020–2049. These results include benefits to consumers which accrue after 2049 from the products purchased in 2020–2049. The results account for the incremental variable and fixed costs incurred by manufacturers due to the standard, some of which may be incurred in preparation for the rule.

The primary estimate assumes the reference case electricity prices and floorspace growth projections from *AEO 2015* and decreasing product prices for both CFL and LED GSLs, due to price learning. The Low Benefits Estimate uses the Low Economic Growth electricity prices and floorspace growth from *AEO 2015* and a faster decrease in product prices for LED GSLs. The High Benefits Estimate uses the High Economic Growth electricity prices and floorspace growth from *AEO 2015* and a slower decrease in product prices for LED GSLs. The methods used to derive projected price trends are explained in section V.G.1.b.

** The CO_2 values represent global monetized values of the SCC, in 2014$, in 2015 under several scenarios of the updated SCC values. The first three cases use the averages of SCC distributions calculated using 5-percent, 3-percent, and 2.5-percent discount rates, respectively. The fourth case represents the 95th percentile of the SCC distribution calculated using a 3-percent discount rate. The SCC time series incorporate an escalation factor.

† The $/ton values used for NO_X are described in section V.L. DOE estimated the monetized value of NO_X emissions reductions using benefit per ton estimates from the Regulatory Impact Analysis titled, ''Proposed Carbon Pollution Guidelines for Existing Power Plants and Emission Standards for Modified and Reconstructed Power Plants,'' published in June 2014 by EPA's Office of Air Quality Planning and Standards. (Available at: *http://www3.epa.gov/ttnecas1/regdata/RIAs/111dproposalRIAfinal0602.pdf.*) See section V.L.2 for further discussion. For DOE's Primary Estimate and Low Net Benefits Estimate, the agency is presenting a national benefit-per-ton estimate for particulate matter emitted from the Electric Generating Unit sector based on an estimate of premature mortality derived from the ACS study (Krewski et al., 2009). For DOE's High Net Benefits Estimate, the benefit-per-ton estimates were based on the Six Cities study (Lepuele et al., 2011), which are nearly two-and-a-half times larger than those from the ACS study. Because of the sensitivity of the benefit-per-ton estimate to the geographical considerations of sources and receptors of emission, DOE intends to investigate refinements to the agency's current approach of one national estimate by assessing the regional approach taken by EPA's Regulatory Impact Analysis for the Clean Power Plan Final Rule.

†† Total Benefits for both the 3-percent and 7-percent cases are derived using the series corresponding to the average SCC with a 3-percent discount rate ($40.0/t case). In the rows labeled ''7% plus CO_2 range'' and ''3% plus CO_2 range,'' the operating cost and NO_X benefits are calculated using the labeled discount rate, and those values are added to the full range of CO_2 values.

‡ This reduction in product costs occurs because (1) more efficacious lamps have longer average lifetimes than less efficacious lamps, resulting in fewer replacement purchases, (2) the purchase price of more efficacious LED lamps is lower than the price of less efficacious LED lamps, and (3) the purchase price of LED lamps declines faster than the price of CFLs during the analysis period, resulting in LED lamps becoming less expensive than CFLs.

VII. Procedural Issues and Regulatory Review

A. Review Under Executive Orders 12866 and 13563

Section 1(b)(1) of Executive Order 12866, ''Regulatory Planning and Review,'' 58 FR 51735 (Oct. 4, 1993), requires each agency to identify the problem that it intends to address, including, where applicable, the failures of private markets or public institutions that warrant new agency action, as well as to assess the significance of that problem. The problems that the proposed standards set forth in this NOPR are intended to address are as follows:

(1) Insufficient information and the high costs of gathering and analyzing relevant information leads some consumers to miss opportunities to make cost-effective investments in energy efficiency.

(2) In some cases, the benefits of more-efficient equipment are not realized due to misaligned incentives between purchasers and users. An example of such a case is when the equipment purchase decision is made by a building contractor or building owner who does not pay the energy costs.

(3) There are external benefits resulting from improved energy efficiency of appliances and equipment that are not captured by the users of such products. These benefits include externalities related to public health, environmental protection, and national energy security that are not reflected in energy prices, such as reduced emissions of air pollutants and greenhouse gases that impact human health and global warming. DOE attempts to quantify some of the external benefits through use of social cost of carbon values.

The Administrator of the Office of Information and Regulatory Affairs (OIRA) in the OMB has determined that the proposed regulatory action is a significant regulatory action under section (3)(f) of Executive Order 12866.

Accordingly, pursuant to section 6(a)(3)(B) of the Order, DOE has provided to OIRA: (i) The text of the draft regulatory action, together with a reasonably detailed description of the need for the regulatory action and an explanation of how the regulatory action will meet that need; and (ii) An assessment of the potential costs and benefits of the regulatory action, including an explanation of the manner in which the regulatory action is consistent with a statutory mandate. DOE has included these documents in the rulemaking record.

In addition, the Administrator of OIRA has determined that the proposed regulatory action is an ''economically'' significant regulatory action under section (3)(f)(1) of Executive Order 12866. Accordingly, pursuant to section 6(a)(3)(C) of the Order, DOE has provided to OIRA an assessment, including the underlying analysis, of benefits and costs anticipated from the regulatory action, together with, to the extent feasible, a quantification of those costs; and an assessment, including the underlying analysis, of costs and benefits of potentially effective and reasonably feasible alternatives to the planned regulation, and an explanation why the planned regulatory action is preferable to the identified potential alternatives. These assessments can be found in the NOPR TSD for this rulemaking.

DOE has also reviewed this regulation pursuant to Executive Order 13563, issued on January 18, 2011. 76 FR 3281 (Jan. 21, 2011). Executive Order 13563 is supplemental to and explicitly reaffirms the principles, structures, and definitions governing regulatory review established in Executive Order 12866. To the extent permitted by law, agencies are required by Executive Order 13563 to: (1) Propose or adopt a regulation only upon a reasoned determination that its benefits justify its costs (recognizing that some benefits and costs are difficult to quantify); (2) tailor regulations to impose the least burden on society, consistent with obtaining regulatory objectives, taking into account, among other things, and to the extent practicable, the costs of cumulative regulations; (3) select, in choosing among alternative regulatory approaches, those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity); (4) to the extent feasible, specify performance objectives, rather than specifying the behavior or manner of compliance that regulated entities must adopt; and (5) identify and assess available alternatives to direct regulation, including providing economic incentives to encourage the desired behavior, such as user fees or marketable permits, or providing information upon which choices can be made by the public.

DOE emphasizes as well that Executive Order 13563 requires agencies to use the best available techniques to quantify anticipated present and future benefits and costs as accurately as possible. In its guidance, OIRA has emphasized that such techniques may include identifying changing future compliance costs that might result from technological innovation or anticipated behavioral changes. For the reasons stated in the preamble, DOE believes that this NOPR is consistent with these principles, including the requirement that, to the extent permitted by law, benefits justify costs and that net benefits are maximized.

B. Review Under the Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) requires preparation of an initial regulatory flexibility analysis (IRFA) for any rule that by law must be proposed for public comment, unless the agency certifies that the rule, if promulgated, will not have a significant economic impact on a substantial number of small entities. As required by Executive Order 13272, ''Proper Consideration of Small Entities in Agency Rulemaking,'' 67 FR 53461 (August 16, 2002), DOE published procedures and policies on February 19, 2003, to ensure that the potential impacts of its rules on small entities are properly considered during the rulemaking process. 68 FR 7990. DOE has made its procedures and policies available on the Office of the General Counsel's Web site (*http://energy.gov/gc/office-general-counsel*). DOE has prepared the following IRFA for the products that are the subject of this rulemaking.

1. Description on Estimated Number of Small Entities Regulated

For manufacturers of GSLs, the SBA has set a size threshold, which defines those entities classified as ''small businesses'' for the purposes of the statute. DOE used the SBA's small business size standards to determine whether any small entities would be subject to the requirements of the rule See 13 CFR part 121. The size standards are listed by NAICS code and industry description and are available at *http://www.sba.gov/sites/default/files/files/Size_Standards_Table.pdf.* Manufacturing of GSLs is classified under NAICS 335110, ''Electric Lamp Bulb and Part Manufacturing.'' The SBA sets a threshold of 1,000 employees or less for an entity to be considered as a small business for this category.

To estimate the number of companies that could be small businesses that sell GSLs covered by this rulemaking, DOE conducted a market survey using publicly available information. DOE's research involved information provided by trade associations (*e.g.,* NEMA [203]) and information from DOE's Compliance Certification Management System (CCMS) Database,[204] EPA's ENERGY STAR Certified Light Bulbs Database,[205] LED Lighting Facts Database,[206] previous rulemakings, individual company Web sites, SBA's database, and market research tools (*e.g.,* Hoover's reports [207]). DOE also asked stakeholders and industry representatives if they were aware of any small businesses during manufacturer interviews and DOE public meetings. DOE used information from these sources to create a list of companies that potentially manufacture or sell GSLs and would be impacted by this rulemaking. DOE screened out companies that do not offer products covered by this rulemaking, do not meet the definition of a ''small business,'' or are completely foreign owned and operated.

DOE identified approximately 118 small businesses that sell GSLs in the United States that are covered by this rulemaking. However, DOE estimates that approximately 65 of these potential small businesses are rebranders who typically purchase fully assembled lamps from original equipment manufacturers and are not involved in the product development or manufacturing of those lamps. Subsequently, DOE determined that 53 companies were small businesses that are involved in the product development and/or manufacturing of GSLs covered by this rulemaking.

[203] National Electric Manufacturers Association | Member Products | Lighting Systems | Related Manufacturers, *http://www.nema.org/Products/Pages/Lighting-Systems.aspx* (last accessed July 13, 2015).

[204] DOE's Compliance Certification Database | Lamps—Bare or Covered (No Reflector) Medium Bas Compact Fluorescent, *http://www.regulations.doe.gov/certification-data* (last accessed July 13, 2015).

[205] ENERGY STAR Qualified Lamps Product List, *http://downloads.energystar.gov/bi/qplist/Lamps_Qualified_Product_List.xls?dee3-e997* (last accessed July 13, 2015).

[206] LED Lighting Facts Database, *http://www.lightingfacts.com/products* (last accessed July 13, 2015).

[207] Hoovers | Company Information | Industry Information | Lists, *http://www.hoovers.com* (last accessed July 13, 2015).

DOE was able to interview five small GSL businesses as part of the NOPR manufacturer interviews. DOE seeks comments, information, and data on the number of small businesses, including the number of rebranders, in the GSL industry that DOE identified, including their estimated market share.

2. Description and Estimate of Compliance Requirements

DOE assumed that LED manufacturers would be required to test and certify their LED lamps in the absence of DOE setting energy conservation standards for this GSL rulemaking, since the EISA 2007 45 lm/W backstop would be triggered and would include LED lamps. This backstop would require LED manufacturers to test and certify their LED lamps using the same DOE test procedure that these manufacturers would use if DOE sets energy conservation standards for this GSL rulemaking.

DOE assumes that the proposed standards would not increase the regulatory burden on GSL manufacturers that are making compliant products compared to the no-new-standards case regulatory burden. Additionally, DOE assumes that the GSL small businesses that are not responsible for the product development or manufacturing of the lamps they sell (*i.e.,* rebranders) have significantly less conversion costs and compliance costs for any products that would need to be redesigned because of the proposed standards compared to GSL manufacturers who do either their own product development or manufacturing. DOE assumes that while rebranders are responsible for certifying their lamps to DOE's energy conservation standards, typically the original equipment manufacturers provide the rebranders with the test data necessary for certification. Therefore, DOE assumes these certification costs will not significantly impact these small businesses.

According to DOE's analysis, of the 118 GSL small businesses, approximately 84 exclusively sell LED lamps and do not sell lamps using other technologies (*i.e.,* CFLs). Of those 84 small businesses exclusively selling LEDs, DOE estimates that approximately half are rebranders and half are involved in the product development and/or the manufacturing of the LEDs they sell.

DOE anticipates that in 2020 approximately 63 percent of all LED lamps covered by this rulemaking would meet the standards required at TSL 3. Also, given the short product development lifetime of LEDs, DOE anticipates that most, if not all, LED lamps that fail to meet the proposed standards would have experienced a product redesign during the three year compliance period in the absence of GSL energy conservation standards. So while DOE assumes that small businesses exclusively selling LED lamps would incur additional R&D investments to increase the efficacy of some of their products to meet the proposed standards, DOE also assumes that a portion of the testing and certification costs would be incurred by these small businesses in the no-new standards case.

Additionally, DOE does not assume small businesses exclusively selling LED lamps will incur additional investment in production equipment (*i.e.,* capital conversion costs) due to the proposed standards, since most LED small businesses either do not own their LED production equipment or could use their existing LED production equipment to manufacture more efficacious LED lamps that meet the proposed standards. Lastly, DOE assumes that original equipment manufacturers frequently produce the same LEDs for a variety of rebranders. Therefore, original equipment manufacturers would not pass on all of these R&D and testing costs caused by the proposed standards, to an individual rebrander. Instead the original equipment manufacturer would most likely spread these R&D and testing costs over a variety of rebranders that purchase an LED lamp from this original equipment manufacturer. Overall, DOE does not anticipate a significant impact to the majority of small businesses that exclusively sell LED lamps, especially for the rebranders, based on the proposed standards, TSL 3.

DOE estimates that there are approximately 29 small businesses that sell both CFLs and LEDs. These small businesses could be disproportionally impacted by the proposed energy conservation standards compared to large GSL manufacturers. The impact on each individual small business will depend on the portion of sales that CFLs, and to a lesser extent LED lamps that are not compliant with proposed standards, make up of a small business' total revenue and the number of CFL models that would need to be removed and LED lamp models that would need to be redesigned due to the proposed standards. The proposed standards would likely create a large shift in the market share of GSL manufacturers, and therefore some small businesses selling CFLs may not be able to replace that lost revenue with an increase in their additional LED lamp revenue.

Lastly, there are approximately five small businesses that exclusively sell CFLs and do not sell any LED lamps. These small businesses would be the most severely impacted by the proposed standards. Because their products would no longer meet the proposed standards, these small busineses would have to discontinue their CFL product lines and replace their portfolio with compliant LED lamps to stay in business. This would require using a completely different technology for all their products and finding new component suppliers (for the two manufacturers) or original equipment manufacturers (for the three rebranders).

DOE calculated the conversion costs that typical small and large general service lamp manufacturers would need to make in order to comply with standards set at each TSL. DOE presents a range of conversion costs for a typical small and large general service lamp manufacturer to account for both the low and high investment scenarios used at each TSL.

TABLE VII–1 COMPARISON OF TYPICAL SMALL AND LARGE MANUFACTURER'S TOTAL CONVERSION COSTS

Trial standard level	Total conversion costs for typical small manufacturer (2014$ millions)	Total conversion costs for typical large manufacturer (2014$ millions)
TSL 1	1.3—1.4	4.7—4.9
TSL 2	1.5—1.6	4.8—5.2
TSL 3	2.2—2.6	6.4—7.7
TSL 4	2.3—2.7	6.5—7.8

3. Duplication, Overlap, and Conflict With Other Rules and Regulations

DOE is not aware of any rules or regulations that duplicate, overlap, or conflict with the proposed new and amended standards. DOE seeks comment on any rules or regulations that could potentially duplicate, overlap, or conflict with the proposed new and amended standards.

4. Significant Alternatives to the Rule

The discussion in the previous section analyzes impacts on small businesses that would result from DOE's proposed rule, TSL 3. In reviewing alternatives to the proposed rule, DOE examined energy conservation standards set at lower efficiency levels. While TSL 1 and TSL 2 would reduce the impacts on small business manufacturers, it would come at the expense of a reduction in energy savings. TSL 1 achieves 95 percent percent lower energy savings compared to the energy savings at TSL 3. TSL 2 achieves 93 percent percent lower energy savings compared to the energy savings at TSL 3.

DOE believes that establishing standards at TSL 3 balances the benefits of the energy savings at TSL 3 with the potential burdens placed on GSL manufacturers, including small business manufacturers. Accordingly, DOE is declining to adopt one of the other TSLs considered in the analysis, or the other policy alternatives detailed as part of the regulatory impacts analysis included in Chapter 17 of this NOPR TSD.

DOE does not have the capability of extending the compliance date for small businesses beyond January 1, 2020 due to the statutory requirement in 42 U.S.C. 6295(i)(6)(A)(iii); however, additional compliance flexibilities may be available through other means. For example, individual manufacturers may petition for a waiver of the applicable test procedure. (See 10 CFR 430.27) Further, EPCA provides that a manufacturer whose annual gross revenue from all of its operations does not exceed $8 million may apply for an exemption from all or part of an energy conservation standard for a period not longer than 24 months after the effective date of a final rule establishing the standard. Additionally, section 504 of the Department of Energy Organization Act, 42 U.S.C. 7194, provides authority for the Secretary to adjust a rule issued under EPCA in order to prevent ''special hardship, inequity, or unfair distribution of burdens'' that may be imposed on that manufacturer as a result of such rule. Manufacturers should refer to 10 CFR part 430, subpart E, and 10 CFR part 1003 for additional details.

DOE requests any available data or reports that would contribute to the analysis of alternatives to standards for GSLs. In particular, DOE seeks information on the effectiveness of existing or past efficiency improvement programs for these products (see issue 57 in section VIII.E).

NEMA indicated that depending on the energy efficiency standard set by the rulemaking, utilities may decide to forego their lamp rebate programs, which may actually result in slower GSL adoption rates. (NEMA, No. 34 at p. 29) DOE notes that it did not assume the continued existence of utility rebate programs for GSLs in its analysis of the considered TSLs. DOE did consider policy alternatives, including consumer rebates, to energy efficiency standards and determined that the energy savings of these alternatives are significantly smaller than those that would be expected to result from adoption of the proposed standard levels.

C. Review Under the Paperwork Reduction Act

Manufacturers of GSLs must certify to DOE that their products comply with any applicable energy conservation standards. In certifying compliance, manufacturers must test their products according to the DOE test procedures for GSLs, including any amendments adopted for those test procedures. DOE has established regulations for the certification and recordkeeping requirements for all covered consumer products and commercial equipment. 76 FR 12422 (March 7, 2011). The collection-of-information requirement for the certification and recordkeeping is subject to review and approval by OMB under the Paperwork Reduction Act (PRA). This requirement has been approved by OMB under OMB control number 1910–1400. DOE requested OMB approval of an extension of this information collection for three years, specifically including the collection of information proposed in the present rulemaking, and estimated that the annual number of burden hours under this extension is 30 hours per company. In response to DOE's request, OMB approved DOE's information collection requirements covered under OMB control number 1910–1400 through November 30, 2017. 80 FR 5099 (January 30, 2015).

Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the PRA, unless that collection of information displays a currently valid OMB control number.

D. Review Under the National Environmental Policy Act of 1969

Pursuant to the National Environmental Policy Act (NEPA) of 1969, DOE has determined that the proposed rule fits within the category of actions included in Categorical Exclusion (CX) B5.1 and otherwise meets the requirements for application of a CX. See 10 CFR part 1021, App. B, B5.1(b); 1021.410(b) and App. B, B(1)–(5). The proposed rule fits within this category of actions because it is a rulemaking that establishes energy conservation standards for consumer products or industrial equipment, and for which none of the exceptions identified in CX B5.1(b) apply. Therefore, DOE has made a CX determination for this rulemaking, and DOE does not need to prepare an Environmental Assessment or Environmental Impact Statement for this proposed rule. DOE's CX determination for this proposed rule is available at *http://cxnepa.energy.gov/*.

E. Review Under Executive Order 13132

Executive Order 13132, ''Federalism,'' 64 FR 43255 (August 10, 1999), imposes certain requirements on federal agencies formulating and implementing policies or regulations that preempt state law or that have Federalism implications. The Executive Order requires agencies to examine the constitutional and statutory authority supporting any action that would limit the policymaking discretion of the states and to carefully assess the necessity for such actions. The Executive Order also requires agencies to have an accountable process to ensure meaningful and timely input by state and local officials in the development of regulatory policies that have Federalism implications. On March 14, 2000, DOE published a statement of policy describing the intergovernmental consultation process it will follow in the development of such regulations. 65 FR 13735. DOE has examined this proposed rule and has tentatively determined that it would not have a substantial direct effect on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. EPCA governs and prescribes federal preemption of state regulations as to energy conservation for the products that are the subject of this proposed rule. States can petition DOE for exemption from such preemption to the extent, and based on criteria, set forth in EPCA. (42 U.S.C. 6297)

Therefore, no further action is required by Executive Order 13132.

F. Review Under Executive Order 12988

With respect to the review of existing regulations and the promulgation of new regulations, section 3(a) of Executive Order 12988, ''Civil Justice Reform,'' imposes on federal agencies the general duty to adhere to the following requirements: (1) Eliminate drafting errors and ambiguity; (2) write regulations to minimize litigation; (3) provide a clear legal standard for affected conduct rather than a general standard; and (4) promote simplification and burden reduction. 61 FR 4729 (Feb. 7, 1996). Regarding the review required by section 3(a), section 3(b) of Executive Order 12988 specifically requires that Executive agencies make every reasonable effort to ensure that the regulation: (1) Clearly specifies the preemptive effect, if any; (2) clearly specifies any effect on existing federal law or regulation; (3) provides a clear legal standard for affected conduct while promoting simplification and burden reduction; (4) specifies the retroactive effect, if any; (5) adequately defines key terms; and (6) addresses other important issues affecting clarity and general draftsmanship under any guidelines issued by the Attorney General. Section 3(c) of Executive Order 12988 requires Executive agencies to review regulations in light of applicable standards in section 3(a) and section 3(b) to determine whether they are met or it is unreasonable to meet one or more of them. DOE has completed the required review and determined that, to the extent permitted by law, this proposed rule meets the relevant standards of Executive Order 12988.

G. Review Under the Unfunded Mandates Reform Act of 1995

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA) requires each federal agency to assess the effects of federal regulatory actions on state, local, and tribal governments and the private sector. Public Law 104–4, sec. 201 (codified at 2 U.S.C. 1531). For a proposed regulatory action likely to result in a rule that may cause the expenditure by state, local, and tribal governments, in the aggregate, or by the private sector of $100 million or more in any one year (adjusted annually for inflation), section 202 of UMRA requires a federal agency to publish a written statement that estimates the resulting costs, benefits, and other effects on the national economy. (2 U.S.C. 1532(a), (b)) The UMRA also requires a federal agency to develop an effective process to permit timely input by elected officers of state, local, and tribal governments on a proposed ''significant intergovernmental mandate,'' and requires an agency plan for giving notice and opportunity for timely input to potentially affected small governments before establishing any requirements that might significantly or uniquely affect them. On March 18, 1997, DOE published a statement of policy on its process for intergovernmental consultation under UMRA. 62 FR 12820. DOE's policy statement is also available at *http://energy.gov/sites/prod/files/gcprod/documents/umra_97.pdf*.

Although this proposed rule does not contain a federal intergovernmental mandate, it may require expenditures of $100 million or more in any one year by the private sector. Such expenditures may include: (1) Investment in R&D and in capital expenditures by GSL manufacturers in the years between the final rule and the compliance date for the new standards, and (2) incremental additional expenditures by consumers to purchase more efficacious GSLs.

Section 202 of UMRA authorizes a federal agency to respond to the content requirements of UMRA in any other statement or analysis that accompanies the proposed rule. (2 U.S.C. 1532(c)) The content requirements of section 202(b) of UMRA relevant to a private sector mandate substantially overlap the economic analysis requirements that apply under section 325(o) of EPCA and Executive Order 12866. The **SUPPLEMENTARY INFORMATION** section of this NOPR and the TSD for this proposed rule respond to those requirements.

Under section 205 of UMRA, the Department is obligated to identify and consider a reasonable number of regulatory alternatives before promulgating a rule for which a written statement under section 202 is required. (2 U.S.C. 1535(a)) DOE is required to select from those alternatives the most cost-effective and least burdensome alternative that achieves the objectives of the proposed rule unless DOE publishes an explanation for doing otherwise, or the selection of such an alternative is inconsistent with law. As required by 42 U.S.C. 6295(d), (f), and (o), 6313(e), and 6316(a), this proposed rule would establish new and amended energy conservation standards for GSLs that are designed to achieve the maximum improvement in energy efficiency that DOE has determined to be both technologically feasible and economically justified. A full discussion of the alternatives considered by DOE is presented in the ''Regulatory Impact Analysis'' section of the TSD for this proposed rule.

H. Review Under the Treasury and General Government Appropriations Act, 1999

Section 654 of the Treasury and General Government Appropriations Act, 1999 (Pub. L. 105–277) requires federal agencies to issue a Family Policymaking Assessment for any rule that may affect family well-being. This rule would not have any impact on the autonomy or integrity of the family as an institution. Accordingly, DOE has concluded that it is not necessary to prepare a Family Policymaking Assessment.

I. Review Under Executive Order 12630

Pursuant to Executive Order 12630, ''Governmental Actions and Interference with Constitutionally Protected Property Rights,'' 53 FR 8859 (March 15, 1988), DOE has determined that this proposed rule would not result in any takings that might require compensation under the Fifth Amendment to the U.S. Constitution.

J. Review Under the Treasury and General Government Appropriations Act, 2001

Section 515 of the Treasury and General Government Appropriations Act, 2001 (44 U.S.C. 3516 note) provides for federal agencies to review most disseminations of information to the public under information quality guidelines established by each agency pursuant to general guidelines issued by OMB. OMB's guidelines were published at 67 FR 8452 (Feb. 22, 2002), and DOE's guidelines were published at 67 FR 62446 (Oct. 7, 2002). DOE has reviewed this NOPR under the OMB and DOE guidelines and has concluded that it is consistent with applicable policies in those guidelines.

K. Review Under Executive Order 13211

Executive Order 13211, ''Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use,'' 66 FR 28355 (May 22, 2001), requires federal agencies to prepare and submit to OIRA at OMB, a Statement of Energy Effects for any proposed significant energy action. A ''significant energy action'' is defined as any action by an agency that promulgates or is expected to lead to promulgation of a final rule, and that: (1) is a significant regulatory action under Executive Order 12866, or any successor order; and (2) is likely to have a significant adverse effect on the supply, distribution, or use of energy, or (3) is designated by the Administrator of

OIRA as a significant energy action. For any proposed significant energy action, the agency must give a detailed statement of any adverse effects on energy supply, distribution, or use should the proposal be implemented, and of reasonable alternatives to the action and their expected benefits on energy supply, distribution, and use.

DOE has tentatively concluded that this regulatory action, which proposes new and amended energy conservation standards for GSLs, is not a significant energy action because the proposed standards are not likely to have a significant adverse effect on the supply, distribution, or use of energy, nor has it been designated as such by the Administrator at OIRA. Accordingly, DOE has not prepared a Statement of Energy Effects on this proposed rule.

L. Review Under the Information Quality Bulletin for Peer Review

On December 16, 2004, OMB, in consultation with the Office of Science and Technology Policy (OSTP), issued its Final Information Quality Bulletin for Peer Review (the Bulletin). 70 FR 2664 (Jan. 14, 2005). The Bulletin establishes that certain scientific information shall be peer reviewed by qualified specialists before it is disseminated by the federal government, including influential scientific information related to agency regulatory actions. The purpose of the Bulletin is to enhance the quality and credibility of the Government's scientific information. Under the Bulletin, the energy conservation standards rulemaking analyses are ''influential scientific information,'' which the Bulletin defines as ''scientific information the agency reasonably can determine will have, or does have, a clear and substantial impact on important public policies or private sector decisions.'' *Id.* at FR 2667.

In response to OMB's Bulletin, DOE conducted formal in-progress peer reviews of the energy conservation standards development process and analyses and has prepared a Peer Review Report pertaining to the energy conservation standards rulemaking analyses. Generation of this report involved a rigorous, formal, and documented evaluation using objective criteria and qualified and independent reviewers to make a judgment as to the technical/scientific/business merit, the actual or anticipated results, and the productivity and management effectiveness of programs and/or projects. The ''Energy Conservation Standards Rulemaking Peer Review Report'' dated February 2007 has been disseminated and is available at the following Web site: *www1.eere.energy.gov/buildings/appliance_standards/peer_review.html*.

M. Description of Materials Incorporated by Reference

In this NOPR, DOE proposes to incorporate by reference the standard published by UL, titled ''Standard for Light-Emitting Diode Retrofit Luminaire Conversion Kits,'' First Edition, dated January 16, 2014, UL 1598C–2014. UL 1598C–2014 is an industry accepted standard that describes the requirements for LED retrofit luminaire conversion kits intended to replace existing incandescent, fluorescent, induction, and HID systems that comply with existing requirements for luminaires. The standard proposed in this NOPR references UL 1598C–2014 for the definition of the term ''LED Downlight Retrofit Kit.'' UL 1598C–2014 is readily available on *http://ulstandards.ul.com/standards-catalog/*.

VIII. Public Participation

A. Attendance at the Public Meeting

The time, date, and location of the public meeting are listed in the **DATES** and **ADDRESSES** sections at the beginning of this NOPR. If you plan to attend the public meeting, please notify Ms. Brenda Edwards at (202) 586–2945 or *Brenda.Edwards@ee.doe.gov*.

Please note that foreign nationals visiting DOE Headquarters are subject to advance security screening procedures which require advance notice prior to attendance at the public meeting. If a foreign national wishes to participate in the public meeting, please inform DOE of this fact as soon as possible by contacting Ms. Regina Washington at (202) 586–1214 or by email (*Regina.Washington@ee.doe.gov*) so that the necessary procedures can be completed.

DOE requires visitors to have laptops and other devices, such as tablets, checked upon entry into the Forrestal Building. Any person wishing to bring these devices into the building will be required to obtain a property pass. Visitors should avoid bringing these devices, or allow an extra 45 minutes to check in. Please report to the visitor's desk to have devices checked before proceeding through security.

Due to the REAL ID Act implemented by the Department of Homeland Security (DHS), there have been recent changes regarding identification (ID) requirements for individuals wishing to enter federal buildings from specific states and U.S. territories. As a result, driver's licenses from several states or territory will not be accepted for building entry, and instead, one of the alternate forms of ID listed below will be required. DHS has determined that regular driver's licenses (and ID cards) from the following jurisdictions are not acceptable for entry into DOE facilities: Alaska, American Samoa, Arizona, Louisiana, Maine, Massachusetts, Minnesota, New York, Oklahoma, and Washington. Acceptable alternate forms of Photo-ID include: U.S. Passport or Passport Card; an Enhanced Driver's License or Enhanced ID-Card issued by the States of Minnesota, New York, or Washington (Enhanced licenses issued by these states are clearly marked Enhanced or Enhanced Driver's License); a military ID or other federal-government-issued photo ID-card.

In addition, you can attend the public meeting via webinar. Webinar registration information, participant instructions, and information about the capabilities available to webinar participants will be published on DOE's Web site at: *https://www1.eere.energy.gov/buildings/appliance_standards/rulemaking.aspx?ruleid=83*. Participants are responsible for ensuring their systems are compatible with the webinar software.

B. Procedure for Submitting Prepared General Statements for Distribution

Any person who has plans to present a prepared general statement may request that copies of his or her statement be made available at the public meeting. Such persons may submit requests, along with an advance electronic copy of their statement in PDF (preferred), Microsoft Word or Excel, WordPerfect, or text (ASCII) file format, to the appropriate address shown in the **ADDRESSES** section at the beginning of this NOPR. The request and advance copy of statements must be received at least one week before the public meeting and may be emailed, hand-delivered, or sent by mail. DOE prefers to receive requests and advance copies via email. Please include a telephone number to enable DOE staff to make follow-up contact, if needed.

C. Conduct of the Public Meeting

DOE will designate a DOE official to preside at the public meeting and may also use a professional facilitator to aid discussion. The meeting will not be a judicial or evidentiary-type public hearing, but DOE will conduct it in accordance with section 336 of EPCA. (42 U.S.C. 6306) A court reporter will be present to record the proceedings and prepare a transcript. DOE reserves the right to schedule the order of presentations and to establish the

procedures governing the conduct of the public meeting. There shall not be discussion of proprietary information, costs or prices, market share, or other commercial matters regulated by U.S. anti-trust laws. After the public meeting, interested parties may submit further comments on the proceedings, as well as on any aspect of the rulemaking, until the end of the comment period.

The public meeting will be conducted in an informal, conference style. DOE will present summaries of comments received before the public meeting, allow time for prepared general statements by participants, and encourage all interested parties to share their views on issues affecting this rulemaking. Each participant will be allowed to make a general statement (within time limits determined by DOE), before the discussion of specific topics. DOE will allow, as time permits, other participants to comment briefly on any general statements.

At the end of all prepared statements on a topic, DOE will permit participants to clarify their statements briefly and comment on statements made by others. Participants should be prepared to answer questions by DOE and by other participants concerning these issues. DOE representatives may also ask questions of participants concerning other matters relevant to this rulemaking. The official conducting the public meeting will accept additional comments or questions from those attending, as time permits. The presiding official will announce any further procedural rules or modification of the above procedures that may be needed for the proper conduct of the public meeting.

A transcript of the public meeting will be included in the docket, which can be viewed as described in the *Docket* section at the beginning of this notice and will be accessible on the DOE Web site. In addition, any person may buy a copy of the transcript from the transcribing reporter.

D. Submission of Comments

DOE will accept comments, data, and information regarding this proposed rule before or after the public meeting, but no later than the date provided in the **DATES** section at the beginning of this proposed rule. Interested parties may submit comments, data, and other information using any of the methods described in the **ADDRESSES** section at the beginning of this NOPR.

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

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

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

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

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

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

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

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

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

Factors of interest to DOE when evaluating requests to treat submitted information as confidential include: (1) A description of the items; (2) whether and why such items are customarily treated as confidential within the industry; (3) whether the information is generally known by or available from other sources; (4) whether the information has previously been made available to others without obligation concerning its confidentiality; (5) an explanation of the competitive injury to the submitting person that would result from public disclosure; (6) when such information might lose its confidential character due to the passage of time; and (7) why disclosure of the information would be contrary to the public interest.

It is DOE's policy that all comments may be included in the public docket,

without change and as received, including any personal information provided in the comments (except information deemed to be exempt from public disclosure).

E. Issues on Which DOE Seeks Comment

Although DOE welcomes comments on any aspect of this proposal, DOE is particularly interested in receiving comments and views of interested parties concerning the following issues:

1. DOE requests comment on its consideration to exclude from the scope of the GSL rulemaking lamps that are addressed in other rulemakings. See section IV.B.2.

2. DOE requests comment on the energy savings potential of standards for GSLs greater than 2,600 lumens. See section IV.B.3.

3. DOE requests comment on the revised definitions proposed for general service LED lamp, OLED lamp, and light fixture. See sections IV.C.1, IV.C.2, and IV.C.6.

4. DOE requests comment on the definition proposed for LED downlight retrofit kit. See section IV.C.7.

5. DOE requests comment on if there are any other lamp types that do not serve in general lighting applications and should be exempted from general service lamp standards. See section IV.D.

6. DOE welcomes comment on the exemptions proposed for non-incandescent lamps of certain shapes, in particular on the proposal to exempt B-shape lamps (including blunt shape), C- and CA-shape lamps (including candle shape), F-shape lamps (including flame or flame tip shape), S-shape lamps, and torpedo or torpedo tip shape lamps with diameters of 1.875 inches or less, G-shape lamps with diameters of 2.0625 or less, and A15 lamps with diameter of 2.185 or less. See section IV.D.2.e.

7. DOE welcomes comment on including non-IRLs in the definition of GSLs. See section IV.D.2.a.

8. DOE requests comment on the various definitions based on GSIL exemptions proposed to better delineate the GSL definition, especially in regards to determining the possible GSLs that use technologies other than incandescent and operate in applications equivalent to those of the lamps exempted from the GSIL definition. See section IV.D.

9. DOE requests comments on its assessments of GSLs for which standards should be proposed. See section IV.E.4.

10. DOE requests information on start times available on the CFL market. See section IV.F.2.c.

11. DOE requests comment on its proposal to require integrated LED lamps to meet a power factor of 0.7 or some other value. See section IV.F.3.

12. DOE requests any comments regarding proposed metrics for GSLs in this NOPR analysis. See section IV.F.4.

13. DOE requests comments on the proposed product classes. See section V.A.1.

14. DOE requests comment on its proposed renaming of ''device level optics'' to ''improved primary optics'' and refined description of this technology option. See section V.A.2.b.

15. DOE requests comment on its proposal to replace the term ''increased light utilization'' with ''improved secondary optics'' and the refined definition of this technology option. See section V.A.2.b.

16. DOE requests comments on the proposed technology options. See section V.A.2.c.

17. DOE requests comment on the proposed design options in this NOPR analysis. See section V.B.3.

18. In its collection of lamp performance data, DOE did not consider high and low end outliers in the engineering analysis where DOE was unable to verify values using test data or manufacturer confirmation. DOE welcomes comment on the data approach. See section V.C.1.

19. DOE requests comment on the baseline lamps analyzed in the NOPR analysis, in particular the spiral CFL baseline in the Integrated Low-Lumen product class. See section V.C.3.a.

20. DOE requests comment on the 3-way lamp used as a basis for the modeled LED lamp and information on whether such a lamp would meet DOE's screening criteria and should be maintained for the final rule analysis. See section V.C.4.

21. DOE requests comment on the ELs under consideration for both of the integrated lamp product classes, including the max-tech levels. See section V.C.5.a.

22. DOE requests comment on the assumption that the efficacy of non-integrated CFLs can be improved for those lamps with base types that potentially cannot meet EL 1. See section V.C.5.b.

23. DOE requests comment on the EL under consideration for the Non-Integrated product class, including the max-tech level. See section V.C.5.b.

24. DOE requests comment on the scaling factors determined. See section V.C.6.

25. DOE requests comment on its assumption that the EISA 2007 backstop will be triggered. See section V.E.1.a.

26. DOE requests comment on the data and methodology used to estimate operating hours for GSLs in the residential sector, as well as on the assumption that GSL operating hours do not vary between CFLs and LED GSLs. See section V.E.1.a.

27. DOE invites comments and data on its approach to account for variability in HOU in the commercial sector. See section V.E.1.b.

28. DOE requests comment on the energy reduction estimate of 30 percent, as well as data and information on the energy use implications of using dimmers in the residential sector. See section V.E.3.

29. DOE requests comment on the assumption that, although in the NOPR analyses DOE continues to assume that 5 percent of CFLs are dimmable, the fraction of CFLs and LEDs that are used with controls external to the lamp is assumed to be the same (14 percent in the reference case) in the residential sector. See section V.E.3.

30. DOE requests comment on the overall methodology and results of the LCC and PBP analyses. See section V.F.

31. DOE requests comment on the installation cost assumptions used in its analyses. See section V.F.2.

32. DOE requests comment on the methodology and assumptions used to determine the market share of the lumen range distributions. See section V.F.3.

33. DOE invites comment on the three GSL service life scenarios in its analyses. DOE also invites comment on the lifetime scenario accounting for GSL failure in the first year of use. See section V.F.6.

34. DOE requests comment and relevant data on the disposal cost assumptions used in its analyses. See section V.F.8.

35. DOE requests relevant data on GSL shipments as they become available in order to improve the accuracy of the shipments analysis. See section V.G.1.a.

36. DOE requests comment on the assumption that the shift to CFL and LED GSLs during the shipments analysis period will take place over several years. See section V.G.1.a.

37. DOE requests comment on whether there are data, in the lighting sector, showing that consumers might purchase, in quantity, existing products on the market prior to compliance of a new, more efficient standard.

38. DOE invites comments on its approach to price learning for LED GSLs. See section V.G.1.b.

39. DOE requests comment on the assumption that brighter lumen bins have a fixed fractional price increment relative to lamps in dimmer lumen bins. See section V.G.1.b.

40. DOE has assumed zero rebound effect in the reference scenario for consumers switching from CFLs to LED lamps in both the commercial and residential sectors. In an alternative scenario, DOE has assumed 15 percent rebound in the residential sector for consumers switching from CFLs to LED lamps, and zero rebound in the commercial sector. DOE requests comment on these assumptions and any data that can be used to further refine the rebound effect assumptions used in the shipments and NIA analyses. See section V.H.1.

41. DOE estimated a reduction in product costs at the proposed standard level because (1) more efficacious lamps have longer average lifetimes than less efficacious lamps, resulting in fewer replacement purchases, (2) the purchase price of more efficacious LED lamps is lower than the price of less efficacious LED lamps, and (3) the purchase price of LED lamps declines faster than the price of CFLs during the analysis period, resulting in LED lamps becoming less expensive than CFLs. DOE requests comment on the cost reduction estimate. See section VI.C.2.

42. DOE considered three lighting-controls scenarios including a smaller range of penetration for smart lamps: 0 percent smart-lamp penetration in the residential sector by 2049, 50 percent penetration (the reference scenario), and a high residential-controls scenario which assumed that externally controlled sockets increase to 50 percent of all sockets in 2049 in addition to a 50 percent penetration of smart lamps in 2049. DOE invites comment on these scenarios. See section V.H.1.a.

43. DOE requests data and information on the assumption of 30 percent energy savings for smart lamps. See section V.H.1.a.

44. DOE invites comment on the low and high benefits scenarios considered in its analysis. See section V.H.2.

45. In addition to the high and low benefits scenarios, DOE considered several other scenarios in its shipments and NIA analyses. DOE invites comments on whether there are other scenarios that should be considered. See section V.H.2.

46. DOE requests comment on the consumer subgroups selected for analysis in this NOPR. See section V.I.

47. DOE requests comment on its approach to conducting the emissions analysis for GSLs. See section V.K.

48. DOE requests comment on the use of 1.52 as an average distribution chain markup and 1.55 as the manufacturer markup for all GSLs. See section V.J.2.b.

49. DOE seeks comment on the assumption that there is only one GSL manufacturer with domestic production of CFLs or LED lamps. Additionally, DOE seeks comment on any potential domestic employment impacts as a result of the proposed new and amended energy conservation standards for GSLs in this NOPR. See section VI.B.2.b.

50. DOE seeks comment on any other potential manufacturer subgroups that could be disproportionally impacted by new and amended energy conservation standards for GSLs. See section VI.B.2.d.

51. DOE seeks comment on the compliance costs of any other regulations GSL manufacturers must make, especially if compliance with those regulations is required three years before or after the estimated compliance date of these proposed standards (2020). See section VI.B.2.e.

52. DOE invites input on its approach to estimating monetary benefits associated with emissions reductions. See section V.L.

53. DOE seeks comment on its approach to conducting the utility impact analysis. See section V.M.

54. DOE welcomes input on its approach to assessing national employment impacts. See section V.N.

55. DOE requests comment on its assumption that there will be no lessening of utility or performance such that the performance characteristics, including physical constraints, diameter, lumen package, color quality, lifetime, and ability to dim, would be adversely affected for the GSL efficacy levels. See sections VI.B.4, V.A, V.B, and V.C.

56. DOE welcomes comments on how to more fully assess the potential impact of energy conservation standards on consumer choice and how to quantify this impact in its regulatory analysis in future rulemakings. See section VI.C.

57. DOE requests any available data or reports that would contribute to the analysis of alternatives to standards for GSLs. In particular, DOE seeks information on the effectiveness of existing or past efficiency improvement programs for these products. See section VII.B.4.

IX. Approval of the Office of the Secretary

The Secretary of Energy has approved publication of this notice of proposed rulemaking.

List of Subjects

10 CFR Part 429

Confidential business information, Energy conservation, Household appliances, Imports, Reporting and recordkeeping requirements.

10 CFR Part 430

Administrative practice and procedure, Confidential business information, Energy conservation, Household appliances, Imports, Incorporation by reference, Intergovernmental relations, Small businesses.

Issued in Washington, DC, on February 12, 2016.

David T. Danielson,

Assistant Secretary, Energy Efficiency and Renewable Energy.

For the reasons set forth in the preamble, DOE proposes to amend parts 429 and 430 of chapter II, subchapter D, of title 10 of the Code of Federal Regulations, as set forth below:

PART 429—CERTIFICATION, COMPLIANCE, AND ENFORCEMENT FOR CONSUMER PRODUCTS AND COMMERCIAL AND INDUSTRIAL EQUIPMENT

■ 1. The authority citation for part 429 continues to read as follows:

Authority: 42 U.S.C. 6291–6317.

■ 2. Section 429.12 is amended by revising paragraph (d) to read as follows:

§ 429.12 General requirements applicable to certification reports.

* * * * *

(d) *Annual filing.* All data required by paragraphs (a) through (c) of this section shall be submitted to DOE annually, on or before the following dates:

Product category	Deadline for data submission
Fluorescent lamp ballasts, Incandescent reflector lamps, General service fluorescent lamps, General service lamps, Residential ceiling fans, Residential ceiling fan light kits, Residential showerheads, Residential faucets, Residential water closets, and Residential urinals.	Mar. 1.
Residential water heater, Residential furnaces, Residential boilers, Residential pool heaters, Commercial water heaters, Commercial hot water supply boilers, Commercial unfired hot water storage tanks, Commercial packaged boilers, Commercial warm air furnaces, Commercial unit heaters and Residential furnace fans.	May 1.
Residential dishwashers, Commercial prerinse spray valves, Illuminated exit signs, Traffic signal modules, Pedestrian modules, and Distribution transformers.	June 1.
Room air conditioners, Residential central air conditioners, Residential central heat pumps, Small duct high velocity system, Space constrained products, Commercial package air-conditioning and heating equipment, Packaged terminal air conditioners, Packaged terminal heat pumps, and Single package vertical units.	July 1.
Residential refrigerators, Residential refrigerators-freezers, Residential freezers, Commercial refrigerator, freezer, and refrigerator-freezer, Automatic commercial automatic ice makers, Refrigerated bottled or canned beverage vending machine, Walk-in coolers, and Walk-in freezers.	Aug. 1.
Torchieres, Residential dehumidifiers, Metal halide lamp fixtures, External power supplies, and Pumps.	Sept. 1.
Residential clothes washers, Residential clothes dryers, Residential direct heating equipment, Residential cooking products, and Commercial clothes washers.	Oct. 1.

* * * * *

PART 430—ENERGY CONSERVATION PROGRAM FOR CONSUMER PRODUCTS

■ 3. The authority citation for part 430 continues to read as follows:

Authority: 42 U.S.C. 6291–6309; 28 U.S.C. 2461 note.

■ 4. Section 430.2 is amended by:

■ a. Adding in alphabetical order the definitions of ''Black light lamp,'' ''Bug lamp,'' ''Colored lamp,'' ''General service light-emitting diode LED lamp,'' ''GU24 base,'' ''Infrared lamp,'' ''Integrated lamp,'' ''LED Downlight Retrofit Kit,'' ''Light fixture,'' ''Marine signal service lamp,'' ''Mercury vapor lamp,'' ''Mine service lamp,'' ''Non-integrated lamp,'' ''Non-reflector lamp,'' ''OLED lamp,'' ''Pin base lamp,'' ''Plant light lamp,'' ''Reflector lamp,'' ''Showcase Lamp,'' ''Sign service lamp,'' ''Silver bowl lamp,'' and ''Traffic signal lamp;'' and

■ b. Revising the definitions of ''designed and marketed'' and ''general service lamp.''

The additions and revisions read as follows:

§ 430.2 Definitions.

* * * * *

Black light lamp means a lamp that is designed and marketed as a black light lamp and is an ultraviolet lamp with the highest radiant power peaks in the UV–A band (315 to 400 nm) of the electromagnetic spectrum.

* * * * *

Bug lamp means a lamp that is designed and marketed as a bug lamp, has radiant power peaks above 550 nm on the electromagnetic spectrum, and has a visible yellow coating.

* * * * *

Colored lamp means a colored fluorescent lamp, a colored incandescent lamp, or a lamp designed and marketed as a colored lamp and not designed and marketed for general lighting applications with either of the following characteristics (if multiple modes of operation are possible [such as variable CCT], either of the below characteristics must be maintained throughout all modes of operation):

(1) A CRI less than 40, as determined according to the method set forth in CIE Publication 13.3 (incorporated by reference; see § 430.3); or

(2) A correlated color temperature less than 2,500 K or greater than 7,000 K as determined according to the method set forth in IES LM–66 or IES LM–79 as appropriate (incorporated by reference; see § 430.3).

* * * * *

Designed and marketed means that the product is specifically designed to fulfill the indicated application and, when distributed in commerce, is designated and marketed for the intended application, with the designation on the packaging and all publicly available documents (*e.g.*, product literature, catalogs, and packaging labels) indicating the intended application. This definition is applicable to terms related to the following covered lighting products: Fluorescent lamp ballasts; fluorescent lamps; general service fluorescent lamps; general service incandescent lamps; general service lamps; incandescent lamps; incandescent reflector lamps; medium base compact fluorescent lamps; and specialty application mercury vapor lamp ballasts.

* * * * *

General service lamp means a lamp that has an ANSI base, operates at any voltage, has an initial lumen output of 310 lumens or greater (or 232 lumens or greater for modified spectrum general service incandescent lamps), is not a light fixture, is not an LED downlight retrofit kit, and is used in general lighting applications. General service lamps include, but are not limited to, general service incandescent lamps, compact fluorescent lamps, general service light-emitting diode lamps, and general service organic light-emitting diode lamps, but do not include general service fluorescent lamps; incandescent reflector lamps; mercury vapor lamps; appliance lamps; black light lamps; bug lamps; colored lamps; infrared lamps; marine signal lamps; mine service lamps; plant light lamps; sign service lamps; traffic signal lamps; and medium screw base incandescent lamps that are left-hand thread lamps, marine lamps, reflector lamps, rough service lamps, shatter-resistant lamps (including a shatter-proof lamp and a shatter-protected lamp), silver bowl lamps, showcase lamps, 3-way incandescent lamps, vibration service lamps, G shape lamps as defined in ANSI C78.20 (incorporated by reference; see § 430.3) and ANSI C79.1–2002 (incorporated by reference; see § 430.3) with a diameter of 5 inches or more, T shape lamps as defined in ANSI C78.20 and ANSI C79.1–2002 and that use not more than 40 watts or have a length of more than 10 inches, and B, BA, CA, F, G16–1/2, G–25, G30, S, or M–14 lamps as defined in ANSI C79.1–2002 and ANSI C78.20 of 40 watts or less.

General service light-emitting diode (LED) lamp means an integrated or non-integrated LED lamp designed for use in general lighting applications (as defined in § 430.2) and that uses light-emitting diodes as the primary source of light.

* * * * *

GU24 base means the GU24 base standardized in ANSI C81.61 (incorporated by reference; see § 430.3).

* * * * *

Infrared lamp means a lamp that is designed and marketed as an infrared lamp, has its highest radiant power peaks in the infrared region of the electromagnetic spectrum (770 nm to 1 mm), and which has a primary purpose of providing heat.

Integrated lamp means a lamp that contains all components necessary for the starting and stable operation of the lamp, does not include any replaceable or interchangeable parts, and is connected directly to a branch circuit through an ANSI base and corresponding ANSI standard lamp-holder (socket).

* * * * *

LED Downlight Retrofit Kit means a product intended to install into an existing downlight, replacing the existing light source and related electrical components, typically employing an ANSI standard lamp base, either integrated or connected to the downlight retrofit by wire leads, and is a retrofit kit classified or certified to UL 1598C (incorporated by reference; see § 430.3). LED downlight retrofit kit does not include integrated lamps or non-integrated lamps.

* * * * *

Light fixture means a complete lighting unit consisting of light source(s) and ballast(s) (when applicable) together with the parts designed to distribute the light, to position and protect the light source, and to connect the light source(s) to the power supply.

* * * * *

Marine signal service lamp means a lamp that is designed and marketed for marine signal service applications.

* * * * *

Mercury vapor lamp means a high intensity discharge lamp, including clear, phosphor-coated, and self-ballasted screw base lamps, in which the major portion of the light is produced by radiation from mercury typically operating at a partial vapor pressure in excess of 100,000 pascal (approximately 1 atmosphere).

* * * * *

Mine service lamp means a lamp that is designed and marketed for mine service applications.

* * * * *

Non-integrated lamp means a lamp that is not an integrated lamp.

Non-reflector lamp means a lamp that is not a reflector lamp.

* * * * *

OLED lamp means an integrated or non-integrated lamp designed for use in general lighting applications that uses OLEDs as the primary source of light.

* * * * *

Pin base lamp means a base type designated as a single pin base or multiple pin base system in Table 1 of ANSI C81.61, Specifications for Electrics Bases (incorporated by reference; see § 430.3).

* * * * *

Plant light lamp means a lamp that is designed to promote plant growth by emitting its highest radiant power peaks in the regions of the electromagnetic spectrum that promote photosynthesis: Blue (440 nm to 490 nm) and/or red (620 to 740 nm). Plant light lamps must be designed and marketed for plant growing applications.

* * * * *

Reflector lamp means a lamp that has an R, PAR, BPAR, BR, ER, MR, or similar bulb shape as defined in ANSI C78.20 (incorporated by reference; see § 430.3) and ANSI C79.1–2002 (incorporated by reference; see § 430.3) and is used to direct light.

* * * * *

Showcase lamp means a lamp that has a T-shape as specified in ANSI C78.20 (incorporated by reference; see § 430.3) and ANSI C79.1–2002 (incorporated by reference; see § 430.3), is designed and marketed as a showcase lamp, and has a maximum rated wattage of 75 watts.

* * * * *

Sign service lamp means a vacuum type or gas-filled lamp that has sufficiently low bulb temperature to permit exposed outdoor use on high-speed flashing circuits, is designed and marketed as a sign service lamp, and has a maximum rated wattage 15 watts.

Silver bowl lamp means a lamp that has a reflective coating applied directly to part of the bulb surface that reflects light toward the lamp base and that is designed and marketed as a silver bowl lamp.

* * * * *

Traffic signal lamp means a lamp that is designed and marketed for traffic signal applications.

* * * * *

■ 5. Section 430.3 is amended by adding paragraph (u)(4) to read as follows:

§ 430.3 Materials incorporated by reference.

* * * * *

(u) * * *

(4) UL 1598C–2014 (''UL 1598C''), Standard for Light-Emitting Diode (LED) Retrofit Luminaire Conversion Kits, First Edition, dated January 16, 2014, IBR approved for § 430.2.

* * * * *

■ 6. Section 430.32 is amended by removing and reserving paragraphs (u) and (x), and adding paragraph (z) to read as follows:

§ 430.32 Energy and water conservation standards and their compliance dates.

* * * * *

(u) Removed and Reserved.

* * * * *

(x) Removed and Reserved.

* * * * *

(z) *General service lamps.* (1) Energy conservation standards for general service lamps:

(i) General service incandescent lamps manufactured after the dates specified in the tables below, except as described in paragraph (z)(1)(ii) of this section, shall have a rated wattage no greater than the values shown in the table in this paragraph:

GENERAL SERVICE INCANDESCENT LAMPS

Rated lumen ranges	Maximum rate wattage	Compliance date
1490–2600	72	1/1/2012
1050–1489	53	1/1/2013
750–1049 ..	43	1/1/2014
310–749	29	1/1/2014

(ii) Modified spectrum general service incandescent lamps manufactured after the dates specified in the table in this paragraph shall have a rated wattage no greater than the values shown in the table in this paragraph:

MODIFIED SPECTRUM GENERAL SERVICE INCANDESCENT LAMPS

Rated lumen ranges	Maximum rate wattage	Compliance date
1118–1950	72	1/1/2012
788–1117 ..	53	1/1/2013
563–787	43	1/1/2014
232–562	29	1/1/2014

(iii) Each candelabra base incandescent lamp shall not exceed 60 rated watts.

(iv) Each intermediate base incandescent lamp shall not exceed 40 rated watts.

(v) A bare or covered (no reflector) medium base compact fluorescent lamp manufactured on or after January 1, 2006, must meet or exceed the following requirements:

Factor	Requirements
Labeled Wattage (Watts) & Configuration *	Minimum initial lamp efficacy (lumens per watt) must be at least:
Bare Lamp:	
Labeled Wattage <15	45.0
Labeled Wattage ≥15	60.0
Covered Lamp (no reflector):	
Labeled Wattage <15	40.0
15≤ Labeled Wattage <19	48.0
19≤ Labeled Wattage <25	50.0
Labeled Wattage ≥25	55.0

* Use labeled wattage to determine the appropriate efficacy requirements in this table; do not use measured wattage for this purpose.

(vi) Except as provided in paragraph (z)(3) of this section, each general service lamp manufactured on or after [DATE 3 YEARS AFTER *DATE OF* PUBLICATION IN THE **Federal Register** OF FINAL RULE] that:

(A) Is an integrated, non-reflector lamp with a medium screw base and an initial lumen output between 310 and 2,600 lumens; or

(B) Is an integrated or non-integrated non-reflector lamp with a GU24 base and an initial lumen output between 310 and 2,600 lumens; shall have:

(*1*) A power factor greater than or equal to 0.7 for integrated LED lamps (as defined in § 430.2) and 0.5 for integrated compact fluorescent lamps (as defined in appendix W of subpart B); and

(*2*) A lamp efficacy greater than or equal to the values shown in the table in this paragraph:

Lamp type	Lumen package (*lumens*)	Standby mode operation	Minimum lamp efficacy (*lm/W*)
Integrated GSLs	310 ≤ Initial Lumen Output <2,000	No standby mode	101.6 − 29.42*0.9983^Initial Lumen Output.
		Capable of operating in standby mode.	96.0—29.42*0.9983^Initial Lumen Output.
	2,000 ≤ Initial Lumen Output ≤ 2,600	No standby mode	73.4 − 29.42*0.9983^Initial Lumen Output.
		Capable of operating in standby mode.	70.5 − 29.42*0.9983^Initial Lumen Output.

(vii) Effective beginning January 1, 2020, each general service lamp sold shall meet a minimum efficacy standard of 45.0 lumens per watt.

(2) Other standards for general service lamps:

(i) General service incandescent lamps manufactured after the dates specified in the tables below, except as described in paragraph (z)(2)(ii) of this section, shall have a color rendering index greater than or equal to 80 and shall have a rated lifetime not less than the values shown in the table in this paragraph:

GENERAL SERVICE INCANDESCENT LAMPS

Rated lumen ranges	Minimum rate life-time (hrs)	Compliance date
1490–2600	1,000	1/1/2012
1050–1489	1,000	1/1/2013
750–1049	1,000	1/1/2014
310–749	1,000	1/1/2014

(ii) Modified spectrum general service incandescent lamps manufactured after the dates specified shall have a color rendering index greater than or equal to 75 and shall have a rated lifetime not less than the values shown in the table in this paragraph:

MODIFIED SPECTRUM GENERAL SERVICE INCANDESCENT LAMPS

Rated lumen ranges	Minimum rate life-time (hrs)	Compliance date
1118–1950	1,000	1/1/2012
788–1117	1,000	1/1/2013
563–787	1,000	1/1/2014
232–562	1,000	1/1/2014

(iii) Medium base CFLs (as defined in § 430.2) manufactured on or after the dates specified in the table below shall meet or exceed the following standards:

Metrics	Requirements for MBCFLs manufactured on or after January 1, 2006	Requirements for MBCFLs manufactured on or after [DATE 3 YEARS AFTER PUBLICATION OF FINAL RULE]
Lumen Maintenance at 1,000 Hours	≥ 90.0%	
Lumen Maintenance at 40 Percent of Lifetime*	≥ 80.0%	
Rapid Cycle Stress Test	At least 5 lamps *must meet or exceed* the minimum number of cycles.	
	All MBCFLs: Cycle once per every two hours of lifetime.*	MBCFLs with start time > 100 ms: Cycle once per hour of lifetime* or a maximum of 15,000 cycles. MBCFLs with a start time of ≤ 100 ms: Cycle once per every two hours of lifetime.*
Lifetime*	≥ 6,000 hours	≥ 10,000 hours.
CRI	No requirement	80.
Start time	No requirement	The time needed for a MBCFL to become fully illuminated must be within one second of application of electrical power.

* Lifetime refers to lifetime of a compact fluorescent lamp as defined in 10 CFR 430.2.

(3) The standards described in paragraph (z)(1)(vi) of this section do not apply to:

(i) Non-integrated CFLs with a pin base;

(ii) Non-integrated LED lamps with a pin base;

(iii) Lamps that have initial lumen outputs greater than 2600 lumens;

(iv) Reflector lamps;

(v) OLED lamps;

(vi) General service incandescent lamps;

(vii) The following medium screw base lamps that are not incandescent lamps:

(*A*) A15 lamps (as defined in ANSI 79.1–2002 (incorporated by reference; see § 430.3)) with lamp diameter when measured at the widest point of less than or equal to 2.185 inches.

(B) Any of the following shapes with lamp diameter when measured at the widest point of less than or equal to 2.0625 inches: G lamps (as defined in ANSI 79.1–2002) and lamps specifically designed and marketed as a globe shape.

(C) Any of the following shapes with lamp diameter when measured at the widest point of less than or equal to 1.875 inches: B lamps (as defined in ANSI 79.1–2002); C lamps (as defined in ANSI 79.1–2002); CA lamps (as defined in ANSI 79.1–2002); F lamps (as defined in ANSI 79.1–2002); S lamps (as defined in ANSI 79.1–2002); and lamps specifically designed and marketed as a blunt, candle, flame, flame tip, torpedo, or torpedo tip shape.

[FR Doc. 2016–04813 Filed 3–16–16; 8:45 am]

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Part III

Department of Energy

10 CFR Parts 429 and 430

Energy Conservation Program: Test Procedures for Certain Categories of General Service Lamps; Proposed Rule

DEPARTMENT OF ENERGY

10 CFR Parts 429 and 430

[Docket No. EERE–2016–BT–TP–0005]

RIN 1904–AD64

Energy Conservation Program: Test Procedures for Certain Categories of General Service Lamps

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

ACTION: Notice of proposed rulemaking.

SUMMARY: The U.S. Department of Energy (DOE) proposes to establish test procedures for certain categories of general service lamps (GSLs) to support the ongoing energy conservation standards rulemaking. Specifically, this rulemaking proposes new test procedures for determining the initial lumen output, input power, lamp efficacy, power factor, and standby mode power of GSLs that are not integrated light emitting diode (LED) lamps, compact florescent lamps (CFLs), or general service incandescent lamps (GSILs). DOE is also proposing clarifying references to the existing lamp test procedures and sampling plans for determining the represented values of integrated LED lamps, CFLs, and GSILs.

DATES: DOE will accept comments, data, and information regarding this notice of proposed rulemaking (NOPR) no later than April 18, 2016. See section V, ''Public Participation,'' for details.

ADDRESSES: Any comments submitted must identify the NOPR for Test Procedures for Certain Categories of General Service Lamps, and provide docket number and/or regulatory information number (RIN) 1904–AD64. Comments may be submitted using any of the following methods:

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

2. *Email: GSL2016TP0005@ee.doe.gov.* Include the docket number EERE–2016–BT–TP–0005 and/or RIN 1904–AD64 in the subject line of the message.

3. *Mail:* Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Office, Mailstop EE–2J, 1000 Independence Avenue SW., Washington, DC 20585–0121. If possible, please submit all items on a CD, in which case it is not necessary to include printed copies.

4. *Hand Delivery/Courier:* Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Office, 950 L'Enfant Plaza SW., Suite 600, Washington, DC 20024. Telephone: (202) 586–2945. If possible, please submit all items on a CD, in which case it is not necessary to include printed copies.

For detailed instructions on submitting comments and additional information on the rulemaking process, see section V of this NOPR, ''Public Participation.''

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

A link to the docket Web page can be found at *https://www1.eere.energy.gov/buildings/appliance_standards/product.aspx?productid=82.* This Web page will link to the docket for this notice on the *www.regulations.gov* site. The *www.regulations.gov* site will contain simple instructions on how to access all documents, including public comments, in the docket. See section V, ''Public Participation,'' for information on how to submit comments through *www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT: Ms. Lucy deButts, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Office, EE–2J, 1000 Independence Avenue SW., Washington, DC 20585–0121. Telephone: (202) 287–1604. Email: *Lucy.deButts@ee.doe.gov.*

Ms. Celia Sher, U.S. Department of Energy, Office of the General Counsel, GC–33, 1000 Independence Avenue SW., Washington, DC 20585–0121. Telephone: (202) 287–6122. Email: *celia.sher@hq.doe.gov.*

For further information on how to submit a comment, review other public comments and the docket, contact Ms. Brenda Edwards at (202) 586–2945 or by email: *Brenda.Edwards@ee.doe.gov.*

SUPPLEMENTARY INFORMATION: DOE intends to incorporate by reference the following industry standards into 10 CFR part 430:

(1) CIE S 025/E:2015 (''CIE S025''), ''International Standard: Test Method for LED Lamps, LED Luminaires and LED Modules.''

Copies of CIE S025 can be obtained from Commission Internationale de l'Eclairage, Central Bureau, Kegelgasse 27, A–1030, Vienna, Austria, 011, or by going to *www.techstreet.com/cie.*

(2) IES LM–20–13, ''IES Approved Method for Photometry of Reflector Type Lamps.''

(3) IES LM–45–15, ''IES Approved Method for the Electrical and Photometric Measurement of General Service Incandescent Filament Lamps.''

Copies of IES LM–20–13 and IES LM–45–15 can be obtained from Illuminating Engineering Society of North America, 120 Wall Street, Floor 17, New York, NY 10005–4001, or by going to *www.ies.org/store.*

See section IV.M for a further discussion of these standards.

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I. Authority and Background

Title III of the Energy Policy and Conservation Act of 1975 (42 U.S.C. 6291, *et seq.;* ''EPCA'' or ''the Act'') sets forth a variety of provisions designed to improve energy efficiency. All references to EPCA refer to the statute as amended through the Energy Efficiency Improvement Act of 2015 (EEIA 2015), Public Law 114–11 (April 30, 2015). Part B of title III, which for editorial reasons was redesignated as

Part A upon incorporation into the U.S. Code (42 U.S.C. 6291–6309, as codified), establishes the ''Energy Conservation Program for Consumer Products Other Than Automobiles.'' This program includes general service lamps, the subject of this NOPR.

Under EPCA, the energy conservation program consists essentially of four parts: (1) Testing, (2) labeling, (3) Federal energy conservation standards, and (4) certification and enforcement procedures. The testing requirements consist of test procedures that manufacturers of covered products must use as the basis for (1) certifying to DOE that their products comply with the applicable energy conservation standards adopted under EPCA (42 U.S.C. 6295(s)) and (2) making representations about the energy use or efficiency of the products (42 U.S.C. 6293(c)). Similarly, DOE must use these test procedures to determine whether the products comply with any relevant standards promulgated under EPCA. (42 U.S.C. 6295(s))

DOE is developing energy conservation standards for general service lamps (GSLs) and has issued a notice of proposed rulemaking published elsewhere in this issue of the **Federal Register**. In support of that rulemaking, this NOPR proposes test procedures for certain categories of GSLs that manufacturers of those lamps would be required to use to assess performance relative to any potential energy conservation standards the lamps must comply with in the future.

Under 42 U.S.C. 6293, EPCA sets forth the criteria and procedures DOE must follow when prescribing or amending test procedures for covered products. (42 U.S.C. 6293(b)) EPCA provides, in relevant part, that any test procedures prescribed or amended under this section shall be reasonably designed to produce test results that measure energy efficiency, energy use, or estimated annual operating cost of a covered product during a representative average use cycle or period of use and shall not be unduly burdensome to conduct. (42 U.S.C. 6293(b)(3)) Pursuant to this authority, DOE proposes to prescribe test procedures for certain categories of GSLs in support of the ongoing GSL standards rulemaking.

Finally, EPCA directs DOE to amend its test procedures for all covered products to integrate measures of standby mode and off mode energy consumption, if technically feasible. (42 U.S.C. 6295(gg)(2)(A)) Standby mode and off mode energy must be incorporated into the overall energy efficiency, energy consumption, or other energy descriptor for each covered product unless the current test procedures already account for and incorporate standby and off mode energy consumption or such integration is technically infeasible. If an integrated test procedure is technically infeasible, DOE must prescribe a separate standby mode and off mode energy use test procedure for the covered product. Id. Any such amendment must consider the most current versions of the IEC Standard 62301 and IEC Standard 62087, as applicable. DOE has tentatively determined that general service lamps can operate in standby mode but not in off mode. Consistent with EPCA's requirement, DOE proposes to address measurement of standby mode power in Appendix CC, as detailed in section III.C of this NOPR.

II. Synopsis of the Notice of Proposed Rulemaking

In this NOPR, DOE proposes test procedures for determining initial lumen output, input power, lamp efficacy, power factor, and standby mode power for certain categories of GSLs for which DOE does not have an existing regulatory test procedure. DOE also notes that representations of energy efficiency must be based on testing in accordance with this rulemaking, if adopted, beginning 180 days after the publication of the final rule.

III. Discussion

A. Scope of Applicability

The term GSL includes general service incandescent lamps, compact fluorescent lamps (CFLs), general service light-emitting diode (LED) lamps, organic light-emitting diode (OLED) lamps, and any other lamps that the Secretary determines are used to satisfy lighting applications traditionally served by general service incandescent lamps (GSILs). 10 CFR 430.2. In its ongoing energy conservation standards rulemaking, DOE is proposing to include in the definition for general service lamp a lamp that has an ANSI base, operates at any voltage, has an initial lumen output of 310 lumens or greater (or 232 lumens or greater for modified spectrum general service incandescent lamps), is not a light fixture, is not an LED downlight retrofit kit, and is used in general lighting applications.[1] In this NOPR, DOE proposes test procedures for certain categories of general service lamps that do not have existing DOE regulatory procedures and clarifies references to the existing DOE regulatory procedures for integrated LED lamps, CFLs, and GSILs.

B. Proposed Method for Determining Initial Lumen Output, Input Power, Lamp Efficacy, and Power Factor

As described in the previous section, the term general service lamp includes many types of lamps using varying lighting technologies. Several of the lamp types included in the definition currently must comply with energy conservation standards and therefore test procedures already exist for these lamps. GSILs are required to comply with the energy conservation standards in 10 CFR 430.32(x) and test procedures for these lamps are in Appendix R to subpart B of part 430. Medium base compact fluorescent lamps (MBCFLs) must comply with standards in 10 CFR 430.32(u) and test procedures for these lamps are in Appendix W. In a separate test procedure rulemaking, DOE has proposed revised test procedures for MBCFLs as well as new test procedures for all other compact fluorescent lamps. 80 FR 45724 (July 31, 2015). The updated and new test procedures will appear at Appendix W. In addition, DOE has proposed new test procedures for integrated LED lamps. 80 FR 39644 (July 9, 2015). Although integrated LED lamps are not currently required to comply with energy conservation standards, DOE is proposing standards for them in the ongoing energy conservation standards rulemaking for GSLs. The test procedures for integrated LED lamps are proposed to be located in new Appendix BB.

If DOE test procedures already exist or have been proposed in an ongoing rulemaking (such as for general service incandescent lamps, compact fluorescent lamps, and integrated LED lamps), DOE proposes to reference, in this rulemaking, those specific provisions. For all other general service lamps, DOE proposes new test procedures in this rulemaking. For the new test procedures, DOE proposes to reference the most recent versions of

[1] The definition also specified several exemptions, including: General service fluorescent lamps; incandescent reflector lamps; mercury vapor lamps; appliance lamps; black light lamps; bug lamps; colored lamps; infrared lamps; marine signal lamps; mine service lamps; plant light lamps; sign service lamps; traffic signal lamps; and medium screw base incandescent lamps that are left-hand thread lamps, marine lamps, reflector lamps, rough service lamps, shatter-resistant lamps (including a shatter-proof lamp and a shatter-protected lamp), silver bowl lamps, showcase lamps, 3-way incandescent lamps, vibration service lamps, G shape lamps as defined in ANSI C78.20 and ANSI C79.1–2002 with a diameter of 5 inches or more, T shape lamps as defined in ANSI C78.20 and ANSI C79.1–2002 and that use not more than 40 watts or have a length of more than 10 inches, and B, BA, CA, F, G16–1/2, G–25, G30, S, or M–14 lamps as defined in ANSI C79.1–2002 and ANSI C78.20 of 40 watts or less.

relevant industry standards. Table III.1 summarizes the test procedures that DOE is proposing for general service lamps, largely based on the lighting technology that they use.

TABLE III.1—TEST PROCEDURES FOR GENERAL SERVICE LAMPS BASED ON LIGHTING TECHNOLOGY

Lamp type	Referenced test procedure
General service incandescent lamps	Appendix R to Subpart B of 10 CFR 430
Compact fluorescent lamps	Appendix W to Subpart B of 10 CFR 430
Integrated LED lamps	Appendix BB to Subpart B of 10 CFR 430
Other incandescent lamps that are not reflector lamps	IES LM–45–15, sections 4–7*
Other incandescent lamps that are reflector lamps	IES LM–20–13, sections 4–8*
Other fluorescent lamps	IES LM–9–09, sections 4–6*
OLED lamps	IES LM–79–08, sections 2–9.2*
Non-integrated LED lamps	CIE S025, sections 4–6*

The test procedures for general service lamps that do not have existing DOE test procedures would be contained in a new Appendix CC. Appendix CC would contain methods for determining initial lumen output, input power, lamp efficacy, and power factor. Energy conservation standards for general service lamps, described in the ongoing energy conservation standards rulemaking, are in terms of lamp efficacy, expressed in lumens per watt (lm/W). Initial lumen output and input power are measured quantities used to calculate lamp efficacy. As described in section IV.F.2.b of the NOPR in the ongoing energy conservation standards rulemaking for GSLs, DOE has determined that power factor impacts energy use. Therefore, DOE also proposes test procedures for power factor in Appendix CC.

C. Proposed Method for Determining Standby Mode Power

As described in section I, EPCA directs DOE to amend its test procedures for all covered products to integrate measures of standby mode and off mode energy consumption, if technically feasible. (42 U.S.C. 6295(gg)(2)(A)) This notice proposes both active mode and standby mode test procedures for general service lamps. DOE does not propose a test procedure for off mode energy consumption because DOE determined that it is not possible for GSLs included in the scope of the proposed energy conservation standards rulemaking to meet the off-mode criteria. There is no condition in which a GSL connected to main power is not already in a mode accounted for in either active or standby mode.

EPCA section 325(gg)(2)(A) directs DOE to establish test procedures for standby mode operation ''taking into consideration the most current versions of Standards 62301 and 62087 of the International Electrotechnical Commission . . .'' (42 U.S.C. 6295(gg)(2)(A)) IEC Standard 62087 applies only to audio, video, and related equipment, but not to lighting equipment. As IEC Standard 62087 does not apply to this rulemaking, DOE is proposing to use the standby mode test procedures outlined in IEC Standard 62301, which applies generally to household electrical appliances. Referencing IEC 62301 is consistent with the proposed standby mode test procedures for compact fluorescent lamps and integrated LED lamps. 80 FR 45724, 45738 (July 31, 2015) and 80 FR 39644, 39654 (July 9, 2015).

D. Laboratory Accreditation

DOE proposes in this document to require that testing of initial lumen output, input power, lamp efficacy, power factor, and standby mode power (if applicable) for general service lamps be conducted by test laboratories accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) or an accrediting organization recognized by the International Laboratory Accreditation Cooperation (ILAC). NVLAP is a member of ILAC, so test data collected by any laboratory accredited by an accrediting body recognized by ILAC would be acceptable. Testing for other regulated lighting products (such as general service fluorescent lamps, incandescent reflector lamps, and fluorescent lamp ballasts), in addition to general service lamps that must already comply with energy conservation standards (such as general service incandescent lamps and medium base compact fluorescent lamps), must also be conducted in a similarly accredited facility. 10 CFR 430.25.

E. Represented Values, Certification, and Rounding Requirements

DOE is proposing to create a new section for general service lamps, 10 CFR 429.57, to provide sampling, represented value, certification, and rounding requirements. Existing sampling procedures in 10 CFR part 429 are referenced, where applicable. If a test procedure does not currently exist, sampling and represented value calculations reference the existing DOE test procedure with the most similar lamp technology. For example, sampling and represented value calculations for OLED lamps are to be as described in section 10 CFR 429.56, the section that addresses integrated LED lamps.

DOE also proposes certification and rounding requirements to include the relevant metrics for general service lamps. Rounding requirements are consistent with those for general service incandescent lamps and those proposed for compact fluorescent lamps and integrated LED lamps. 80 FR 45724, 45752 (July 31, 2015) and 80 FR 39644, 39665 (July 9, 2015).

F. Effective Date and Compliance Dates

If adopted, the effective date for the new test procedures proposed in this NOPR would be 30 days after publication of the GSL test procedure final rule in the **Federal Register**. More specifically, for GSLs that are not integrated LED lamps, CFLs, or GSILs, the effective date of the new test procedure upon adoption would be 30 days after a final rule would be published in the **Federal Register**. Pursuant to EPCA, manufacturers of covered products would be required to use the applicable test procedure as the basis for determining that their products comply with the applicable energy conservation standards and for making representations about the efficiency of those products. (42 U.S.C. 6293(c); 42 U.S.C. 6295(s)) For those energy efficiency or consumption metrics covered by the DOE test procedure (*i.e.,* the test method and sampling plan), manufacturers must make representations, including certification of compliance with an applicable standard, in accordance with the DOE

test procedure no later than 180 days after publication of a final rule in the **Federal Register** (referred to as the ''compliance date'').

DOE proposes that after the effective date and prior to the compliance date of a GSL test procedure final rule, manufacturers may voluntarily begin to make representations with respect to the energy use or efficiency of GSLs that are not integrated LED lamps, CFLs, and GSILs using the results of testing pursuant to that final rule. On or after 180 days after publication of a final rule, any representations, including certifications of compliance (if required), made with respect to the energy use or efficiency of GSLs that are not integrated LED lamps, CFLs, and GSILs would be required to be made in accordance with the results of testing pursuant to the new test procedures.

IV. Procedural Issues and Regulatory Review

A. Review Under Executive Order 12866

The Office of Management and Budget (OMB) has determined that test procedure rulemakings do not constitute ''significant regulatory actions'' under section 3(f) of Executive Order 12866, ''Regulatory Planning and Review.'' 58 FR 51735 (Oct. 4, 1993). Accordingly, this action was not subject to review under the Executive Order by the Office of Information and Regulatory Affairs (OIRA) in the OMB.

B. Review Under the Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) requires preparation of an initial regulatory flexibility analysis (IRFA) for any rule that by law must be proposed for public comment, unless the agency certifies that the rule, if promulgated, will not have a significant economic impact on a substantial number of small entities. As required by Executive Order 13272, ''Proper Consideration of Small Entities in Agency Rulemaking,'' 67 FR 53461 (Aug. 16, 2002), DOE published procedures and policies on February 19, 2003, to ensure that the potential impacts of its rules on small entities are properly considered during the DOE rulemaking process. 68 FR 7990. DOE has made its procedures and policies available on the Office of the General Counsel's Web site: *http://energy.gov/gc/office-general-counsel.*

DOE reviewed the test procedures for GSLs proposed in this NOPR under the provisions of the Regulatory Flexibility Act and the procedures and policies published on February 19, 2003. DOE certifies that the proposed rule, if adopted, would not have a significant economic impact on a substantial number of small entities. The factual basis for this certification is set forth in the following paragraphs.

1. Estimated Small Business Burden

The Small Business Administration (SBA) considers a business entity to be a small business, if, together with its affiliates, it employs less than a threshold number of workers specified in 13 CFR part 121. These size standards and codes are established by the North American Industry Classification System (NAICS). Manufacturing of GSLs is classified under NAICS 335110, ''Electric Lamp Bulb and Part Manufacturing.'' The SBA sets a threshold of 1,000 employees or less for an entity to be considered as a small business for this category.

To estimate the number of companies that could be small businesses that sell GSLs, DOE conducted a market survey using publicly available information. DOE's research involved information provided by trade associations (*e.g.,* the National Electrical Manufacturers' Association) and information from DOE's Compliance Certification Management System (CCMS) Database, the Environmental Protection Agency's ENERGY STAR Certified Light Bulbs Database, LED Lighting Facts Database, previous rulemakings, individual company Web sites, SBA's database, and market research tools (*e.g.,* Hoover's reports). DOE screened out companies that do not meet the definition of a ''small business'' or are completely foreign owned and operated. DOE identified approximately 118 small businesses that sell GSLs in the United States.

In this NOPR, DOE proposes test procedures for determining initial lumen output, input power, lamp efficacy, power factor, and standby power of GSLs. Several of the lamp types included in the definition of general service lamp must already comply with energy conservation standards and therefore test procedures already exist for these lamps. If DOE test procedures already exist or have been proposed in an ongoing rulemaking (such as for general service incandescent lamps, compact fluorescent lamps, and integrated LED lamps), DOE proposes to reference them directly. For all other general service lamps, DOE proposes new test procedures in this rulemaking. For the new test procedures, DOE proposes to reference the most recent versions of relevant industry standards.

In this section, DOE estimates the testing costs and burden associated with conducting testing according to the new test procedures proposed in this NOPR for general service lamps. DOE did not consider the costs and burdens associated with DOE test procedures that already exist or that have been proposed in other ongoing rulemakings because these have been or are being addressed separately. In this section, DOE assesses elements (testing methodology, testing times, and sample size) in the newly proposed test procedures that could affect costs associated with complying with this rule. The following is an analysis of both in-house and third party testing costs associated with this proposed rulemaking.

DOE estimates that the labor costs associated with conducting in-house testing of initial lumen output, input power, and standby mode power is $41.68 per hour. DOE determined that calculating efficacy and power factor of a GSL would not result in any incremental testing burden beyond the cost of conducting the initial lumen output and input power testing. The cost of labor was then calculated by multiplying the estimated hours of labor by the hourly labor rate. For lamps not capable of operating in standby mode, DOE estimated that testing in-house in accordance with Appendix CC would require, at most, four hours per lamp by an electrical engineering technician. For lamps capable of operating in standby mode, DOE estimated that testing time would increase to five hours per lamp due to the additional standby mode power consumption test. DOE believes that these estimates are representative of the time it would take to test the most labor intensive technology, LED lamps. In total, DOE estimates that using the test method prescribed in this NOPR to determine initial light output and input power would result in an estimated labor burden of $1,670 per basic model of certain GSLs and $2,080 per basic model of certain GSLs that can operate in standby mode.

Because NVLAP [1] imposes a variety of fees during the accreditation process, including fixed administrative fees, variable assessment fees, and proficiency testing fees, DOE included the costs associated with maintaining a NVLAP-accredited facility or a facility accredited by an organization recognized by NVLAP. In the first year, for manufacturers without NVLAP accreditation who choose to test in-house, DOE estimated manufacturers on

[1] As discussed in section III.D, laboratories can be accredited by any accreditation body that is a signatory member to the ILAC MRA. DOE based its estimate of the costs associated with accreditation on the NVLAP accreditation body.

average would experience a maximum total cost burden of about $2,210 per basic model tested or $2,630 per basic model with standby mode power consumption testing.[2]

Additionally, DOE requested pricing from independent testing laboratories for testing GSLs. DOE estimated the cost for testing at an independent laboratory to be up to $1,070 per basic model. This estimate includes the cost of accreditation as quotes were obtained from accredited laboratories.

DOE notes that its proposed test procedures directly reference existing industry standards that have been approved for widespread use by lamp manufacturers and test laboratories. The quantities that are directly measured, namely initial lumen output and input power, are commonly reported by the manufacturer on product packaging and on product specification sheets. Thus, testing for these quantities is already being conducted. Additionally, these quantities are required to be reported to ENERGY STAR if manufacturers certify the lamps as meeting the program requirements. Standby mode power consumption is also a reported quantity for the ENERGY STAR program, though it may not be a commonly reported value for lamps that are not certified with ENERGY STAR. In reviewing the lamps for which DOE is proposing new test procedures in this rulemaking, DOE notes that very few products can operate in standby mode and therefore very few products would be required to make representations of standby mode energy consumption according to the test procedures proposed in this rulemaking. Although DOE has proposed to require that all testing be conducted in accredited laboratories, DOE believes that many manufacturers of these products have already accredited their own in-house laboratories because they also make products such as general service incandescent lamps and medium base compact fluorescent lamps that are required to be tested in similarly accredited laboratories.

The final cost per manufacturer primarily depends on the number of basic models the manufacturer sells. These are not annual costs because DOE does not require manufacturers to retest a basic model annually. The initial test results used to generate a certified rating for a basic model remain valid as long as the basic model has not been modified from the tested design in a way that makes it less efficient or more consumptive, which would require a change to the certified rating. If a manufacturer has modified a basic model in a way that makes it more efficient or less consumptive, new testing is required only if the manufacturer wishes to make representations of the new, more efficient rating.

For the reasons described in this section, DOE tentatively concludes and certifies that the new proposed test procedures would not have a ''significant economic impact on a substantial number of small entities,'' and the preparation of an IRFA is not warranted. DOE will transmit the certification and supporting statement of factual basis to the Chief Counsel for Advocacy of the SBA for review under 5 U.S.C. 605(b).

C. Review Under the Paperwork Reduction Act of 1995

DOE established regulations for the certification and recordkeeping requirements for certain covered consumer products and commercial equipment. 10 CFR part 429, subpart B. This collection-of-information requirement was approved by OMB under OMB control number 1910–1400.

DOE requested OMB approval of an extension of this information collection for three years, specifically including the collection of information proposed in the present rulemaking, and estimated that the annual number of burden hours under this extension is 30 hours per company. In response to DOE's request, OMB approved DOE's information collection requirements covered under OMB control number 1910–1400 through November 30, 2017. 80 FR 5099 (January 30, 2015).

Notwithstanding any other provision of the law, no person is required to respond to, nor must any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the PRA, unless that collection of information displays a currently valid OMB control number.

D. Review Under the National Environmental Policy Act of 1969

In this proposed rule, DOE proposes test procedures for certain categories of GSLs that will be used to support the ongoing GSL standards rulemaking. DOE has determined that this rule falls into a class of actions that are categorically excluded from review under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*) and DOE's implementing regulations at 10 CFR part 1021. Specifically, this proposed rule adopts existing industry test procedures for certain categories of general service lamps, so it will not affect the amount, quality or distribution of energy usage, and, therefore, will not result in any environmental impacts. Thus, this rulemaking is covered by Categorical Exclusion A5 under 10 CFR part 1021, subpart D. Accordingly, neither an environmental assessment nor an environmental impact statement is required.

E. Review Under Executive Order 13132

Executive Order 13132, ''Federalism,'' 64 FR 43255 (Aug. 4, 1999), imposes certain requirements on agencies formulating and implementing policies or regulations that preempt State law or that have Federalism implications. The Executive Order requires agencies to examine the constitutional and statutory authority supporting any action that would limit the policymaking discretion of the States and to carefully assess the necessity for such actions. The Executive Order also requires agencies to have an accountable process to ensure meaningful and timely input by State and local officials in the development of regulatory policies that have Federalism implications. On March 14, 2000, DOE published a statement of policy describing the intergovernmental consultation process it will follow in the development of such regulations. 65 FR 13735. DOE has examined this proposed rule and has determined that it would not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. EPCA governs and prescribes Federal preemption of State regulations as to energy conservation for the products that are the subject of this proposed rule. States can petition DOE for exemption from such preemption to the extent, and based on criteria, set forth in EPCA. (42 U.S.C. 6297(d)) No further action is required by Executive Order 13132.

F. Review Under Executive Order 12988

Regarding the review of existing regulations and the promulgation of new regulations, section 3(a) of Executive Order 12988, ''Civil Justice Reform,'' 61 FR 4729 (Feb. 7, 1996), imposes on Federal agencies the general duty to adhere to the following requirements: (1) Eliminate drafting errors and ambiguity; (2) write regulations to minimize litigation; (3) provide a clear legal standard for affected conduct rather than a general standard; and (4) promote simplification and burden reduction. Section 3(b) of Executive Order 12988 specifically

[2] NVLAP costs are fixed and were distributed based on an estimate of 28 basic models per manufacturer.

requires that Executive agencies make every reasonable effort to ensure that the regulation: (1) Clearly specifies the preemptive effect, if any; (2) clearly specifies any effect on existing Federal law or regulation; (3) provides a clear legal standard for affected conduct while promoting simplification and burden reduction; (4) specifies the retroactive effect, if any; (5) adequately defines key terms; and (6) addresses other important issues affecting clarity and general draftsmanship under any guidelines issued by the Attorney General. Section 3(c) of Executive Order 12988 requires Executive agencies to review regulations in light of applicable standards in sections 3(a) and 3(b) to determine whether they are met or it is unreasonable to meet one or more of them. DOE has completed the required review and determined that, to the extent permitted by law, the proposed rule meets the relevant standards of Executive Order 12988.

G. Review Under the Unfunded Mandates Reform Act of 1995

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA) requires each Federal agency to assess the effects of Federal regulatory actions on State, local, and Tribal governments and the private sector. Public Law 104–4, sec. 201 (codified at 2 U.S.C. 1531). For a proposed regulatory action likely to result in a rule that may cause the expenditure by State, local, and Tribal governments, in the aggregate, or by the private sector of $100 million or more in any one year (adjusted annually for inflation), section 202 of UMRA requires a Federal agency to publish a written statement that estimates the resulting costs, benefits, and other effects on the national economy. (2 U.S.C. 1532(a), (b)) The UMRA also requires a Federal agency to develop an effective process to permit timely input by elected officers of State, local, and Tribal governments on a proposed ''significant intergovernmental mandate,'' and requires an agency plan for giving notice and opportunity for timely input to potentially affected small governments before establishing any requirements that might significantly or uniquely affect small governments. On March 18, 1997, DOE published a statement of policy on its process for intergovernmental consultation under UMRA. 62 FR 12820; also available at *http://energy.gov/gc/office-general-counsel.* DOE examined this proposed rule according to UMRA and its statement of policy, and DOE determined that the rule contains neither an intergovernmental mandate nor a mandate that may result in the expenditure of $100 million or more in any year, so these requirements do not apply.

H. Review Under the Treasury and General Government Appropriations Act, 1999

Section 654 of the Treasury and General Government Appropriations Act, 1999, (Pub. L. 105–277) requires Federal agencies to issue a Family Policymaking Assessment for any rule that may affect family well-being. This rule would not have any impact on the autonomy or integrity of the family as an institution. Accordingly, DOE has concluded that it is not necessary to prepare a Family Policymaking Assessment.

I. Review Under Executive Order 12630

DOE has determined, under Executive Order 12630, ''Governmental Actions and Interference with Constitutionally Protected Property Rights,'' 53 FR 8859 (March 18, 1988) that this regulation would not result in any takings that might require compensation under the Fifth Amendment to the U.S. Constitution.

J. Review Under the Treasury and General Government Appropriations Act, 2001

Section 515 of the Treasury and General Government Appropriations Act, 2001, (44 U.S.C. 3516 note) provides for agencies to review most disseminations of information to the public under guidelines established by each agency pursuant to general guidelines issued by OMB. OMB's guidelines were published at 67 FR 8452 (Feb. 22, 2002), and DOE's guidelines were published at 67 FR 62446 (Oct. 7, 2002). DOE has reviewed this proposed rule under the OMB and DOE guidelines, and has concluded that it is consistent with applicable policies in those guidelines.

K. Review Under Executive Order 13211

Executive Order 13211, ''Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use,'' 66 FR 28355 (May 22, 2001), requires Federal agencies to prepare and submit to OMB a Statement of Energy Effects for any proposed significant energy action. A ''significant energy action'' is defined as any action by an agency that promulgated or is expected to lead to promulgation of a final rule, and that: (1) Is a significant regulatory action under Executive Order 12866, or any successor order; and (2) is likely to have a significant adverse effect on the supply, distribution, or use of energy; or (3) is designated by the Administrator of OIRA as a significant energy action. For any proposed significant energy action, the agency must give a detailed statement of any adverse effects on energy supply, distribution, or use should the proposal be implemented, and of reasonable alternatives to the action and their expected benefits on energy supply, distribution, and use.

This regulatory action to propose test procedures for certain categories of GSLs is not a significant regulatory action under Executive Order 12866. Moreover, it would not have a significant adverse effect on the supply, distribution, or use of energy, nor has it been designated as a significant energy action by the Administrator of OIRA. Therefore, it is not a significant energy action, and, accordingly, DOE has not prepared a Statement of Energy Effects.

L. Review Under Section 32 of the Federal Energy Administration Act of 1974

Under section 301 of the Department of Energy Organization Act (Pub. L. 95–91; 42 U.S.C. 7101), DOE must comply with section 32 of the Federal Energy Administration Act of 1974, as amended by the Federal Energy Administration Authorization Act of 1977. (15 U.S.C. 788; FEAA) Section 32 essentially provides in relevant part that, where a proposed rule authorizes or requires use of commercial standards, the notice of proposed rulemaking must inform the public of the use and background of such standards. In addition, section 32(c) requires DOE to consult with the Attorney General and the Chairman of the FTC concerning the impact of the commercial or industry standards on competition.

The proposed test procedures incorporate testing methods contained in the following commercial standards:

(1) CIE S025, ''International Standard: Test Method for LED Lamps, LED Luminaires and LED Modules,'' 2015;

(2) IES LM–45–15, ''IES Approved Method for the Electrical and Photometric Measurement of General Service Incandescent Filament Lamps,'' 2015;

(3) IES LM–20–13, ''IES Approved Method for Photometry of Reflector Type Lamps,'' 2013;

(4) IES LM–79–08, ''Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products,'' 2008;

(5) IES LM–9–09, ''IES Approved Method for the Electrical and Photometric Measurement of Fluorescent Lamps,'' 2009; and

(6) IEC Standard 62301 (Edition 2.0), ''Household electrical appliances—Measurement of standby power,'' 2011.

DOE has evaluated these standards and is unable to conclude whether they fully comply with the requirements of section 32(b) of the FEAA (*i.e.,* that they were developed in a manner that fully provides for public participation, comment, and review). DOE will consult with the Attorney General and the Chairman of the FTC concerning the impact of these test procedures on competition, prior to prescribing a final rule.

M. Description of Materials Proposed To Be Incorporated by Reference

In this NOPR, DOE proposes to incorporate by reference the test standard published by CIE, titled ''International Standard: Test Method for LED Lamps, LED Luminaires and LED Modules,'' CIE S025. CIE S025 is an internationally accepted test standard that specifies test procedures for measuring electrical and photometric characteristics of LED lamps, LED luminaires, and LED modules. The test procedures proposed in this NOPR reference sections of CIE S025 for performing electrical and photometric measurements of non-integrated LED lamps. CIE S025 is readily available on CIE's Web site at *www.techstreet.com/cie.*

DOE also proposes to incorporate by reference the test standard published by IES, titled ''IES Approved Method for the Electrical and Photometric Measurement of General Service Incandescent Filament Lamps,'' IES LM–45–15. IES LM–45–15 is an industry accepted test standard that specifies procedures to be observed in performing measurements of electrical and photometric characteristics of general service incandescent filament lamps under standard conditions. The test procedures proposed in this NOPR reference sections of IES LM–45–15 for performing electrical and photometric measurements of general service incandescent filament lamps. IES LM–45–15 is readily available on IES's Web site at *www.ies.org/store/.*

DOE also proposes to incorporate by reference the test standard published by IES, titled ''IES Approved Method for Photometry of Reflector Type Lamps,'' IES LM–20–13. IES LM–20–13 is an industry accepted test standard that specifies photometric test methods for reflector lamps. The test procedures proposed in this NOPR reference sections of IES LM–20–13 for performing electrical and photometric measurements of reflector lamps. IES LM–20–13 is readily available on IES's Web site at *www.ies.org/store.*

V. Public Participation

A. Submission of Comments

DOE will accept comments, data, and information regarding this proposed rule no later than the date provided in the **DATES** section at the beginning of this NOPR. Interested parties may submit comments, data, and other information using any of the methods described in the **ADDRESSES** section at the beginning of this NOPR.

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

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

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

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

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

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

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

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

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

Factors of interest to DOE when evaluating requests to treat submitted information as confidential include: (1) A description of the items; (2) whether and why such items are customarily

treated as confidential within the industry; (3) whether the information is generally known by or available from other sources; (4) whether the information has previously been made available to others without obligation concerning its confidentiality; (5) an explanation of the competitive injury to the submitting person which would result from public disclosure; (6) when such information might lose its confidential character due to the passage of time; and (7) why disclosure of the information would be contrary to the public interest.

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

B. Issues on Which DOE Seeks Comment

Although comments are welcome on all aspects of this proposed rulemaking, DOE is particularly interested in comments on the following issues.

(1) DOE requests comment on the appropriateness of the industry standards referenced in its proposed test methods for certain categories of general service lamps for which DOE test procedures do not currently exist.

(2) DOE requests comment in its proposed test method for standby mode power consumption.

(3) DOE requests comment on requiring that testing for general service lamps be conducted in laboratories accredited by NVLAP or an accrediting organization recognized by the International Laboratory Accreditation Cooperation (ILAC).

(4) DOE requests comment on its tentative conclusion that the proposed test procedures will not have a significant economic impact on a substantial number of small entities.

VI. Approval of the Office of the Secretary

The Secretary of Energy has approved publication of this proposed rule.

List of Subjects

10 CFR Part 429

Confidential business information, Energy conservation, Household appliances, Imports, Reporting and recordkeeping requirements.

10 CFR Part 430

Administrative practice and procedure, Confidential business information, Energy conservation, Household appliances, Imports, Incorporation by reference, Intergovernmental relations, Small businesses.

Issued in Washington, DC, on February 26 2016.

Kathleen B. Hogan,

Deputy Assistant Secretary for Energy Efficiency Energy Efficiency and Renewable Energy.

For the reasons stated in the preamble, DOE proposes to amend parts 429 and 430 of chapter II of title 10, of the Code of Federal Regulations, as set forth below:

PART 429—CERTIFICATION, COMPLIANCE, AND ENFORCEMENT FOR CONSUMER PRODUCTS AND COMMERCIAL AND INDUSTRIAL EQUIPMENT

■ 1. The authority citation for part 429 continues to read as follows:

Authority: 42 U.S.C. 6291–6317.

■ 2. Section 429.57 is added to read as follows:

§ 429.57 General service lamps.

(a) *Determination of represented value.* Manufacturers must determine represented values, which includes certified ratings, for each basic model of general service lamp in accordance with following sampling provisions.

(1) The requirements of § 429.11 are applicable to general service lamps, and

(2) For general service incandescent lamps, use § 429.27(a);

(3) For compact fluorescent lamps, use § 429.35(a);

(4) For integrated LED lamps, use § 429.56(a) (proposed in the LED Test Procedure SNOPR, 80 FR 39644, 39664–65 (July 9, 2015));

(5) For other incandescent lamps, use § 429.27(a);

(6) For other fluorescent lamps, use § 429.35(a); and

(7) For OLED lamps and non-integrated LED lamps, use § 429.56(a) (proposed in the LED Test Procedure SNOPR at 80 FR 39664–39665).

(b) *Certification reports.*

(1) The requirements of § 429.12 are applicable to general service lamps;

(2) Values reported in certification reports are represented values;

(3) For general service incandescent lamps, use § 429.27(b);

(4) For compact fluorescent lamps, use § 429.35(b);

(5) For integrated LED lamps, use § 429.56(b) (proposed in the LED Test Procedure SNOPR at 80 FR 39664–39665); and

(6) For other incandescent lamps, for other fluorescent lamps, for OLED lamps and non-integrated LED lamps, pursuant to § 429.12(b)(13), a certification report must include the following public product-specific information: The testing laboratory's NVLAP identification number or other NVLAP-approved accreditation identification, initial lumen output, input power, and lamp efficacy.

(c) *Rounding requirements.*

(1) Round input power to the nearest tenth of a watt.

(2) Round initial lumen output to three significant digits.

(3) Round lamp efficacy to the nearest tenth of a lumen per watt.

(4) Round power factor to the nearest hundredths place.

(5) Round standby mode power to the nearest tenth of a watt.

PART 430—ENERGY CONSERVATION PROGRAM FOR CONSUMER PRODUCTS

■ 3. The authority citation for part 430 continues to read as follows:

Authority: 42 U.S.C.6291–6309; 28 U.S.C. 2461 note.

■ 4. Section 430.3 is amended by:

■ a. Adding paragraph (l)(3);

■ b. Redesignating paragraphs (o)(5), (o)(6), (o)(7), (o)(8), and (o)(9) as (o)(6), (o)(8), (o)(9), (o)(10), and (o)(11) respectively;

■ c. Adding new paragraphs (o)(5) and (o)(7);

■ d. Removing the words ''appendices R, V, and V1'' in paragraph (o)(2) and adding in its place the words, ''appendices R, V, V1, and CC'';

■ e. Removing the words ''appendix V1'' in newly redesignated paragraph (o)(11) and adding in its place the words ''appendices V1 and CC''; and

■ f. Removing the words ''X1 and Z'' in paragraph (p)(4) and adding in its place the words, ''X1, Z, and CC''.

The additions read as follows:

§ 430.3 Materials incorporated by reference.

* * * * *

(l) * * *

(3) CIE S 025/E:2015 (''CIE S025''), International Standard: Test Method for LED Lamps, LED Luminaires and LED Modules, 2015; IBR approved for appendix CC to subpart B.

* * * * *

(o) * * *

(5) IES LM–20–13, IES Approved Method: Photometry of Reflector Type Lamps, approved February 4, 2013; IBR approved for appendix CC to subpart B.

* * * * *

(7) IES LM–45–15, (''IES LM–45–15''), IES Approved Method: Electrical and Photometric Measurement of General Service Incandescent Filament Lamps,

approved August 8, 2015; IBR approved for appendix CC to subpart B.

* * * * *

■ 5. Section 430.23 as proposed to be amended on July 9, 2015 80 FR 39644, is further amended by adding paragraph (ee) to read as follows:

§ 430.23 Test procedures for the measurement of energy and water consumption.

* * * * *

(ee) *General Service Lamps.*

(1) For general service incandescent lamps, measure lamp efficacy in accordance with paragraph (r) of this section.

(2) For compact fluorescent lamps, measure lamp efficacy, lumen maintenance at 1,000 hours, lumen maintenance at 40 percent of lifetime, rapid cycle stress, time to failure, power factor, CRI, start time, and standby mode power in accordance with paragraph (y) of this section.

(3) For integrated LED lamps, measure lamp efficacy, power factor, and standby mode power in accordance with paragraph (dd) (proposed in the LED Test Procedure SNOPR, 80 FR at 39665) of this section.

(4) For other incandescent lamps, measure initial light output, input power, lamp efficacy, power factor, and standby mode power in accordance with appendix CC of this subpart.

(5) For other fluorescent lamps, measure initial light output, input power, lamp efficacy, power factor, and standby mode power in accordance with appendix CC of this subpart.

(6) For OLED and non-integrated LED lamps, measure initial light output, input power, lamp efficacy, power factor, and standby mode power in accordance with appendix CC of this subpart.

■ 6. Section 430.25 is revised to read as follows:

§ 430.25 Laboratory Accreditation Program.

The testing for general service fluorescent lamps, general service lamps (with the exception of applicable lifetime testing), incandescent reflector lamps, and fluorescent lamp ballasts must be conducted by test laboratories accredited by an Accreditation Body that is a signatory member to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA). A manufacturer's or importer's own laboratory, if accredited, may conduct the applicable testing.

■ 7. Appendix CC to subpart B of part 430 [(Appendix BB was proposed at 80 FR 39644, 39666, July 9, 2015)] is added to read as follows:

Appendix CC to Subpart B of Part 430—Uniform Test Method for Measuring the Energy Consumption and Energy Efficiency of General Service Lamps That Are Not General Service Incandescent Lamps, Compact Fluorescent Lamps, or Integrated LED Lamps.

Note: On or after [DATE 180 DAYS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], any representations, including certifications of compliance (if required), made with respect to the energy use or efficiency of general service lamps that are not general service incandescent lamps, compact fluorescent lamps, or integrated LED lamps must be made in accordance with the results of testing pursuant to this appendix.

1. *Scope:* This appendix specifies the test methods required to measure the initial lumen output, input power, lamp efficacy, power factor, and standby mode energy consumption of general service lamps that are not general service incandescent lamps, compact fluorescent lamps, or integrated LED lamps.

2. Definitions

Measured initial input power means the input power to the lamp, measured after the lamp is stabilized and seasoned (if applicable), and expressed in watts (W).

Measured initial lumen output means the lumen output of the lamp measured after the lamp is stabilized and seasoned (if applicable), and expressed in lumens (lm).

Power factor means the measured initial input power (watts) divided by the product of the input voltage (volts) and the input current (amps) measured at the same time as the initial input power.

3. Active Mode Test Procedures

3.1. Take measurements at full light output.

3.2. Do not use a goniophotometer.

3.3. Operate the lamp at the rated voltage throughout testing. For lamps with multiple rated voltages including 120 volts, operate the lamp at 120 volts. If a lamp is not rated for 120 volts, operate the lamp at the highest rated input voltage.

3.4. Operate the lamp at the maximum input power. If multiple modes occur at the same maximum input power (such as variable CCT or CRI), the manufacturer may select any of these modes for testing; however, all measurements must be taken at the same selected mode. The manufacturer must indicate in the test report which mode was selected for testing and include detail such that another laboratory could operate the lamp in the same mode.

3.5. To measure initial lumen output, input power, input voltage, and input current use the test procedures in the table in this section.

TABLE 3.1—REFERENCES TO INDUSTRY STANDARD TEST PROCEDURES

Lamp type	Referenced test procedure
Other incandescent lamps that are not reflector lamps	IES LM–45–15, sections 4–7 *
Other incandescent lamps that are reflector lamps	IES LM–20–13, sections 4–8 *
Other fluorescent lamps	IES LM–9–09, sections 4–6 *
OLED lamps	IES LM–79–08, sections 2–9.2 *
Non-integrated LED lamps	CIE S025, sections 4–6 *

* (incorporated by reference, see § 430.3)

3.6. Determine initial lamp efficacy by dividing the measured initial lumen output (lumens) by the measured initial input power (watts).

3.7. Determine power factor by dividing the measured initial input power (watts) by the product of the measured input voltage (volts) and measured input current (amps).

4. Standby Mode Test Procedure

4.1. Measure standby mode power only for lamps that are capable of standby mode operation.

4.2. Connect the lamp to the manufacturer-specified wireless control network (if applicable) and configure the lamp in standby mode by sending a signal to the lamp instructing it to have zero light output. Lamp must remain connected to the network throughout testing.

4.3. Operate the lamp at the rated voltage throughout testing. For lamps with multiple rated voltages including 120 volts, operate the lamp at 120 volts. If a lamp is not rated for 120 volts, operate the lamp at the highest rated input voltage.

4.4. Stabilize the lamp prior to measurement as specified in section 5.0 of IEC 62301 (incorporated by reference; see § 430.3).

4.5. Measure the standby mode power in watts as specified in section 5 of IEC 62301 (incorporated by reference; see § 430.3).

[FR Doc. 2016–04551 Filed 3–16–16; 8:45 am]

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Part IV

Department of Energy

10 CFR Parts 429 and 431

Energy Conservation Program for Certain Commercial and Industrial Equipment: Test Procedures for Commercial Packaged Boilers; Proposed Rule

DEPARTMENT OF ENERGY

10 CFR Parts 429 and 431

[Docket Number EERE–2014–BT–TP–0006]

RIN 1904–AD16

Energy Conservation Program for Certain Commercial and Industrial Equipment: Test Procedures for Commercial Packaged Boilers

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

ACTION: Notice of proposed rulemaking and public meeting.

SUMMARY: The U.S. Department of Energy (DOE) proposes to amend the test procedure and applicable definitions for commercial packaged boilers, as well as modify the sampling plans for commercial packaged boilers in its regulations pertaining to energy efficiency programs for certain programs for commercial and industrial equipment. This rulemaking will fulfill DOE's statutory obligations to make its test procedure consistent with the applicable industry test procedure and to review its test procedures for covered equipment at least once every seven years. In this notice of proposed rulemaking (NOPR), DOE proposes to incorporate by reference certain sections of the American National Standards Institute (ANSI)/Air-Conditioning, Heating, and Refrigeration Institute (AHRI) Standard 1500, ''2015 Standard for Performance Rating of Commercial Space Heating Boilers,'' and, in addition, incorporate amendments that clarify the coverage for field-constructed commercial packaged boilers and the applicability of DOE's test procedure and standards for this category of commercial packaged boilers, provide an optional field test for commercial packaged boilers with fuel input rate greater than 5,000,000 Btu/h, provide a conversion method to calculate thermal efficiency based on combustion efficiency testing for steam commercial packaged boilers with fuel input rate greater than 5,000,000 Btu/h, modify the inlet and outlet water temperatures during tests of hot water commercial packaged boilers, establish limits on the ambient temperature and relative humidity conditions during testing, modify setup and instrumentation requirements to remove ambiguity, and standardize terminology and provisions for ''fuel input rate.'' This NOPR also announces a public meeting to discuss and invite comments, data, and information about the issues and proposed amendments presented in this test procedure rulemaking for commercial packaged boilers.

DATES: *Meeting:* DOE will hold a public meeting on Monday, April 4, 2016, from 10 a.m. to 3 p.m., in Washington, DC. The meeting will also be broadcast as a webinar. See section V, ''Public Participation,'' for webinar registration information, participant instructions, and information about the capabilities available to webinar participants.

Comments: DOE will accept written comments, data, and information regarding this NOPR before and after the public meeting, but not later than May 31, 2016. See section V, ''Public Participation,'' for details.

ADDRESSES: The public meeting will be held at the U.S. Department of Energy, Forrestal Building, Room 6E–069, 1000 Independence Avenue SW., Washington, DC 20585–0121. Persons may also attend the public meeting via webinar. To attend, please notify Ms. Brenda Edwards at (202) 586–2945. For more information, refer to section V, ''Public Participation,'' near the end of this notice.

Interested parties are encouraged to submit comments using the Federal eRulemaking Portal at *www.regulations.gov.* Interested parties may submit comments by any of the following methods:

- *Federal eRulemaking Portal: www.regulations.gov.* Follow the instructions for submitting comments.
- *Email: CommPackagedBoilers2014TP0006@ee.doe.gov.* Include docket number EERE–2014–BT–TP–0006 and/or regulation identifier number (RIN) 1904–AD16 in the subject line of the message. Submit electronic comments in WordPerfect, Microsoft Word, PDF, or ASCII file format, and avoid the use of special characters or any form of encryption.
- *Postal Mail:* Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Office, Mailstop EE–5B, Test Procedure for Commercial and Industrial Packaged Boilers, Docket No. EERE–2014–BT–TP–0006 and/or RIN 1904–AD16, 1000 Independence Avenue SW., Washington, DC 20585–0121. If possible, please submit all items on a compact disc (CD), in which case it is not necessary to include printed copies.
- *Hand Delivery/Courier:* Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Office, 950 L'Enfant Plaza, SW., Suite 600, Washington, DC 20024. Telephone: (202) 586–2945. If possible, please submit all items on a CD, in which case it is not necessary to include printed copies.

No telefacsimiles (faxes) will be accepted. For detailed instructions on submitting comments and additional information on the rulemaking process, see section V, ''Public Participation,'' of this document.

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

A link to the docket Web page can be found at: *http://www.regulations.gov/#!docketDetail;D=EERE–2014–BT–TP–0006.* This Web page contains a link to the docket for this NOPR on the *www.regulations.gov* site. The *www.regulations.gov* Web page contains simple instructions on how to access all documents, including public comments, in the docket. See section V, ''Public Participation,'' for information on how to submit comments through *www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT: Mr. James Raba, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Office, EE–5B, 1000 Independence Avenue SW., Washington, DC 20585–0121. Telephone: (202) 586–8654. Email: *commercial_packaged_boilers@ee.doe.gov.*

Mr. Peter Cochran, U.S. Department of Energy, Office of the General Counsel, GC–33, 1000 Independence Avenue SW., Washington, DC 20585–0121. Telephone: (202) 586–9496. Email: *Peter.Cochran@hq.doe.gov.*

For further information on how to submit a comment, review other public comments and the docket, or participate in the public meeting, contact Ms. Brenda Edwards at (202) 586–2945 or by email: *Brenda.Edwards@ee.doe.gov.*

SUPPLEMENTARY INFORMATION:

This proposed rule would incorporate by reference into 10 CFR parts 429 and 431 the testing methods contained in the following commercial standard:

AHRI/ANSI Standard 1500–2015, ''Performance Rating of Commercial Space Heating Boilers,'' Section 3 ''Definitions,'' Section 5 ''Rating Requirements,'' Appendix C ''Methods of Testing for Rating Commercial Space Heating Boilers—Normative,'' excluding Figures C5 and C7, Appendix D ''Properties of Saturated Steam—Normative,'' and Appendix E

''Correction Factors for Heating Values of Fuel Gases—Normative,'' ANSI approved November 28, 2014.

Copies of AHRI standards may be purchased from the Air-Conditioning, Heating, and Refrigeration Institute, 2111 Wilson Blvd., Suite 500, Arlington, VA 22201, or by visiting *http://www.ahrinet.org/site/686/Standards/HVACR-Industry-Standards/Search-Standards.*

See section IV.M for additional information on this standard.

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I. Authority and Background

Title III of the Energy Policy and Conservation Act of 1975 (42 U.S.C. 6311, *et seq.;* ''EPCA'' or, ''the Act'') sets forth a variety of provisions designed to improve energy efficiency.[1] Part C of Title III establishes the ''Energy Conservation Program for Certain Industrial Equipment,'' which covers certain industrial equipment (hereafter referred to as ''covered equipment''), including commercial packaged boilers.[2] (42 U.S.C. 6311(1)(J))

Under EPCA, the energy conservation program consists essentially of four parts: (1) Testing, (2) labeling, (3) Federal energy conservation standards, and (4) certification and enforcement procedures. The testing requirements consist of test procedures that manufacturers of covered equipment must use as the basis for (1) certifying to the Department of Energy (DOE) that their equipment complies with applicable energy conservation standards adopted under EPCA, and (2) making representations about the efficiency of the equipment. Similarly, DOE must use these test procedures to determine whether the equipment complies with any relevant standards promulgated under EPCA.

With respect to commercial packaged boilers (CPB), EPCA requires DOE to use industry test procedures developed or recognized by the Air-Conditioning, Heating, and Refrigeration Institute (AHRI) or the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE), as referenced in ASHRAE/IES[3] Standard 90.1, ''Energy Standard for Buildings Except Low-Rise Residential Buildings.'' (42 U.S.C. 6314(a)(4)(A)) Further, if such an industry test procedure is amended, DOE is required to amend its test procedure to be consistent with the amended industry test procedure, unless it determines, by rule published in the **Federal Register** and supported by clear and convincing evidence, that the amended test procedure would be unduly burdensome to conduct or would not produce test results that reflect the energy efficiency, energy use, and estimated operating costs of that equipment during a representative average use cycle. (42 U.S.C. 6314(a)(4)(B))

EPCA also requires that, at least once every 7 years, DOE evaluate test procedures for each type of covered equipment, including commercial packaged boilers, to determine whether amended test procedures would more accurately or fully comply with the requirements for the test procedures to not be unduly burdensome to conduct and be reasonably designed to produce test results that reflect energy efficiency, energy use, and estimated operating costs during a representative average use cycle. (42 U.S.C. 6314(a)(1)(A)) DOE last reviewed the test procedures for commercial packaged boilers on July 22, 2009. 74 FR 36312. Therefore, DOE is required to re-evaluate the test procedures no later than July 22, 2016, and this rulemaking satisfies that requirement. As the industry standard for commercial packaged boilers was recently updated, this rulemaking will also fulfill DOE's statutory obligations to make its test procedure consistent with the applicable industry test procedure.

On September 3, 2013, DOE initiated a test procedure and energy conservation standards rulemaking for commercial packaged boilers and published a notice of public meeting and availability of the Framework document (September 2013 Framework document). 78 FR 54197. Both in the September 2013 Framework document and during the October 1, 2013 public meeting, DOE solicited public comments, data, and information on all aspects of, and any issues or problems with, the existing DOE test procedure, including whether the test procedure is in need of updates or revisions. More recently, DOE also received comments on the test procedure in response to the notice of availability of the preliminary technical support document (TSD) for the standards rulemaking, which was published in the **Federal Register** on November 20, 2014 (November 2014 Preliminary Analysis). 79 FR 69066.

Additionally, on February 20, 2014, DOE published in the **Federal Register** a request for information (February 2014 RFI) seeking comments on the existing DOE test procedure for commercial packaged boilers, which incorporates by reference Hydronics Institute (HI)/AHRI Standard BTS–2000 (Rev 06.07), ''Method to Determine Efficiency of Commercial Space Heating Boilers'' (BTS–2000). 79 FR 9643. BTS–2000

[1] All references to EPCA in this document refer to the statute as amended through the Energy Efficiency Improvement Act of 2015 (April 30, 2015).

[2] For editorial reasons, Part C was codified as Part A–1 in the U.S. Code.

[3] Illuminating Engineering Society.

provides test procedures for measuring steady-state combustion and thermal efficiency of a gas-fired or oil-fired commercial packaged boiler capable of producing hot water and/or steam and operating at full load only. In the February 2014 RFI, DOE requested comments, information, and data about a number of issues, including (1) part-load testing and part-load efficiency rating, (2) typical inlet and outlet water temperatures for hot water commercial packaged boilers, (3) the steam pressure for steam commercial packaged boilers operating at full load, and (4) design characteristics of commercial packaged boilers that are difficult to test under the existing DOE test procedure.

Subsequently, on April 29, 2015, AHRI, together with the American National Standards Institute (ANSI), published the ''2015 Standard for Performance Rating of Commercial Space Heating Boilers'' (ANSI/AHRI Standard 1500–2015). ANSI/AHRI Standard 1500–2015 states ''this standard supersedes AHRI Hydronics Institute Standard BTS–2000 Rev. 06.07'' in the front matter of the document. DOE believes that ANSI/AHRI Standard 1500–2015 is consistent with the existing metrics and approach incorporated in BTS–2000 but also incorporates provisions that improve the accuracy and repeatability of the test procedure over the BTS–2000 standard. ANSI/AHRI Standard 1500–2015 also adopts several changes that were suggested in public comments submitted by interested parties in response to DOE's September 2013 Framework document, November 2014 Preliminary Analysis, and February 2014 RFI.[4] Therefore, as required by 42 U.S.C. 6314(a)(4)(B), DOE is replacing BTS–2000 with the updated industry standard, ANSI/AHRI Standard 1500–2015, as the basis for the DOE test procedure. Section III.A contains a more detailed discussion of the basis for transitioning to the commercial packaged boiler test procedures outlined in ANSI/AHRI Standard 1500–2015.

II. Synopsis of the Notice of Proposed Rulemaking

In this notice of proposed rulemaking (NOPR), DOE proposes to amend its existing test procedures for commercial packaged boilers at 10 CFR 431.86. DOE proposes to incorporate by reference certain sections of ANSI/AHRI Standard 1500–2015 as a direct replacement for BTS–2000 since, as discussed in section I, ANSI/AHRI Standard 1500–2015 supersedes BTS –2000 and DOE has found ANSI/AHRI Standard 1500–2015 to be more accurate compared to BTS–2000 and not unduly burdensome to conduct for the purposes of testing commercial packaged boilers.

To obtain information and data regarding its current test procedures for commercial packaged boilers, DOE sought public comment in the September 2013 Framework document, February 2014 RFI, and November 2014 Preliminary Analysis. In response to the September 2013 Framework document, DOE received comments from the American Boiler Manufacturers Association (ABMA), AHRI, Burnham Holdings (Burnham), Cleaver-Brooks, HTP Incorporated (HTP), and a joint submission[5] from the American Council for an Energy-Efficient Economy (ACEEE), the Appliance Standards Awareness Project (ASAP), and the National Resources Defense Council (NRDC). In response to the February 2014 RFI, DOE received comments from ACEEE, AHRI, Burnham, HTP, the National Propane Gas Association (NPGA), and Sidel Systems (Sidel) (three submittals). Sidel submitted two comments prior to the publication of the February 2014 RFI that also pertain to commercial packaged boilers. In response to the November 2014 Preliminary Analysis, DOE received comments from ABMA, AHRI, Lochinvar LLC (Lochinvar), Raypak, and joint submissions[6] from Pacific Gas and Electric (PGE) and Southern California Edison (SCE), and ACEEE, ASAP, and NRDC.

The comments received from stakeholders typically concern BTS–2000 since ANSI/AHRI Standard 1500–2015 had not yet been published at the time DOE solicited comments. Some of the comments received from stakeholders that concerned BTS–2000 apply equally to ANSI/AHRI Standard 1500–2015, whereas other comments are not applicable to ANSI/AHRI Standard 1500–2015.

ANSI/AHRI Standard 1500–2015 updates several provisions from BTS–2000 to: (1) Improve repeatability of testing; (2) further clarify the test procedure; and (3) increase the allowable operating steam pressure during steam commercial packaged boiler testing. ANSI/AHRI Standard 1500–2015 also incorporates provisions that accommodate the testing of large commercial packaged boilers that have difficulty meeting the requirements in the existing DOE test procedure.

In addition to adopting ANSI/AHRI Standard 1500–2015 as a replacement for BTS–2000 in the DOE test procedure, DOE further proposes several modifications to its test procedure that are not captured in ANSI/AHRI Standard 1500–2015. The additional proposed amendments include the following:

- Clarifying the coverage of field constructed commercial packaged boilers under DOE's regulations;
- incorporating an optional field test for commercial packaged boilers with fuel input rate greater than 5,000,000 Btu/h;
- incorporating an optional conversion method to calculate thermal efficiency based on combustion efficiency test for steam commercial packaged boilers with fuel input rate greater than 5,000,000 Btu/h;
- modifying the inlet and outlet water temperatures required during tests of hot water commercial packaged boilers to be more representative of field conditions;
- requiring additional limits on the room ambient temperature and relative humidity during testing;
- modifying setup and instrumentation requirements to remove ambiguity; and
- standardizing terminology and provisions in regulatory text related to ''fuel input rate.''

These proposed amendments are intended to improve the repeatability of the test and to accommodate some commercial packaged boilers for which testing has previously been difficult or burdensome. DOE reviewed these additional proposed amendments as well as the proposal to incorporate by reference ANSI/AHRI Standard 1500–2015 under 42 U.S.C. 6314(a)(4)(C) and, in aggregate, DOE has tentatively concluded that there would not be an overall effect on efficiency ratings. Accordingly, DOE proposes that the amended test procedure would be effective 30 days after publication of any final rule in the **Federal Register** and would be required for any representations made with regard to the energy efficiency of commercial packaged boilers 360 days following publication of any final rule in the **Federal Register.** (42 U.S.C. 6314(d))

[4] Comments received as part of the February 2014 RFI about test procedures for commercial packaged boilers are in Docket Number EERE–2014–BT–TP–0006. In some cases, earlier comments that address or are relevant to test procedures for commercial packaged boilers are in the energy conservation standards docket, Docket Number EERE–2013–BT–STD–0030. These comments in response to the September 2013 Framework Document relevant to the test procedure are also placed in the test procedure rulemaking docket, Docket Number EERE–2014–BT–TP–0006

[5] The joint submission by ACEEE, ASAP, and NRDC is referred to as the ''Joint Advocates'' comment in references to the documents submitted to the docket.

[6] The joint submission by PGE and SCE is referred to as the ''Joint Utilities'' comment in references to the documents submitted to the docket.

DOE's rationale regarding the impact of the proposed test procedure amendments on measured energy efficiency of commercial packaged boilers is discussed in the subsequent sections.

III. Discussion

Based on DOE's review of the existing test procedure for commercial packaged boilers and comments submitted by interested parties, DOE has determined that certain amendments and clarifications are necessary in order to improve the repeatability of the DOE test procedure, accommodate certain commercial packaged boilers for which manufacturers have expressed difficulty testing under the provisions of the existing test procedure, and clarify the applicability of DOE's test procedure and energy conservation standards to field-constructed equipment. The following sections address comments received and propose specific improvements for DOE's test procedures for commercial packaged boilers.

A. Proposing To Adopt Certain Sections of ANSI/AHRI Standard 1500–2015

The existing DOE test procedure for commercial packaged boilers incorporates by reference BTS–2000 to determine the steady-state efficiency of steam or hot water commercial packaged boilers while operating at full load. As described in section I, on April 29, 2015, AHRI published a new ANSI/AHRI Standard 1500–2015 (ANSI approved November 28, 2014), which supersedes BTS–2000. On May 29, 2015, AHRI submitted a request directly to DOE to update the incorporation by reference in the DOE test procedure to reference the new ANSI/AHRI Standard 1500–2015. (Docket EERE–2014–BT–TP–0006, AHRI, No. 29 at p. 1) [7] DOE reviewed both documents and DOE believes that the recently published ANSI/AHRI Standard 1500–2015 standard is not unduly burdensome to conduct and represents an improvement over BTS–2000 while retaining the general testing methodology and metrics (*i.e.,* thermal and combustion efficiency) of the existing test procedure.[8]

Specifically, ANSI/AHRI Standard 1500–2015 contains the following key substantive changes as compared to BTS–2000:

- Improvements in instrumentation accuracy specifications, including removing outdated instrumentation; use of more appropriate measurement units; and revising gas chemistry instrumentation accuracy requirements to reflect those of commonly used devices;
- more specific instructions for establishing test procedure configuration, particularly for water piping and positioning of temperature measurement devices in fluid stream;
- establishment of criteria that indicate when a steady-state condition is met; [9]
- allowance of steam operating pressure up to 15 psig; and
- instructions addressing how to conduct testing when manufacturers do not provide sufficient information within their installation materials shipped with the commercial packaged boiler.

DOE notes that several of the changes incorporated into ANSI/AHRI Standard 1500–2015 were also suggested by interested parties in public comments responding to DOE's September 2013 Framework document, November 2014 Preliminary Analysis, and February 2014 RFI.

DOE seeks comment on its proposal to replace BTS–2000 with ANSI/AHRI Standard 1500–2015 in its test procedure for commercial packaged boilers. This is identified as Issue 1 in section V.E.

B. Scope and Definitions

DOE proposes to incorporate several new definitions that help clarify the scope and applicability of DOE's commercial packaged boiler test procedure. DOE notes that any changes or amendments to DOE's definitions at 10 CFR 431.82, if adopted, would also apply to DOE's energy conservation standards for commercial packaged boilers.

1. Definition of Commercial Packaged Boiler

While EPCA authorizes DOE to establish, subject to certain criteria, test procedures and energy conservation standards for packaged boilers, to date, DOE has only established test procedures and standards for commercial packaged boilers, a subset of packaged boilers. In 2004, DOE published a final rule (October 2004 final rule) establishing definitions, test procedures, and energy conservation standards for commercial packaged boilers. 69 FR 61949 (Oct. 21, 2004). In the October 2004 final rule, DOE defined ''commercial packaged boiler'' as a type of packaged low pressure boiler that is industrial equipment with a capacity (fuel input rate) of 300,000 Btu per hour (Btu/h) or more which, to any significant extent, is distributed in commerce: (1) For heating or space conditioning applications in buildings; or (2) for service water heating in buildings but does not meet the definition of ''hot water supply boiler.'' DOE also defined ''packaged low pressure boiler'' as a packaged boiler that is: (1) A steam boiler designed to operate at or below a steam pressure of 15 psig; or (2) a hot water commercial packaged boiler designed to operate at or below a water pressure of 160 psig and a temperature of 250 °F; or (3) a boiler that is designed to be capable of supplying either steam or hot water, and designed to operate under the conditions in paragraphs (1) and (2) of this definition. 69 FR 61960.

DOE notes that, because commercial packaged boilers are currently defined as a subset of packaged low pressure boilers, all commercial packaged boilers have to meet the pressure and temperature criteria established in the definition of a ''packaged low pressure boiler.'' Consequently, DOE is proposing to modify DOE's definition of ''commercial packaged boiler'' to explicitly include the pressure and temperature criteria established by the ''packaged low pressure boiler'' definition. DOE believes such a modification will clarify the characteristics of the equipment to which DOE's test procedure and energy conservation standards apply. As a result, DOE proposes to remove its definition for packaged low pressure boiler, as it is no longer necessary. DOE notes that the term ''packaged high pressure boiler'' also is no longer used in the commercial packaged boiler subpart, and therefore proposes to remove its definition. DOE seeks comment on these proposals. This is identified as Issue 2 in section V.E.

2. Field-Constructed Commercial Packaged Boilers

EPCA establishes the statutory authority by which DOE may regulate ''packaged boilers'' and defines a ''packaged boiler'' as a boiler that is shipped complete with heating equipment, mechanical draft

[7] A notation in this form provides a reference for information that is in Docket No. EERE–2014–BT–TP–0006. This particular notation refers to a comment from AHRI on p. 1 of document number 29 in the docket.

[8] Thermal efficiency is measured for all commercial packaged boilers except for oil-fired and gas-fired commercial packaged boilers that provide hot water and have greater than 2,500,000 Btu/h in fuel input rate, for which combustion efficiency is used. See 10 CFR 431.87(b).

[9] BTS 2000 noted in section 9.1.1.1.6 that ''a state of equilibrium shall have been reached when consistent readings are obtained during a 30 minute period,'' but did not explicitly define what ''consistent'' meant. ANSI/AHRI Standard 1500–2015 incorporates specific thresholds for steam pressure and percent CO_2 or O_2 in the flue gas to specify the maximum allowable fluctuations that may occur during ''steady-state'' operation.

equipment, and automatic controls; usually shipped in one or more sections. (42 U.S.C. 6311(11)(B)) In adopting the EPCA definition for a ''packaged boiler,'' DOE amended the definition to: (1) Include language to address the various ways in which packaged boilers are distributed in commerce; and (2) explicitly exclude custom-designed, field-constructed boilers. 69 FR 61949, 61952. ''Custom-designed, field-constructed'' boilers were excluded because DOE believed the statutory standards for ''packaged boilers'' were not intended to apply to these boiler systems, which generally require alteration, cutting, drilling, threading, welding or similar tasks by the installer. As a result, DOE defined a ''packaged boiler'' as a boiler that is shipped complete with heating equipment, mechanical draft equipment and automatic controls; usually shipped in one or more sections and does not include a boiler that is custom designed and field constructed. If the boiler is shipped in more than one section, the sections may be produced by more than one manufacturer, and may be originated or shipped at different times and from more than one location. 10 CFR 431.82.

In this NOPR, DOE wishes to further clarify the differentiation between field-constructed commercial packaged boilers, which are excluded from DOE's commercial packaged boiler regulations, and field-assembled commercial packaged boilers, which are subject to DOE's regulations. A field-constructed commercial packaged boiler is a custom-designed commercial packaged boiler that requires welding of structural components in the field during installation. Specifically, DOE considers structural components to include heat exchanger sections, flue tube bundles and internal heat exchanger surfaces, external piping to one or more heat exchanger sections or locations, and the mechanical supporting structure the heat exchanger rests upon in the case where a support structure is not provided with the commercial packaged boiler. For the purposes of this clarification, welding does not include attachment using mechanical fasteners or brazing; and any jackets, shrouds, venting, burner, or burner mounting hardware are not structural components.

Conversely, a field-assembled commercial packaged boiler can be assembled in the field without the welding of the structural components that were previously listed. DOE reiterates that field-assembled equipment is covered, is required to be tested using the DOE test procedure, and is required to comply with the applicable energy conservation standards and certification requirements.

In this NOPR, DOE also proposes to clarify that the field-constructed exemption pertains to commercial packaged boilers specifically, not the broader definition of packaged boiler. Therefore, DOE proposes to remove this exclusionary language from its definition for ''packaged boiler'' and to incorporate the exclusion for field-constructed equipment into its definition for commercial packaged boiler.

DOE seeks comment on its proposed definition for ''field-constructed'' and this is identified as Issue 3 in section V.E.

C. Testing of Large Commercial Packaged Boilers

In response to the energy conservation standards September 2013 Framework document, Cleaver-Brooks, Burnham, and ABMA stated that for practical reasons, testing requirements should be limited to boilers with rated maximum input capacities less than 2,500,000 Btu/h. These commenters raised concerns regarding the time and expense of testing larger boilers, and the ability of some independent testing laboratories and manufacturers to test larger boilers due to heat sink requirements for the hot water generated. (Docket EERE–2013–BT–STD–0030, Cleaver-Brooks, No. 12 at p. 1; Docket EERE–2013–BT–STD–0030, Burnham, No. 15 at p. 2; Docket EERE–2013–BT–STD–0030, ABMA, No. 14 at p. 3) ABMA reiterated these concerns in response to the November 2014 Preliminary Analysis. (Docket EERE–2013–BT–STD–0030, ABMA, No. 33 at pp. 1–2) Lochinvar, in response to the November 2014 Preliminary Analysis, stated that alternative efficiency determination method (AEDM) rules mitigated test burden concerns for large boilers. (Docket EERE–2013–BT–STD–0030, Lochinvar, No. 34 at p. 1)

In response, DOE notes that neither the statutory definition for ''packaged boiler'' at 42 U.S.C. 6311(11)(B) nor the definition for ''commercial packaged boiler'' at 10 CFR 431.82 set an upper limit on the maximum fuel input rate of covered equipment. The energy conservation standards for commercial packaged boilers at 10 CFR 431.87 also do not establish any limitations based on the fuel input rate of equipment. Consequently, commercial packaged boiler models with high fuel input rates are subject to DOE's existing standards for commercial packaged boilers, and to establish such a fuel input rate limit for covered equipment with existing standards would violate the anti-backsliding provisions of EPCA found at 42 U.S.C. 6313(a)(6)(B)(iii)(I) for those equipment larger than the limit. Additionally, both BTS–2000 (incorporated by reference in the existing DOE test procedure) and ANSI/AHRI Standard 1500–2015 (proposed to be incorporated by reference) include any commercial packaged boiler with fuel input rate of 300,000 Btu/h or greater.

DOE recognizes the commenters' concerns that it may be difficult to test thermal efficiency for large commercial packaged boilers and notes that EPCA requires that test procedures shall not be unduly burdensome to conduct. (42 U.S.C. 6314(a)(2)) Specifically, DOE recognizes that large commercial packaged boilers may not be fully assembled until they are installed at the field site, which may preclude them from being tested in a laboratory setting. DOE also recognizes that, as the size of the equipment increases, testing costs incurred to condition the incoming water and air to the test procedure rating conditions, as well as management of the hot water generated during testing, also increases.

In this NOPR, DOE proposes several amendments to the DOE test procedure in order to provide greater flexibility for testing certain large commercial packaged boilers and field-assembled commercial packaged boilers. Specifically, DOE proposes the following provisions:

- A field test of combustion efficiency for commercial packaged boilers with fuel input rate greater than 5,000,000 Btu/h;
- a calculation method to convert combustion efficiency to thermal efficiency for steam commercial packaged boilers with fuel input rate greater than 5,000,000 Btu/h; and
- an increase in allowable steam pressure to 15 psi (by incorporating by reference AHRI Standard 1500–2015).

DOE notes that the continued allowance for the use of an AEDM also facilitates the ability to ascertain the efficiency of large commercial packaged boilers. These proposed amendments for providing greater flexibility in the testing of large commercial packaged boilers are discussed in the following subsections.

1. Field Tests for Commercial Packaged Boilers

DOE proposes to adopt an optional test method for commercial packaged boilers with fuel input rate greater than 5,000,000 Btu/h which would allow for: (1) Measuring a steam or hot water commercial packaged boiler's

combustion efficiency in the field; and (2) converting the measured combustion efficiency to thermal efficiency via a calculation method for steam commercial packaged boilers (discussed in section III.C.2).

DOE understands ''field test'' to mean a combustion efficiency test that is conducted at the location in which a given commercial packaged boiler is or will be installed and commissioned for use. DOE understands that the combustion efficiency test is less burdensome to conduct on large commercial packaged boilers than the thermal efficiency test and is more feasible to conduct in the field than the thermal efficiency test. Specifically, the test setup required for obtaining the combustion efficiency according to ANSI/AHRI Standard 1500–2015 is less involved and requires less instrumentation in the working fluid stream (flow meters are not required) than the thermal efficiency test, and involves calculations using primarily the flue gas temperature and constituents. The combustion efficiency test also requires less time to run than the thermal efficiency test and therefore requires less fuel and water, which must be managed and disposed of as part of the test. DOE believes that allowance for testing commercial packaged boilers with fuel input rates greater than 5,000,000 Btu/h in the field would reduce the burden associated with testing this equipment and would mitigate the concerns of interested parties regarding laboratory limitations. However, DOE notes that changes to the test procedure are necessary to account for the following issues associated with testing in the field:

- Ambient conditions in the field may be difficult to control (see section III.E of this NOPR).
- Setup requirements of thermal efficiency test (both ANSI/AHRI Standard 1500–2015 and proposed DOE test procedure amendments) may not be possible to achieve in field (see section III.F of this NOPR).
- Maintaining inlet and outlet water temperatures or steam quality (as applicable) may not be possible in the field (see section III.D of this NOPR).

Consequently, DOE proposes that the aforementioned requirements for ambient conditions, certain setup requirements, steam quality, and inlet and outlet water temperatures not apply for field tests. While DOE believes such flexibility is necessary to limit burden when testing large commercial packaged boilers in the field, DOE recognizes that eliminating these requirements regarding testing conditions may decrease the accuracy and repeatability of the test. As such, DOE is proposing that the optional field test only be available for commercial packaged boilers with fuel input rates greater than 5,000,000 Btu/h, for which testing in a laboratory setting is difficult, expensive, or impractical.

To help improve the consistency and repeatability of field tests, DOE also proposes that manufacturers measure these values (inlet water temperature, outlet water temperature, ambient relative humidity, and ambient temperature) and maintain the records of these measurements as part of the test data underlying the manufacturer's compliance certification in accordance with the requirements in 10 CFR 429.71. If a manufacturer elects to use the field test option in the test procedure, the manufacturer would also be required to report that the rated efficiency is based on a field test.

Since DOE proposes this optional methodology primarily to accommodate commercial packaged boilers with fuel input rate greater than 5,000,000 Btu/h, DOE proposes to allow certification based on a sample size of one for manufacturers utilizing the field test and conversion methodology. DOE has never intended that a manufacturer build more than one unit solely for the purposes of testing and clarified this during the Commercial Certification Working Group meetings (Docket No. EERE–2013–BT–NOC–0023). Additionally, 10 CFR 429.12(a) requires that certification of equipment occur before distribution in commerce. With respect to commercial packaged boilers that are not field assembled, distribution in commerce would be determined, similar to other covered equipment, using the factors specified in the certification, compliance, and enforcement final rule published on March 7, 2011. 76 FR 12422, 12426–12427. Any field tested basic model of a commercial packaged boiler that has not been previously certified through testing or an AEDM would be required to be certified by the manufacturer to DOE within 15 days of commissioning. (Note: by ''commissioning,'' DOE means adapting the boiler operating conditions and parameters to those required for the building space heating load.) DOE proposes to adopt this exception in recognition of the high test burden and practical limitations of testing these boilers prior to distributing them in commerce; however, DOE notes that, if the field test demonstrates that the unit does not meet the applicable standard, then the manufacturer would have to decommission the unit until it can be modified and retested to demonstrate compliance with the standard. Failure to decommission the unit immediately (*i.e.,* allowing the unit to be used during any time period while the unit is being redesigned, parts are being built or ordered, etc. to make the unit compliant) would constitute a violation of the standards and the certification requirements. DOE also notes that, when a single unit is tested, there is no tolerance on the performance; the tested unit must meet the standard.

Since commercial packaged boilers with fuel input rates greater than 5,000,000 Btu/h would not be easily transported between manufacturer, laboratory, and consumer facilities, DOE also proposes that, at its discretion, assessment and enforcement testing of commissioned units could also be conducted as field tests. The location at which the enforcement field test is performed may or may not be the same location at which the manufacturer conducted its field test. DOE recognizes that a field test could not meet the existing laboratory accreditation requirements found at 10 CFR 429.110(a)(3) and there proposes an exception in this section specifically for field tests of commercial packaged boilers.

DOE seeks comments on the following issues, and these are also listed in section V.E:

- The feasibility of conducting a combustion efficiency test in the field for steam and hot water commercial packaged boilers with fuel input rate greater than 5,000,000 Btu/h (Issue 4).
- Whether the thermal efficiency test can be conducted for steam commercial packaged boilers with fuel input rate greater than 2,500,000 Btu/h and less than or equal to 5,000,000 Btu/h (Issue 5).
- The specific limitations, if any, that preclude combustion efficiency testing in a laboratory setting for steam commercial packaged boilers with fuel input rate greater than 2,500,000 Btu/h and less than or equal to 5,000,000 Btu/h (Issue 6).
- The specific additional equipment or facilities and their associated cost that would be required to accommodate testing commercial packaged boilers with fuel input rate greater than 2,500,000 Btu/h and less than or equal to 5,000,000 Btu/h in a laboratory setting (Issue 7).
- Whether the 5,000,000 Btu/h fuel input rate is an adequate threshold for the allowance of the field combustion test and conversion methodology, and if not, what threshold should be used (Issue 8).
- Whether certification should be permitted for field tested units after distribution in commerce and after

commissioning, in particular the impact of this approach on building inspectors (Issue 9).

2. Method To Convert Combustion Efficiency to Thermal Efficiency for Steam Commercial Packaged Boilers

DOE also proposes a method for converting the combustion efficiency of a steam commercial packaged boiler to thermal efficiency. Such a conversion would be necessary for steam commercial packaged boilers because the efficiency metric for this equipment at 10 CFR 431.86 is thermal efficiency. DOE proposes this conversion method only for those steam commercial packaged boilers with a fuel input rate greater than 5,000,000 Btu/h based on the concerns presented in section III.C. This conversion methodology would be available to manufacturers or laboratories to perform a combustion efficiency test in a laboratory setting or as a field test as described in III.C.1.

The proposed conversion method calculates thermal efficiency by subtracting a constant value from the combustion efficiency, which must be measured in accordance with ANSI/AHRI Standard 1500–2015. Thermal efficiency includes heat exchanger effectiveness and jacket losses which are not captured in the combustion efficiency. The constant value subtracted from the tested combustion efficiency value represents those additional losses. In order to determine such a value, DOE analyzed the AHRI directory (as of January 2015).[10] DOE looked at the difference between rated combustion and thermal efficiency for all steam commercial packaged boilers with rated input larger than 5,000,000 Btu/h. DOE found 52 basic models of steam commercial packaged boilers with a rated input larger than 5,000,000 Btu/h and the difference between rated combustion and thermal efficiency ranged between 0.5 percent and 2.0 percent. Based on these values, DOE proposes subtracting 2.0 percent from the measured combustion efficiency of steam commercial packaged boilers with fuel input rating 5,000,000 Btu/h or greater in order to calculate a rated thermal efficiency. DOE believes that subtracting 2.0 percent from the measured combustion efficiency determined during the field test would result in conservative thermal efficiency ratings of models, thereby encouraging manufacturers to conduct thermal efficiency tests.

Manufacturers must use the certified rating for any representation of efficiency no matter which methodology is used. That is, for equipment certified under the calculation procedure, any representations of the energy efficiency must be made based on the calculated value and any equipment certified using the tested value of thermal efficiency must be made based on the results of that testing.

DOE seeks comments on the following issues, which are also listed in section V.E:

- The proposed conversion method for calculating thermal efficiency based on measured combustion efficiency for steam commercial packaged boilers with fuel input rate greater than 5,000,000 Btu/h (Issue 10);
- The proposed value for the difference between the combustion efficiency and thermal efficiency in the conversion method (proposed value of 2.0 percent of the combustion efficiency), whether the value would result in conservative ratings, and what number DOE should use instead if the proposed value is not adequate (Issue 11);
- Whether the 5,000,000 Btu/h fuel input rate is an adequate threshold for the allowance of the field test (for combustion efficiency) and/or conversion methodology, and if not, what threshold should be used (Issue 12); and
- If the field test (for hot water and steam commercial packaged boilers) and conversion methodologies (for steam commercial packaged boilers) do not adequately accommodate commercial packaged boilers with fuel input rate greater than 5,000,000 Btu/h, what procedure should DOE implement in order to do so (Issue 13).

3. Alternative Efficiency Determination Methods

The provisions under 10 CFR 429.70 provide for alternative methods for determining energy efficiency and energy use of certain equipment, including commercial packaged boilers. An AEDM must first be validated for a particular validation class in accordance with the requirements of 10 CFR 429.70(c) using the applicable test procedure (*e.g.,* the test procedure under 10 CFR 431.86 for commercial packaged boilers). For each validation class of commercial packaged boilers, at least two (2) distinct basic models must be tested in order to validate the AEDM before using the AEDM to predict the fuel input rate or efficiency of a commercial packaged boiler. 10 CFR 429.70(c)(2)(iv). Such a test may be performed on any individual models in a validation class that meet or exceed the current applicable Federal energy conservation standard, regardless of size. As noted by Lochinvar in response to the November 2014 Preliminary Analysis, the AEDM process mitigates test burden concerns for large commercial packaged boilers. (Docket EERE–2013–BT–STD–0030, Lochinvar, No. 34 at p. 1)

However, in light of DOE's proposal to allow field tests for commercial packaged boilers with fuel input rates than 5,000,000 Btu/h (described in section III.C.1), DOE proposes to limit the cases in which field tests may be used for AEDM validation pursuant to 10 CFR 429.70(c)(2). Specifically, DOE proposes that AEDMs validated using data derived from field tests may only be used to rate commercial packaged boilers with fuel input rate greater than 5,000,000 Btu/h. As discussed in section III.C.1, DOE proposes a field test option for commercial packaged boilers with fuel input rates greater than 5,000,000 Btu/h that disregards certain testing requirements, measures combustion efficiency, and applies a calculation method to convert combustion efficiency to thermal efficiency (for steam commercial packaged boilers). While this field test option reduces testing burden, it also leads to more variability and uncertainty in the test results. As such, DOE believes that the proposed allowances for field tests of commercial packaged boilers with fuel input rate greater than 5,000,000 Btu/h would not provide sufficient validation of an AEDM for use on smaller units that must undergo laboratory tests. Therefore, DOE proposes that AEDMs validated based on field test data may only be used for commercial packaged boilers with fuel input rates greater than 5,000,000 Btu/h. Laboratory tests of commercial packaged boilers of any size (*i.e.,* not field tested) can continue to be used to validate an AEDM that is used to rate commercial packaged boilers of any size, including those with fuel input rate greater than 5,000,000 Btu/h.

4. Steam Commercial Packaged Boiler Operating Pressure

Section 8.6.1 of BTS–2000 provides that tests may be made at atmospheric pressure or at pressure not exceeding 2 psi gauge, and section 8.6.3 of BTS–2000 requires that the moisture in steam not exceed 2 percent of the water fed to the commercial packaged boiler during the test. These provisions are incorporated by reference in the existing DOE test procedure for commercial packaged boilers. DOE solicited public comments on test pressure and steam moisture content in the September 2013 Framework document; during the October 1, 2013 energy conservation

[10] Available at: *https://www.ahridirectory.org/ahridirectory/pages/home.aspx.*

standards Framework document public meeting; and in the February 2014 RFI. In particular, DOE requested comments about (1) the appropriate steam pressure for steam commercial packaged boilers operating at full load, (2) the effect of different steam pressures on steady-state efficiency (thermal or combustion), and (3) the impacts of the steam pressure testing requirements on the amount of water carryover and the system operation.

ABMA expressed concern that the steam pressure requirements in BTS–2000 may be suitable for certain boilers but not for some larger-capacity models. For example, ABMA indicated that a fire-tube boiler cannot operate successfully at 2 psig steam pressure. Instead, ABMA argued that a fire-tube boiler should be operated at 10 to 12 psig steam pressure to achieve acceptable steam quality. (Docket EERE–2013–BT–STD–0030, ABMA, No. 13 at p. 31) ABMA also commented that while steam pressure not greater than 0–2 psig has been adequate for the majority of boilers, the 0–2 psig test pressure is unrealistic for larger-capacity steam boilers, as it causes high steam velocity at the steam/water interface and the steam outlet nozzle, which results in excessive water entrainment and carryover (*i.e.,* poor steam quality). (Docket EERE–2013–BT–STD–0030, ABMA, No. 14 at p. 2) Cleaver-Brooks commented that it cannot test its steam boilers at such low operating pressures because its boilers are designed to operate near or at 10 psig. (Docket EERE–2013–BT–STD–0030, Cleaver-Brooks, No. 12 at p. 1) Burnham encouraged DOE to raise the limit of the required steam test pressure to give manufacturers flexibility for equipment designed to operate at pressures above 2 psig. (Docket EERE–2014–BT–TP–0006, Burnham, No. 4 at p. 2) AHRI opined that an alternative steam pressure requirement may have an effect on the steady-state measurement, but that such change would be minimal. (Docket EERE–2014–BT–TP–0006, AHRI, No. 6 at p. 2)

DOE notes that it has also received several requests for test procedure waivers, citing the inability to simultaneously meet the maximum steam pressure requirement (of between 0 and 2 psig) and the steam moisture requirement (of less than or equal to 2 percent moisture). Based on the public comments and the waiver requests DOE has received to date, DOE understands that larger commercial packaged boilers are designed for operating pressures greater than 2 psig and have difficulty being tested in accordance with the DOE existing test procedure for commercial packaged boilers; that is, at a pressure not exceeding 2 psig and also not exceeding 2 percent moisture in the produced steam.

DOE notes that, to accommodate testing of these commercial packaged boilers, section 5.3.6 of ANSI/AHRI Standard 1500–2015 requires that tests shall be made at atmospheric pressure or at the pressure required to comply with Section 5.3.7 [of ANSI/AHRI Standard 1500–2015], not exceeding 15 psi gauge. Therefore, DOE recognizes that amending 10 CFR 431.86 to replace BTS–2000 with ANSI/AHRI Standard 1500–2015 would permit steam operating pressures up to but not exceeding 15 psig and therefore resolve the issues associated with testing large commercial packaged boilers designed to operate at higher pressures. DOE does not anticipate this change would have an effect on measured efficiency ratings because it is being made to accommodate only certain large commercial packaged boilers that manufacturers have claimed cannot be tested under the existing DOE test procedure and for which manufacturers submitted waiver requests under 10 CFR 431.401.

DOE also notes that ANSI/AHRI Standard 1500–2015 allows for any steam pressure from 0–15 psig to be used for testing. However, DOE believes that it is important to maintain consistency and repeatability within the CPB test procedure and subsequent ratings. Therefore, DOE proposes that only those commercial packaged boilers that cannot operate at a steam pressure below 2 psig would be able to apply such a provision in order to also meet the steam quality requirement. However, DOE recognizes that, theoretically, variation in steam pressure would result in changes in both thermal and combustion efficiency. Therefore, to ensure commercial packaged boilers that cannot be tested at the prescribed 0–2 psig steam pressure are tested in a consistent manner, DOE proposes that such equipment be tested at the steam pressure closest to 2 psig that it can maintain while also maintaining the requirement of less than 2 percent moisture in the steam, not exceeding 15 psig. DOE notes that a manufacturer may need to incrementally increase steam test pressure above atmospheric pressure or the 2 psig requirement to meet the moisture requirement, thereby maintaining steam quality. DOE is not aware of any commercial packaged boilers that would require higher operating pressures than 15 psig to maintain the steam quality requirements.

DOE seeks comments, data, and information about pressures recommended by manufacturers and relevance to actual operating conditions in buildings. This is identified as Issue 14 in section V.E. DOE also seeks comment on whether DOE should require testing to be performed at the lowest possible steam pressure where steam quality requirements can be met. This is identified as Issue 15 in section V.E. DOE also requests comment on if there are any commercial packaged boilers that require steam pressures greater than 15 psig to maintain 2 percent moisture in the produced steam. This is identified as Issue 16 in section V.E.

D. Hot Water Commercial Packaged Boiler Operating Temperatures

In the energy conservation standards September 2013 Framework document, the February 2014 RFI, and the November 2014 Preliminary Analysis DOE requested comments, data, and information about the appropriate inlet and outlet water temperatures for part-load and full-load testing conditions of hot water commercial packaged boilers, and information about how these equipment are currently tested. Issues pertaining to the inlet water temperature and the temperature rise required by the test procedure were also raised during the public meeting regarding the energy conservation standards September 2013 Framework document. In addition to the comments solicited in response to the September 2013 Framework document, February 2014 RFI, and the November 2014 Preliminary Analysis; DOE conducted confidential manufacturer interviews as part of the energy conservation standards rulemaking process for commercial packaged boilers (manufacturer interviews), during which manufacturers also discussed issues regarding the commercial packaged boiler test procedure. In the subsequent sections, DOE discusses the existing requirements regarding hot water temperatures, issues identified by interested parties, proposed changes to the hot water temperature requirements, and potential impacts of those proposed changes.

1. Existing Requirements

The existing DOE test procedure for commercial packaged boilers incorporates by reference BTS–2000 which includes test requirements for inlet and outlet water temperatures for non-condensing and condensing commercial packaged boilers. For a non-condensing commercial packaged boiler, section 8.5.1.1 of BTS–2000 requires inlet water temperature to be

between 35 °F and 80 °F (at Point A in Figure III.1), and outlet water temperature to be 180 °F ± 2 °F (at Point C in Figure III.1). For a condensing commercial packaged boiler, section 8.5.1.2 of BTS–2000 requires inlet water temperature to be 80 °F ± 5 °F (at Point A in Figure III.1 and outlet water temperature to be 180 °F ± 2 °F (at Point C in Figure III.1). These temperature requirements are consistent with those in ANSI/AHRI Standard 1500–2015. Specifically, Figure III.1 (taken from Figure C9 in ANSI/AHRI Standard 1500–2015) identifies the location of the measurement of the inlet water temperature (Point A: T_{IN}) and the outlet water temperature (Point C: T_{OUT}).

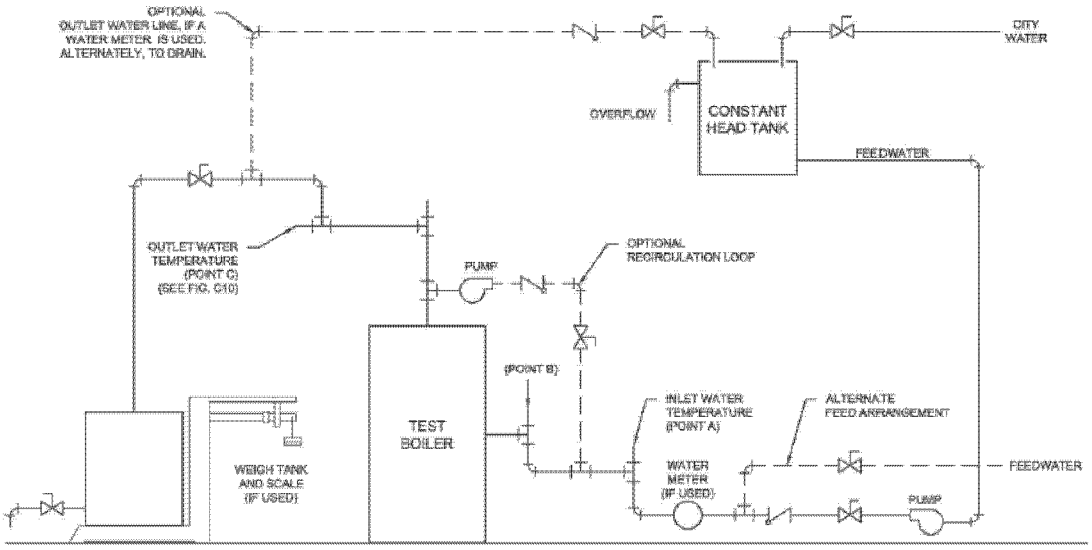

Figure III.1. Piping Arrangement for Testing Hot Water Commercial Packaged Boilers (Taken from Figure C9 in ANSI/AHRI Standard 1500-2015)

The difference between the inlet and outlet water temperatures describes the temperature rise across the commercial packaged boiler. BTS–2000 also includes an allowance in section 8.5.1.1.1 for tubular commercial packaged boilers to use a recirculating loop, which reduces the temperature rise across the commercial packaged boiler itself (Point B to Point C), while maintaining the inlet water temperature requirements specified in the DOE test procedure as measured at Point A. That is, in cases where a recirculating loop is used, BTS–2000 requires that the temperature requirements described previously must still be met at Point A in Figure III.1 prior to mixing with the warmer recirculating loop water. BTS–2000 (and ANSI/AHRI Standard 1500–2015 at section 5.3.5.3) also limits the temperature rise between Point B and Point C to not less than 20 °F for commercial packaged boilers tested using a recirculating loop. ANSI/AHRI Standard 1500–2015 expands the allowable use of a recirculating loop to all commercial packaged boilers in section 5.3.5.3, where previously it was allowed for commercial packaged boilers with tubular heat exchangers only.

The measurements of inlet and outlet water temperature at Points A and C are used in Equation 1 to calculate the amount of energy transferred into the heated water, as described by item C7.2.11.3 in ANSI/AHRI Standard 1500–2015 (also in 11.1.11.3 of BTS–2000). This equation is given by

$$Q_S = \frac{W \times C_{P,H2O}(T_{OUT} - T_{IN})}{t_T} \qquad \textbf{Equation 1}$$

where Q_S is the rate of heat transferred in Btu/h, W is the weight of heated water in pounds (lb) measured during the test, $C_{P,H2O}$ is the specific heat of water in Btu/lb/°F, T_{OUT} is the outlet water temperature at Point C (°F), T_{IN} is the inlet water temperature at Point A (°F), and t_T is the test duration in hours.

In general, the efficiency of a commercial packaged boiler is proportional to the amount of water heated and the amount of heat energy added to this amount of water. As shown in Equation 1, the amount of heat energy transferred is proportional to the product of the weight of the water fed (W) and the temperature rise across the commercial packaged boiler ($T_{OUT} - T_{IN}$). The efficiency is therefore dependent on the inlet water temperature, whereby lower inlet temperatures result in greater amounts of heat energy transferred and therefore higher thermal efficiencies. As the energy from the flue gases is only transferred to the hot water in the heat exchanger, the first law of thermodynamics establishes a lower limit on the temperature the flue gas can achieve, which is the lowest water temperature within the commercial packaged boiler. Therefore as the inlet water temperature is reduced, more energy may be extracted from the combustion gases, resulting in potentially higher efficiency. These conditions hold true for both non-condensing and condensing commercial packaged boilers.

2. Issues With Water Temperature Requirements and Proposed Changes

Through the October 2013 Framework document, February 2014 RFI, the November 2014 Preliminary Analysis, manufacturer interviews, and a review of the existing DOE test procedure, DOE identified the following concerns regarding its existing water temperature requirements for commercial packaged boilers:

- The current temperature rise is unrepresentative of actual operating conditions.
- The current temperature rise may induce excessive stresses on some commercial packaged boilers.
- The presence of recirculating loops during testing leads to significant variability in the actual temperature rise across the commercial packaged boiler (Point B to Point C in Figure III.1).

These issues are discussed in detail in this section.

During the manufacturer interviews, a number of manufacturers indicated that the 100 °F temperature rise in BTS–2000 (for both condensing or non-condensing commercial packaged boilers) was unrepresentative of real-world conditions, and instead indicated that commercial packaged boilers are typically designed for a 20 °F to 40 °F temperature rise. These manufacturers suggested that testing with a 20 °F to 40 °F temperature rise would better reflect conditions found in typical building applications. DOE understands this to mean the actual temperature rise across the commercial packaged boiler itself (*i.e.,* between Point B and Point C in Figure III.1).

During the public meeting regarding the September 2013 energy conservation standards Framework document, ACEEE asserted that a 100 °F temperature rise is an inadequate way to characterize modern boilers, does not provide sufficient information about performance of a boiler with a 20 °F temperature rise between inlet and outlet water temperature at part-load conditions, and is essentially irrelevant for comparing efficiencies among a range of boiler sizes. (Docket EERE–2013–BT–STD–0030, ACEEE, No. 13 at pp. 20, 36) In later comments, ACEEE recommended a 20 °F temperature rise, arguing that it is within the range of the most common temperature rise and provides the most conservative value for full-load, steady-state efficiency. ACEEE also commented that a manufacturer should be able to publish ''application ratings'' (informational ratings obtained at different operating conditions) for different temperature rise values. In addition, whether for a fixed capacity or modulating boiler, ACEEE observed that the lower inlet water temperatures result in higher efficiencies, and ACEEE stated its understanding that almost all the efficiency gain is due to the release of latent energy at inlet water temperatures less than 140 °F. ACEEE then suggested that a commercial packaged boiler should be rated at the lowest inlet water temperature that remains under the manufacturer's warranty for continuous service, whether for a fixed capacity or modulating boiler. (Docket EERE–2014–BT–TP–0006, ACEEE, No. 2 at p. 2.)

A joint comment from ACEEE, ASAP, and NRDC suggested that the existing DOE test procedure for commercial packaged boilers is obsolete because it obscures the annual energy savings potential of condensing boilers in commercial building applications. BTS–2000 measures efficiency at peak load, using a minimum 100 °F temperature rise between inlet and outlet (note: BTS–2000 defines inlet temperature at a location preceding the reentry of any recirculating loop water), and requires 180 °F outlet temperature. (This continues to be the case in ANSI/AHRI Standard 1500–2015.) However, the commenters argued that the existing test procedure does not consider condensing boilers that can operate at part load with greater efficiency if the system design allows for inlet water at condensing temperatures (<140 °F). (Docket EERE–2013–BT–STD–0030, Joint Advocates, No. 16 at p. 2)

In response to the November 2014 Preliminary Analysis, Raypak suggested that the wide range in allowable inlet water temperatures in BTS–2000 is to accommodate the wide range of ground water temperatures throughout the year. (Docket EERE–2013–BT–STD–0030, Raypak, No. 35 at p. 3)

ABMA expressed concerns on behalf of its members that (1) water temperatures required by BTS–2000 are obsolete or do not represent installed boilers; (2) the temperature rise resulting from the required inlet and outlet water temperatures set forth in BTS–2000 can place excessive stress on the boiler pressure vessel, thereby leading to shorter boiler life; and (3) the considerable cost of testing larger boilers could approach $1 million. ABMA added that test pressures and temperatures should be more realistic in terms of normal system operating conditions and that an appropriate inlet temperature would be 140 °F or the manufacturer's recommended minimum. (Docket EERE–2013–BT–STD–0030, ABMA, No. 14 at p. 1–3) DOE notes that these concerns continue to apply to ANSI/AHRI Standard 1500–2015 since these temperatures are the same as those found in BTS–2000.

Cleaver-Brooks stated that BTS–2000 specifies an outlet temperature of 180 °F and an inlet water temperature of 38 °F [sic] to 80 °F for non-condensing boilers. (Note: BTS–2000 prescribes an inlet water temperature of 35 °F.) Instead, for much of its equipment, Cleaver-Brooks stated that it specifies a minimum inlet water temperature of 140 °F to reduce damage from thermally induced stresses. Cleaver-Brooks asserted that neither the required steam nor the hot water test conditions set forth in the existing DOE test procedure for commercial packaged boilers reflect actual conditions in buildings, and that test conditions overestimate boiler efficiency compared to what an end-user would be expected to experience in actual applications. The commenter suggested modifying the test procedure to require an outlet water temperature of 180 °F and an inlet water temperature of 140 °F or, at a minimum, to allow such test conditions as an alternative. (Docket EERE–2013–BT–STD–0030, Cleaver-Brooks, No. 12 at p. 1) Again, DOE notes that these concerns also apply to ANSI/AHRI Standard 1500–2015, as the standard maintains the same inlet and outlet water temperature requirements as BTS–2000. DOE also believes that the inlet water temperatures described by Cleaver-Brooks and ABMA are intended to mean the inlet water temperature in the absence of a recirculating loop. As noted earlier, the existing DOE test procedure (section 8.5.1.1.1 of BTS–2000) allows for the use of a recirculating loop for tubular commercial packaged boilers, thereby increasing the inlet water temperature seen by the commercial packaged boiler (shown as Point B in Figure III.1) and reducing the actual temperature rise across the commercial packaged boiler.

Similarly, Lochinvar stated in response to the November 2014 Preliminary Analysis that the allowance in BTS–2000 for a recirculation loop in some instances would result in higher water temperature going into the commercial packaged boiler. Lochinvar noted that efficiency curves that present the efficiency of a commercial packaged boiler as a function of return (inlet) water temperature (and are sometimes provided in marketing literature) are not based on the methodology of BTS–2000. Lochinvar further recommended that DOE not attempt to correct the efficiency of commercial packaged boilers for inlet water temperature. (Docket EERE–2013–BT–STD–0030, No. 34 at p. 3)

In order to address the issues presented in section III.D.2, DOE

proposes amendments to the inlet and outlet water temperatures for both condensing and non-condensing commercial packaged boilers. Upon consideration of the above comments about inlet and outlet water temperatures; review of commercial packaged boiler manufacturer literature; and consideration of results of testing of commercial packaged boilers at temperatures that, according to commercial packaged boiler manufacturers, would reflect normal system operating conditions; DOE agrees with interested parties that a 100 °F to 145 °F nominal temperature rise does not necessarily reflect conditions typically associated with installed non-condensing or condensing commercial packaged boilers.

Further, DOE acknowledges that the presence of recirculating loops in testing obscures the actual inlet water temperature entering the commercial packaged boiler at Point B in Figure III.1 (and therefore the actual temperature rise experienced by the commercial packaged boiler) because the inlet water temperature is measured and maintained at Point A only, under the existing procedure. Specifically, DOE observed that, based on the permissible inlet and outlet temperatures, the tolerances on those temperatures, and the use of recirculating loops, the temperature rises between Point B and Point C in Figure III.1 allowable by both BTS–2000 and ANSI/AHRI Standard 1500–2015 can range from 20 °F to 147 °F for non-condensing commercial packaged boilers (section 8.5.1.1 of BTS 2000 and section 5.3.5.1 of ANSI/AHRI Standard 1500–2015) and 20 °F to 107 °F for condensing commercial packaged boilers (section 8.5.1.2 of BTS 2000 and section 5.3.5.2 of ANSI/AHRI Standard 1500–2015). (Note: the minimum temperature rise of 20 °F across the commercial packaged boiler assumes that recirculating loops are currently being used for these tests.) DOE notes that such variability has the potential to yield variability in tested combustion efficiency and thermal efficiency ratings.

Accordingly, to improve the consistency and repeatability of the DOE test procedure, DOE proposes to revise the hot water temperature requirements to require the inlet water temperature to be 140 °F ±1 °F for non-condensing equipment, as determined at Point B (see Figure III.1). For non-condensing equipment, DOE is maintaining the outlet temperature of 180 °F but is specifying a new tolerance for this measurement, which is discussed further in section III.D.3). Similarly, DOE proposes to require an outlet water temperature of 120 °F ±1 °F for condensing equipment, as determined at Point C (see Figure III.1). For condensing equipment, DOE is proposing an inlet water temperature specification of 80 °F as measured at Point B in Figure III.1 and updating the measurement tolerance to ±1 °F, as discussed section III.D.3. DOE believes these test temperatures will more accurately represent the energy efficiency of commercial packaged boilers and are more consistent with the conditions typically observed in field installations. DOE also notes that the proposed temperature requirements result in equivalent temperature rises across the commercial packaged boiler for condensing and non-condensing equipment in order to maintain comparability. The proposed temperature requirements also incorporate inlet water temperatures that more accurately represent the efficiencies of non-condensing and condensing commercial packaged boilers. DOE does not believe that maintaining the same outlet water temperature for non-condensing and condensing commercial packaged boilers is important for maintaining comparability of ratings.

DOE is proposing to modify the location at which the inlet water temperature is maintained from Point A to Point B, which is immediately preceding the commercial packaged boiler, downstream of the recirculation loop (see Figure III.1). DOE believes that the comments of interested parties refer to the temperature rise experienced across the commercial packaged boiler itself (Point B to Point C) and that, therefore, DOE's proposal is consistent with the input of interested parties. In addition, DOE notes that specifying the inlet water temperature at Point B, immediately prior to entering the commercial packaged boiler would remove ambiguity and improve the consistency and repeatability of the DOE test procedure. This temperature is more directly related to the measured thermal or combustion efficiency than the temperature rise determined with the inlet water upstream of the recirculation loop (between Point C and Point A of Figure III.1).

DOE recognizes that these inlet temperatures would typically be produced through the use of a recirculating loop to temper incoming feedwater to the appropriate inlet temperature. In proposing to adopt ANSI/AHRI Standard 1500–2015, DOE is proposing to allow recirculation loops to be used on all commercial packaged boilers and, as such, DOE clarifies that recirculation loops could be used to meet the new proposed inlet water requirements. However, DOE proposes that the efficiency calculations in section C7.2.11.3 in ANSI/AHRI Standard 1500–2015 would continue to use the water temperature and flow rate measured upstream of the recirculating loop, if present (Point A in Figure III.1). DOE acknowledges that this would require measurements of water temperature at both Point A and Point B for equipment tested with recirculating loops. However, DOE notes that by continuing to use the temperature at Point A in the calculation of thermal efficiency, the precision of the resulting thermal efficiency will not be impacted as compared to the current methodology.

While DOE believes that the proposed inlet and outlet temperature requirements are applicable and representative for the majority of commercial packaged boilers available on the market, DOE is aware that some commercial packaged boilers are unable to operate at a temperature rise across the commercial packaged boiler of 40 °F. Specifically, DOE is aware that some commercial packaged boilers are only capable of operating with lower temperature differentials, such as 20 °F. As such, DOE is proposing to adopt provisions for commercial packaged boilers that cannot operate with a temperature rise of 40 °F across the boiler (Point B to Point C), as indicated in the manufacturer literature. For non-condensing commercial packaged boilers, DOE is proposing that, if the commercial packaged boiler cannot operate with an inlet temperature of 140 °F ± 1 °F at Point B in Figure III.1 when the outlet temperature is 180 °F ± 1 °F, DOE is proposing that the inlet temperature be maintained as close to 140 °F ± 1 °F as possible, consistent with manufacturer's instructions provided in the literature for that basic model and that the average inlet water temperature measured at Point B in Figure III.1 be reported as part of the certification report for the basic model. Similarly, for condensing commercial packaged boilers that cannot operate with a temperature rise of 40 °F across the commercial packaged boiler, DOE is proposing that the inlet temperature at Point B in Figure III.1 be maintained as close to 80 °F ± 1 °F as possible, consistent with manufacturer's instructions provided in the literature for that basic model, while the outlet temperature is maintained at 120 °F ± 1 °F, consistent with the DOE test procedure. Again, the average inlet water temperature measured at Point B in Figure III.1 would be reported as part

of the certification report for the basic model

DOE seeks comments, data, and information about whether the proposed testing conditions related to water temperatures are appropriate both for a non-condensing commercial packaged boiler and a condensing commercial packaged boiler. This is identified as Issue 17 in Section V.E.

DOE also requests comment on the proposed test provisions to accommodate commercial packaged boilers that cannot be tested with a temperature rise of 40 °F across the commercial packaged boiler (Point B to Point C). This is identified as Issue 18 in Section V.E.

Under EPCA, DOE is required to determine what impacts, if any, its amendments to a test procedure will have on ratings. (42 U.S.C. 6293(e); 42 U.S.C. 6314(a)(4)(C)) DOE proposes using the temperature rise across the commercial packaged boiler itself as described in order to improve the repeatability of the tests. Whereas the existing test procedure (using BTS–2000, incorporated by reference) allows for a wide range of temperature rises across the commercial packaged boiler due to the allowance of recirculating loops and a measurement location upstream of the recirculation loop, which obscures the actual temperature rise across the commercial packaged boiler, DOE's proposed amendments would remove ambiguity by standardizing this temperature rise across all commercial packaged boilers where possible. DOE notes that the effect on any individual commercial packaged boiler could be to slightly increase or slightly decrease measured efficiency, depending on how the test was previously performed. Further, based on discussions with manufacturers, DOE believes that testing is already performed using a recirculating loop for equipment that does not utilize a tubular heat exchanger in order to prevent damaging the equipment and provide the boiler with inlet water temperatures more representative of typical field conditions. Therefore, in combination with the other proposed amendments to the test procedure, DOE has tentatively determined that the proposed amendments, in aggregate, would not result in an overall measurable impact on ratings.

3. Allowable Uncertainty in Water Temperature Measurement

HTP initially expressed concern about several operating conditions being either unspecified or unrealistic, and suggested updated test parameters for commercial packaged boilers that would be more reasonable. (Docket EERE–2013–BT–STD–0030, HTP, No. 18 at p.4) However, in later comments and after further analysis, HTP concluded that the test conditions should not be amended because manufacturers cannot be confident that the DOE test method would maintain an acceptable level of uncertainty if different test points or temperature rises were to be used. Instead, HTP commented that an acceptable test method uncertainty analysis should be completed to verify the Appliance Standards and Rulemaking Federal Advisory Committee (ASRAC) agreed-upon 5-percent allowable tolerance on ratings in order to account for variations in manufacturing and testing. (Docket EERE–2014–BT–TP–0006, HTP, No. 5 at p. 4)

In response to HTP's concerns regarding the uncertainty of the test, DOE proposes to reduce the tolerances for inlet and outlet water temperatures during the test period to ±1 °F for both non-condensing and condensing commercial packaged boilers so that testing uncertainties are not increased. DOE notes that the required minimum accuracy of the inlet and outlet water temperature measurement instrumentation is ±0.2 °F (Table C1 of ANSI/AHRI Standard 1500–2015 and Table 1 of BTS–2000). Therefore, the instrumentation required by the test procedure is sufficiently precise to accommodate this tolerance. Investigative testing performed by DOE showed that reducing the temperature rise did not substantially increase the variability in thermal efficiency between repeated tests compared to the expected variability of the currently allowable temperature rises. Furthermore, a review of the data obtained during investigative testing showed little variation over time in the temperatures themselves, typically less than ±1 °F over the course of the test. DOE seeks additional comments, data, and analysis concerning thermal efficiency test measurement uncertainty. This is identified as Issue 19 in section V.E.

4. Water Flow Rate During Testing

Burnham and AHRI observed that a change in the specified water temperatures would potentially change the water flow rate and the calculated efficiency resulting from the test procedure. Higher flow rates and a resulting higher total volume of water are necessary to achieve smaller temperature rises. According to the commenters, decreasing the temperature rise would require a higher water flow rate and may exceed the water handling, cooling, processing, and disposal capabilities of many laboratories currently testing using the existing DOE test procedure (*i.e.,* BTS–2000). Further, the commenters argued that reducing the temperature rise by lowering the outlet temperature may result in increased measured thermal efficiency. In view of these concerns, both AHRI and Burnham recommended that the current operating temperatures should be retained. (Docket EERE–2014–BT–TP–0006, Burnham, No. 4 at p. 2; Docket EERE–2014–BT–TP–0006, AHRI, No. 6 at p. 2)

DOE is aware that the water temperature rise across the commercial packaged boiler is inversely related to the flow rate of the working fluid (water or steam) at a given burner fuel input rate, and that increasing water flow rates to achieve lower temperature rises may reduce the commercial packaged boiler size that laboratories are capable of testing. However, as stated previously, DOE also acknowledges that, under the proposed test procedure, recirculating loops, which reduce the temperature rise across the commercial packaged boiler with modest flow rates of incoming feedwater and outgoing water for disposal, would be allowed for all commercial packaged boilers, not just commercial packaged boilers with tubular heat exchangers as is currently allowed in section 8.5.1.1.1 of BTS–2000. This is supported by Lochinvar's assertion that recirculating loops are used in testing and increase the inlet water temperature to the commercial packaged boiler. (Docket EERE–2013–BT–STD–0030, No. 34 at p. 3) In addition, DOE notes that the 100 °F temperature rise required by both BTS–2000 and ANSI/AHRI Standard 1500–2015 is not directly comparable to DOE's proposed temperature rise of 40 °F due to the difference in where the inlet temperature requirement is measured.

DOE believes that requiring the temperature to be measured and maintained at the location downstream of the recirculation loop and just prior to the commercial packaged boiler inlet would allow manufacturers and laboratories to continue using incoming water at much lower temperatures (at or near the current 35 °F to 80 °F of BTS–2000 and ANSI/AHRI Standard 1500–2015). That is, under these proposed inlet and outlet temperature conditions (when utilizing a recirculation loop), the same temperatures and test conditions could be established under the existing and new test procedures (due to the different measurement locations). DOE therefore believes that the concerns regarding an increase in water flow rate

(and therefore reduction in laboratory capacity) may be overstated in view of the proposed change in location of where the inlet water temperature would be measured under the proposed test procedure.

DOE seeks comment regarding the prevalence of using recirculating loops in testing; specifically, DOE requests comment about the kinds of commercial packaged boilers utilizing recirculation loops during testing and the conditions at which these commercial packaged boilers and recirculating loops operate. This is identified as Issue 20 in section V.E.

DOE estimates the impact on manufacturers of requiring higher water flow rates in section IV.B. DOE seeks further comments, data, and information concerning the capabilities of test laboratories, particularly in light of the specific proposed conditions contained in this NOPR. This is identified as Issue 21 in section V.E.

E. Testing Conditions

For non-condensing commercial packaged boilers, the existing DOE test procedure does not prescribe test room requirements for ambient temperature or humidity. For combustion efficiency tests of condensing commercial packaged boilers, the existing DOE test procedure requires that the ''humidity of the room shall at no time exceed 80 percent.'' 10 CFR 431.86(c)(2)(ii). Additionally, BTS–2000 requires that test air temperature, as measured at the burner inlet, be within ±5 °F of the ambient temperature, where ambient temperature is measured within 6 feet of the front of the unit at mid-height. ANSI/AHRI Standard 1500–2015 prescribes an allowable ambient temperature during the test between 30 °F and 100 °F (section 5.3.8) with the relative humidity not exceeding 80 percent in the test room or chamber (section 5.3.9). Section C3.6 of ANSI/AHRI Standard 1500–2015 also requires that test air temperature, as measured at the burner inlet, be within ±5 °F of the ambient temperature (which is measured within 6 feet of the commercial packaged boiler at mid-height; see section C3.7 of ANSI/AHRI Standard 1500–2015).

DOE understands that ambient temperature and humidity, including test air temperature, can have a measurable effect on the tested efficiency of commercial packaged boilers, particularly condensing commercial packaged boilers.[11] High humidity or any increase in humidity over a baseline would enable a commercial packaged boiler to capture more latent heat from combustion gases, thereby resulting in a higher measured efficiency. DOE recognizes that this effect would be noticeable both in tests for combustion efficiency and thermal efficiency. Therefore, DOE proposes to amend 10 CFR 431.86 so as to minimize this effect.

As noted previously, the existing DOE test procedure requires a maximum of 80-percent ambient relative humidity in the test room or chamber when testing a condensing commercial packaged boiler for combustion efficiency only. DOE proposes to require that ambient relative humidity at all times be 60 percent ± 5 percent during thermal and combustion efficiency testing of commercial packaged boilers.[12] While DOE acknowledges that the effect of ambient humidity on the efficiency of non-condensing commercial packaged boilers is less than that for condensing commercial packaged boilers, DOE nevertheless proposes the same ambient humidity requirements for all commercial packaged boilers in order to maintain consistency and comparability between ratings. Also, DOE proposes that the ambient relative humidity be measured and recorded at each 30-second interval during the entire test. DOE seeks comments, data, and information about room ambient relative humidity, whether the proposed constraints are appropriate, and if not, what are appropriate constraints on room ambient relative humidity when testing commercial packaged boilers. This is identified as Issue 22 in section V.E.

In addition to proposed limits to ambient relative humidity when testing commercial packaged boilers, DOE proposes an ambient room temperature of 75 °F ± 5 °F during testing of commercial packaged boilers. The ambient temperature would be measured and recorded at each 30-second interval during the entire test. Additionally, DOE proposes that the ambient room temperature cannot differ by more than ± 2 °F from the average ambient room temperature during the ''Test Period'' (as described in section C4 of Appendix C of ANSI/AHRI Standard 1500–2015; proposed for incorporation by reference) at any reading.

DOE believes that limiting ambient room temperature and relative humidity during testing will improve repeatability and provide for test conditions that more closely reflect the ambient conditions that commercial packaged boilers experience in normal operation. For non-condensing hot water and steam commercial packaged boilers, DOE anticipates negligible changes in the rated efficiency for a particular commercial packaged boiler due to the proposed changes to room ambient temperature and relative humidity requirements. Nevertheless, DOE proposes limits to ambient conditions for non-condensing commercial packaged boilers to prevent testing from occurring at extreme ambient temperature or relative humidity, which would be outside the expected range of conditions that commercial packaged boilers experience in normal operation. In comparison, ambient room temperature and relative humidity would have some effect on the test results for condensing commercial packaged boilers. However, Because DOE expects that current efficiency ratings generally have been determined at typical ambient room temperatures and relative humidity levels, DOE also expects that reported rating values will not change as a result of the proposed limits on ambient room temperature and relative humidity, which fall within the typical ambient room temperatures and relative humidity levels.

DOE seeks comments, data, and information about the aforementioned proposed room ambient temperatures, whether the proposed constraints are appropriate, and if not, what are appropriate constraints on room ambient temperature. This is identified as Issue 23 in section V.E.

F. Setup and Instrumentation

In DOE's review of the existing test procedure, DOE identified several setup instructions and instrumentation requirements for which clarifications are expected to improve the accuracy and repeatability of test results. These include: (1) Additional specifications regarding the steam riser/header geometry, (2) additional requirements regarding the use of steam condensate return piping, and (3) additional insulation requirements for the steam and water piping.

First, in section C2.3, ''Steam Piping,'' of ANSI/AHRI Standard 1500–2015 (section 7.3 of BTS–2000), the description of the steam riser/header geometry may lead to different interpretations which can impact the amount of entrained water reaching the steam separator and result in variability

[11] Test air temperature is defined in ANSI/AHRI Standard 1500–2015 as the temperature of the air being supplied to the burner from the room.

[12] *Humidity* is the amount of water vapor in the air. *Absolute* humidity is the water content of air. *Relative* humidity, expressed as a percent, measures the current absolute humidity relative to the maximum for that temperature. *Specific* humidity is a ratio of the water vapor content of the mixture to the total air content on a mass basis.

in the measured thermal efficiency of commercial packaged boilers. Specifically, variations in the nominal pipe diameter or size of the pipe of the steam riser and the height of the steam riser above the water line may impact the amount of entrained water in the steam and may result in exceeding the DOE test procedure's 2 percent limit for moisture content in the steam. In order to reduce the amount of entrained water in the steam to satisfy this steam moisture requirement, the water level within the commercial packaged boiler is typically lowered during testing (within the allowable tolerance for the water level pursuant to manufacturer literature or ANSI/AHRI Standard 1500–2015 section C4.1.1.1.3, as applicable). However, lowering the water level inside the heat exchanger decreases the thermal efficiency of the commercial packaged boiler because as the water level is lowered, less heat exchanger surface area is in contact with water. Therefore, variations in the steam riser and header geometry can affect the amount of moisture in the steam and require changes in the water level to meet the 2 percent moisture content requirement, which can then result in decreased thermal efficiency measurements for the same commercial packaged boiler model.

To decrease the variability and increase the repeatability and precision of the DOE test procedure, DOE therefore proposes to clarify the description of the steam riser and header geometry in its test procedure. Specifically, DOE proposes to adopt section C2.3 of ANSI/AHRI Standard 1500–2015 with additional provisions regarding the description of the steam riser and header geometries. The proposed additional specifications and the reason for inclusion are as follows:

- No reduction in diameter shall be made in any horizontal header piping, as a reduction in pipe diameter in the horizontal header prevents entrained water from draining properly and typically leads to non-steady-state operation. In the case of commercial packaged boilers with multiple steam risers, the cross-sectional area of the header must be no less than 80 percent of the summed total cross-sectional area of the risers, and the header pipe must be constant in diameter along its entire length.
- The diameter of the vertical portion of the steam condensate return pipe that is above the manufacturer's recommended water level may be reduced to no less than one half of the header pipe diameter to ensure adequate operation of the return loop and draining of entrained water back into the commercial packaged boiler.

DOE notes that section C2.3 of ANSI/AHRI Standard 1500–2015 specifies that the steam riser shall be connected in accordance with the manufacturer's instructions. However, in the event the manufacturer's literature does not specify necessary height and dimension characteristics for steam risers, headers, and return piping, DOE proposes the following requirements to ensure consistent and repeatable testing:

- The header pipe diameter must be the same size as the commercial packaged boiler's steam riser (steam take-off) pipe diameter. In the case of commercial packaged boilers with multiple steam risers, the cross-sectional area of the header must be no less than 80 percent of the summed total cross-sectional area of the risers, and the header pipe must be constant in diameter along its entire length.
- The height measured from the top of the header to the manufacturer's recommended water level must be no less than the larger of 24 inches or 6 times the header pipe diameter.
- The distance between the vertical steam riser (steam take-off) leading to the water separator and the elbow leading to the condensate return loop must be a minimum of three (3) header pipe diameters to prevent entrained water from entering the separator piping.
- If a water separator is used, piping must pitch downward to the separator at a rate of at least ¼ inch per foot of pipe length in order to assure proper collection of moisture content and steady-state operation during testing.
- A vented water seal is required in steam moisture collection plumbing to prevent steam from escaping through the moisture collection plumbing.

DOE notes that header diameters that are larger than the diameter of the steam outlet can result in atypically low steam flow rate in the header, affecting carryover of entrained water, while smaller diameter headers may reduce the measured steam quality, possibly requiring tests to be conducted at lower water levels, which may result in lower efficiencies. Undersized headers with pipe diameters that are smaller than the diameter of the steam outlet on the commercial packaged boiler can also impede or prevent adequate draining of entrained water.

Second, Figure C5, ''Suggested Piping Arrangement for Steam Boilers, Condensate Measurement,'' and Figure C7, ''Suggested Piping Arrangement for Steam Boilers, Feedwater Measurement,'' in ANSI/AHRI Standard 1500–2015 both allow a steam commercial packaged boiler to be tested without a steam condensate return pipe. DOE proposes that all steam commercial packaged boiler test setups be required to include a steam condensate return pipe to minimize variation in tests. DOE also proposes to prohibit use of the ''suggested'' piping arrangements in Figures C5 and C7 for steam commercial packaged boiler testing setups. DOE believes these changes would ensure that commercial packaged boilers that typically require a steam condensate return pipe for adequate operation have one installed during testing. DOE believes that requiring a steam condensate return pipe, with the criteria specified in this section, would ensure consistent and repeatable test results. DOE further believes that such requirement would not have a significant impact upon thermal efficiency or steam moisture content for a steam commercial packaged boiler that may operate without a steam condensate return pipe.

Third, Sections C2.3 and C2.4 in ANSI/AHRI Standard 1500–2015 provide only minimal guidance about insulation requirements for steam and water piping components that are used in the thermal efficiency test. To provide for repeatability and minimize heat losses in the piping, DOE proposes to adopt the minimum pipe insulation thickness and conductivity requirements in ASHRAE/IES Standard 90.1–2013, Table 6.8.3–1. DOE also believes these requirements would be more representative of insulation requirements for outlet piping used in most commercial applications.

In view of all the above, DOE seeks comment about its proposed changes to the steam riser, header, and return water loop testing requirements. This is identified as Issue 24 in section V.E.

DOE recognizes that for oil-fired commercial packaged boilers, burners are not always included when shipped from the manufacturer. In such cases, DOE proposes that the unit be tested with the particular make and model of burner certified by the manufacturer. Since each basic model distributed in commerce must be certified, DOE expects that using a manufacturer's certification will provide the most complete list of all burners for use with a particular boiler. Furthermore, DOE expects all burners specified in the installation and operation manual would be certified to the Department as part of the commercial packaged boiler basic model. If multiple burners are specified in the installation and operation manualor in one or more certification reports, then DOE proposes that any of the listed burners may be

used for testing and all must be certified to the Department. DOE believes these provisions provide manufacturers with ample opportunity to specify burners that should be used with their commercial packaged boilers for testing, and will reduce ambiguity concerning what burner a commercial packaged boiler can be tested with. DOE believes these changes represent a clarification in how burners are specified and therefore does not anticipate any changes in ratings for commercial packaged boilers. DOE seeks comment regarding the specification of burners for oil-fired commercial packaged boilers and this is identified as Issue 25 in section V.E.

With respect to outdoor commercial packaged boilers, units with multiple outdoor venting arrangements provided by the manufacturer are required by ANSI/AHRI Standard 1500–2015 section C2.2.5 to be tested using the arrangement having the least draft loss. However, draft loss is not defined nor are provisions provided in ANSI/AHRI Standard 1500–2015 for determining which arrangement has the least draft loss. DOE proposes language in its test procedure to clarify how this is determined, specifically by adding the straight lengths of venting for each arrangement supplied with the equipment and using the one with the shortest total length. DOE believes this is a clarification only and does not believe ratings for commercial packaged boilers would be affected by this clarification.

In addition to these proposed clarifications regarding the setup and configuration of commercial packaged boilers for testing, DOE proposes clarifications and provisions regarding the test instrumentation and calibration. Specifically, regarding section 7.6, ''Application of Additional Instruments (Steam),'' of BTS–2000 (now section C2.6 of ANSI/AHRI Standard 1500–2015), ABMA commented that references to mercury and use of a mercury manometer should be removed, suggesting that mercury is no longer an industry-acceptable pressure measuring fluid for testing steam boilers.[13] (Docket EERE–2013–BT–STD–0030, ABMA, No. 14 at p. 3–4) DOE has concluded that the mercury-based instrumentation is outdated and recognizes that the ANSI/AHRI Standard 1500–2015 does not require or reference the use of mercury manometers. As such, DOE notes that by incorporating by reference ANSI/AHRI Standard 1500–2015 as proposed in this NOPR, the DOE test procedure would no longer specify or reference use of mercury manometers (or other mercury-based instrumentation).

Additionally, ABMA suggested that some other required instrumentation prescribed in BTS–2000 is outdated and that some calculation methods contained therein are laborious. In particular, ABMA inquired whether an oxygen (O_2) combustion analyzer may be used to determine combustion efficiency rather than the existing calculation procedures if it can be shown that its results are equivalent. (Docket EERE–2013–BT–STD–0030, ABMA, No. 14 at pp. 3–4) ANSI/AHRI Standard 1500–2015 includes a methodology for using an O_2 combustion analyzer for measurements of combustion efficiency, and DOE's proposal to incorporate by reference this industry standard would adopt this methodology. DOE recognizes ABMA's concern on this topic and seeks additional comments, and particularly data, about whether the oxygen combustion analyzer produces equivalent combustion efficiencies to the carbon monoxide (CO) and carbon dioxide (CO_2) calculations provided by ANSI/AHRI Standard 1500–2015 and BTS–2000. This is identified as Issue 26 in section V.E.

DOE acknowledges that section C.1.1, ''Calibration,'' of ANSI/AHRI Standard 1500–2015 requires instruments to be calibrated to a recognized standard at regular intervals. DOE believes that such a requirement is sufficient for ensuring appropriate calibration procedures for applicable test equipment. However, in order to ensure accurate and repeatable test measurements, DOE is proposing a provision that would require all instrumentation to be calibrated at least once per year. For combustion measurement equipment (instruments listed in the ''Gas Chemistry'' row of Table C1 in ANSI/AHRI Standard 1500–2015), DOE proposes to require calibration using standard gases with purities of greater than 99.9995 percent for all constituents analyzed. DOE acknowledges that manufacturers and laboratories may have existing calibration and documentation protocols in place that already meet these requirements.

Finally, DOE proposes to require that data obtained digitally be sampled and recorded at 30-second intervals or less, and data related to rates, flows, or flux be integrated over the 15-minute intervals required throughout ANSI/AHRI Standard 1500–2015. Data not related to rates, flows, or fluxes shall be averaged over the 15-minute interval. DOE proposes this requirement as a means of confirming that ambient condition requirements and water temperatures are maintained for the duration of the test. This requirement would apply to digital flow meters for measuring water flow. However, DOE proposes that this requirement would not apply to the use of a scale for measuring the weight of feedwater collected, which would continue to be recorded in 15-minute intervals as provided in ANSI/AHRI Standard 1500–2015. DOE seeks comment on its proposal to require digital data acquisition, and this is identified as Issue 27 in section V.E.

DOE seeks general comment as to the proposed clarifications to test procedure setup and instrumentation. This is identified as Issue 28 in section V.E.

G. Fuel Input Rate

In DOE's existing regulations, equipment classes and the standards that apply to them are determined partly on the basis of the size of the commercial packaged boiler. However, several terms are used interchangeably in BTS 2000, ANSI/AHRI Standard 1500–2015, and in the existing DOE test procedure and energy conservation standards to describe the size of the commercial packaged boiler, each of which is derived from the maximum rated fuel input rate to the commercial packaged boiler. For example, the existing DOE test procedure for commercial packaged boilers at 10 CFR 431.86 uses the term ''rated input capacity'' and ''fuel input'' while the energy conservation standards for commercial packaged boilers at 10 CFR 431.87 use ''capacity,'' ''rated maximum input,'' ''maximum rated capacity,'' and ''size category (input),'' all of which are intended to mean the same thing. BTS–2000, which is incorporated by reference in the existing DOE test procedure for commercial packaged boiler, uses the terms ''input,'' ''input rating,'' and ''manufacturer's nameplate input.'' ANSI/AHRI Standard 1500–2015 defines ''input rating'' as the maximum Btu/h or gph [gallons per hour] input located on the Boiler rating plate. Furthermore, neither the existing DOE regulatory text nor BTS–2000 specify how to determine this ''rated'' or ''nameplate'' maximum fuel input rate for a commercial packaged boiler. However, BTS–2000 and ANSI/AHRI Standard 1500–2015 require that the input be within ±2 percent of the ''manufacturer's nameplate input'' (BTS–2000) or ''Input Rating'' (ANSI/AHRI Standard 1500–2015).

To clarify how to determine the appropriate equipment class for

[13] A ''manometer'' is an instrument that uses a column of liquid, such as mercury or water, contained in a glass or plastic tube and is used to measure the pressure of gases.

commercial packaged boilers, DOE proposes to adopt a definition for the term ''fuel input rate.'' DOE believes this is necessary to reduce ambiguity and standardize terminology throughout its commercial packaged boiler regulations. The proposed definition for ''fuel input rate'' states that it is determined using test procedures prescribed under 10 CFR 431.86 and represents the maximum rate, or ''high fire rate,'' at which the commercial packaged boiler uses energy. DOE proposes to use this term in the division of equipment classes and applicable testing provisions to determine the fuel input rate. Manufacturers would be required to measure the fuel input rate during certification testing and use the mean of the measured values, after applying the applicable rounding provisions,[14] in certification reports pursuant to 10 CFR 429.60(b)(2). DOE also notes that, for commercial packaged boilers certified using an AEDM, that AEDM would be used to determine the fuel input rate and the same rounding provisions would apply. DOE believes it is critical to clarify how the fuel input rate is to be determined because the applicable standards for a commercial packaged boiler are based in part on the fuel input rate of the commercial packaged boiler. These proposed additions would clarify for manufacturers what energy conservation standard applies to a given basic model.

DOE also proposes clarifications in its regulatory text that specify precisely how the fuel input rate is to be determined when using the DOE test procedure. DOE notes sections C4.1.1.2.3 and C4.1.2.2.3 of ANSI/AHRI Standard 1500–2015 require the total measured fuel input during the test to be within 2 percent of the ''boiler Input Rating'' and sections C4.1.1.1.4 and C4.1.2.1.5 require the measured fuel input rate, measured at 15-minute intervals to confirm steady-state, to be within 2 percent of the fuel input rate listed on the commercial packaged boiler nameplate. However, ANSI/AHRI Standard 1500–2015 does not specify the quantities and calculation procedure to be used in determining this value. DOE's clarifications specify the amount of oil or gas, as applicable, needed to ensure the fuel input rate is at steady-state (which is evaluated at 15-minute intervals). Moreover, DOE also proposes that steady-state is confirmed when the measured fuel input rate does not vary by more than ± 2 percent between 15 minute interval readings rather than in comparison to the commercial packaged boiler nameplate.

Section 5.2.2 of ANSI/AHRI Standard 1500–2015 specifies rounding gross output (as defined in section 3.20 of ANSI/AHRI Standard 1500–2015) to the nearest 1,000 Btu/h. DOE does not propose to adopt this section of ANSI/AHRI Standard 1500–2015 because DOE regulations are not based on gross output. Instead, DOE proposes adding a requirement to the DOE test procedure that values of fuel input rate for each unit tested be rounded to the nearest 1,000 Btu/h. Also, the representative value of fuel input rate for a model would be rounded to the nearest 1,000 Btu/h for representation purposes (including certification).

Additionally, DOE proposes that, for its enforcement testing, this rate would be measured pursuant to 10 CFR 431.86 and compared against the fuel input rate certified by the manufacturer. If the measured fuel input rate is within 2 percent of the certified value, then DOE will use the certified value when determining equipment class and calculating combustion and/or thermal efficiency for the model. If the measured fuel input rate is not within ±2 percent of the certified value, then DOE will follow these steps to bring the fuel input rate to within ±2 percent of the certified value. First, DOE will attempt to adjust the gas pressure in order to increase or decrease the fuel input rate as necessary. If the fuel input rate is still not within ±2 percent of the certified value, DOE will then attempt to modify the gas inlet orifice (*e.g.,* drill) accordingly. Finally, if these measures do not bring the fuel input rate to within ±2 percent of the certified value, DOE will use the measured fuel input rate when determining equipment class and the associated combustion and/or thermal efficiency standard level for the basic model. DOE proposes a fuel input rate tolerance of ±2 percent based on the steady-state criteria already present in ANSI/AHRI Standard 1500–2015 sections C4.1.1.1.4 and C4.1.2.1.5, and believes that such a requirement would not impose additional testing burden or affect ratings. DOE proposes this verification process to provide manufacturers with additional information about how DOE will evaluate compliance. DOE also notes that modification of the orifice to meet these conditions would not be considered a field constructed modification.

DOE considers these provisions to be clarifications to its test procedure, and this is supported by the existing requirement in BTS–2000 that the measured fuel input rate during testing must be within ±2 percent of the fuel input rate listed on commercial packaged boiler nameplates. DOE seeks comment regarding its proposed definition and methodology for measuring and verifying fuel input rate and steady-state, identified as Issue 29 in section V.E.

H. Clerical Issues

DOE proposes an amendment to the regulatory text to clarify those places in AHRI/ANSI Standard 1500–2015 that refer to manufacturer's ''specifications or recommendations,'' to mean as specified or recommended in the installation and operation manual shipped with the commercial packaged boiler or in supplemental instructions provided by the manufacturer pursuant to 10 CFR 429.60(b)(4). Furthermore, DOE proposes amendments to the regulatory text that clarify the order in which these manufacturer instructions must be used should a conflict arise between them. For parameters or considerations not specified by the DOE test procedure, the manual shipped with the commercial packaged boiler must first be consulted and used. Should the manual shipped with the commercial packaged boiler not provide the necessary information, the supplemental instructions must be consulted and used. The supplemental instructions provided pursuant to 10 CFR 429.60(b)(4) do not replace or alter any requirements in the DOE test procedure and are not meant to override the manual shipped with the commercial packaged boiler. In cases where these supplemental instructions conflict with any instructions or provisions provided in the manual shipped with the commercial packaged boiler, the manual shipped with the commercial packaged boiler must be used. DOE also proposes to clarify that unless otherwise noted, in all incorporated sections of ANSI/AHRI Standard 1500–2015 the term ''boiler'' means ''commercial packaged boiler'' as defined in 10 CFR 431.82.

DOE found two clerical issues in its review of ANSI/AHRI Standard 1500–2015. First, DOE notes that while section C2.3 of ANSI/AHRI Standard 1500–2015 anticipates that steam could be superheated and therefore temperature measurement of the steam would be required, it does not provide sufficient steam property tables or provisions for using the superheated steam temperature for calculating the thermal efficiency. DOE therefore proposes provisions for using this temperature and includes expanded steam property tables. Second, DOE notes that section C4.1.1.1.2 of ANSI/

[14] The proposed calculations for the fuel input rate include a rounding requirement to the nearest 1,000 Btu/h; this is discussed in this section III.G.

AHRI Standard 1500–2015 states that tests shall be conducted at atmospheric pressure or at the minimum steam pressure required to comply with Section 5.3.5. However, Section 5.3.5 describes the hot water rating conditions for ANSI/AHRI Standard 1500–2015. DOE believes that this was intended to refer instead to Section 5.3.6, and therefore proposes language in order to correct this.

Upon review of its definitions at 10 CFR 431.82 concerning commercial packaged boilers, DOE determined that additional description of the term ''combustion efficiency'' was warranted and is therefore proposing to modify that definition. Specifically, the existing definition for ''combustion efficiency'' does not describe what the metric represents and so DOE is proposing additional language to indicate that the combustion efficiency measures how much of the fuel input energy is converted to useful heat in combustion.

DOE proposes rounding requirements for thermal efficiency and combustion efficiency values. DOE notes that while section 5.2.1 of ANSI/AHRI Standard 1500–2015 includes rounding requirements to the nearest tenth of a percent for thermal and combustion efficiency, DOE proposes to clarify in its regulations that values used for purposes of DOE compliance certification (representative values) must be values rounded to the nearest tenth of a percent.

With respect to the requirements for testing and certifying commercial packaged boiler models capable of supplying either steam or hot water, DOE notes that commercial packaged boilers that are capable of producing steam and commercial packaged boilers that are capable of producing hot water are subject to different energy conservation standards. However, DOE is also aware that some commercial packaged boiler models are capable of supplying both steam and hot water. DOE notes that such commercial packaged boiler models span two equipment classes (both the steam and hot water variations of the applicable fuel type and fuel input rate category combination) and therefore are subject to the energy conservation standards and testing requirements for both equipment classes. Models capable of producing both steam and hot water must be certified as two basic models.

DOE also proposes to move the requirements related to representative values of efficiency for such commercial packaged boilers. For commercial packaged boiler models capable of supplying either steam or hot water and with fuel input rate less than or equal to 2,500,000 Btu/h, under the existing test procedure (10 CFR 431.86(c)(2)(iii)) manufacturers must:

- Determine the representative value of the thermal efficiency in steam mode based on thermal efficiency in steam mode determined in accordance with the test procedure in § 431.86 or determined with an AEDM; and
- Determine the representative value of the thermal efficiency in hot water mode based on either:
  - The thermal efficiency in hot water mode determined in accordance with the test procedure in § 431.86 or determined with an AEDM; or
  - The thermal efficiency in steam mode determined in accordance with the test procedure in § 431.86 or determined with an AEDM.

For commercial packaged boiler models capable of supplying either steam or hot water and with fuel input rate greater than 2,500,000 Btu/h, under the existing test procedure (10 CFR 431.86(c)(2)(iii)) manufacturers must:

- Determine the representative value of the thermal efficiency in steam mode based on thermal efficiency in steam mode determined in accordance with the test procedure in § 431.86 or determined with an AEDM; and
- Determine the representative value of the combustion efficiency in hot water mode based on either:
  - The combustion efficiency in hot water mode determined in accordance with the test procedure in § 431.86 or determined with an AEDM; or
  - The combustion efficiency in steam mode determined in accordance with the test procedure in § 431.86 or determined with an AEDM.

DOE notes that these are existing provisions for such boilers at 10 CFR 431.86(c)(2)(iii) that establish the testing and rating requirements for commercial packaged boiler models capable of supplying either steam or hot water. Because provisions related to representations are typically in 10 CFR part 429, DOE is moving and rephrasing these requirements. Therefore, DOE notes that these regulations do not alter testing or rating options compared to the existing test procedure.

DOE seeks comment on its proposed clerical corrections and clarifications, identified as Issue 30 in section V.E.

I. Other Issues

In response to the September 2013 Framework document and February 2014 RFI, DOE received several comments about other issues, not discussed previously in this notice, concerning the test procedure for determining the energy efficiency of a commercial packaged boiler. These issues and comments are addressed in the following subsections.

1. Stack Temperature Adjustment for Using Combustion Efficiency in Steam Mode To Represent Hot Water Mode

DOE's existing test procedure allows commercial packaged boilers with fuel input rate greater than 2,500,000 Btu/h capable of producing steam and hot water to use the combustion efficiency as measured in steam mode to represent the combustion efficiency in hot water mode. 10 CFR 431.86(c)(2)(iii)(B). DOE has received multiple waiver requests that asked to use an adjustment to the stack temperature for using this rating method in order to more accurately reflect the combustion efficiency of a commercial packaged boiler operating in hot water mode. The adjustment is given by Equation 2:

$$T_{F,SS,adjusted} = T_{F,SS} - T_{sat} + 180 \qquad \textbf{Equation 2}$$

where $T_{F,SS,adjusted}$ is the adjusted steady-state flue temperature used for subsequent calculations of combustion efficiency, $T_{F,SS}$ is the measured steady-state flue temperature during combustion efficiency testing in steam mode, T_{sat} is the saturated steam temperature that corresponds to the measured steam pressure, and 180 is the hot water outlet temperature.

The proposed adjustment equation is derived by assuming that the heat transfer properties of the heat exchanger operating in hot water mode are roughly the same as the heat transfer properties of the heat exchanger operating in steam mode. This assumption is already implicit in the DOE allowance for using combustion efficiency ratings in steam mode to represent those in hot water mode, and, thus, this methodology is consistent with the intent of DOE's existing regulations. DOE believes that the methodology is technically sound and may result in more accurate representations of the performance of

these commercial packaged boilers operating in hot water mode.

However, to further validate the proposed procedure, DOE seeks comments, as well as sample stack temperature data, sample calculations and estimates of the impact of this methodology. This is identified as Issue 31 in section V.E.

Relatedly, DOE proposes additional provisions for enforcement testing of commercial packaged boilers that are capable of producing both steam and hot water. Specifically, DOE is proposing that DOE could choose to test a given model that is capable of producing both steam and hot water in either mode for the purposes of assessing compliance with the applicable standard. DOE seeks comment regarding this proposed provision, and this is identified as Issue 32 in section V.E.

2. Testing at Part Load

In response to the September 2013 Framework document, ACEEE, ASAP, and NRDC asserted that the existing DOE test procedure for commercial packaged boilers, which is based on BTS–2000 and measures efficiency at peak load, is obsolete and that the rating method for boilers with modulating burners (including high/low fire) must incorporate some part-load efficiency measure. (Docket EERE–2013–BT–STD–0030, Joint Advocates, No. 16 at p. 2)

In the February 2014 RFI, DOE requested additional public comment, data, and information about adopting methodologies and measurements to determine part-load efficiency of commercial packaged boilers, including appropriate inlet and outlet water temperatures under part-load testing conditions, number of hours a modulating burner would operate under part-load and full-load conditions over the course of a year, and any added test burden to account for part-load operation (*e.g.,* measurement of jacket, sensible, and infiltration losses). 79 FR 9643, 9644.

ACEEE stated that whether for a fixed capacity or modulating boiler, the lower the inlet water temperature the higher the efficiency, and suggested that a boiler be rated at the lowest inlet water temperature permissible under a manufacturer's warranty. Also, in response to expected hours that modulating burners would operate under part-load and full-load conditions, ACEEE advocated for a review of industry designs, operational data, and simulations for boiler operation over the course of a year. (Docket EERE–2014–BT–TP–0006, ACEEE, No. 2 at pp. 2 and 3)

Burnham suggested using the same inlet/outlet water temperatures for part-load testing as for full [load] input testing because the design of modulating burners is indifferent to operating at full load or part load, and actual operation would vary according to the application. As for added test burden associated with part-load operation, Burnham asserted that test costs would double and that additional testing equipment would be needed to accommodate more precise control of lower flows and measurement. (Docket EERE–2013–BT–STD–0030, Burnham, No. 4 at pp. 1 and 2)

HTP stated that part-load testing would burden manufacturers when multiple operating conditions are required and, given possible misunderstanding of the systems-level aspects of efficiency, there may be market confusion over multiple efficiency ratings. HTP posited that DOE should only regulate single-point minimum efficiencies for commercial packaged boilers to maintain consistency with historical use of ''high fire rate.'' (Docket EERE–2014–BT–TP–0006, HTP, No. 5 at p. 2)

Although ACEEE suggested that DOE require enough testing to describe the entire performance map of the boiler (Docket EERE–2014–BT–TP–0006, ACEEE, No. 2 at p. 1), several parties expressed the concern that additional test points would greatly increase the testing burden for minimal added benefit. (Docket EERE–2013–BT–STD–0030, ABMA, No. 39 at p. 68; Docket EERE–2014–BT–TP–0006, Burnham, No. 4 at p. 1; Docket EERE–2014–BT–TP–0006, HTP, No. 5 at p. 2)

DOE understands that while a modulating burner can greatly reduce the annual energy consumption of a condensing commercial packaged boiler, the effect of a modulating burner on the measured steady-state efficiency of a non-condensing commercial packaged boiler is small.[15] Thus, DOE has tentatively determined that small increases in steady-state efficiency of non-condensing commercial packaged boilers at reduced firing rates do not warrant additional test procedures or efficiency metrics for non-condensing commercial packaged boilers operating at reduced firing rates. DOE also acknowledges the concerns from manufacturers (testing at different input ratings would require tests to be repeated, at least in part, multiple times). Therefore, DOE tentatively concludes that additional part-load testing for any commercial packaged boiler is not warranted at this time, but seeks further comment about part-load testing. This is identified as Issue 33 in section V.E.

3. Other Industry Test Procedures

Instead of using BTS–2000 to measure commercial packaged boiler efficiencies, Cleaver-Brooks suggested using the American Society of Mechanical Engineers (ASME) PTC 4.1–1964 (Reaffirmed 1991), ''Power Test Codes: Test Code for Steam Generating Units'' (with 1968 and 1969 Addenda) (ASME PTC 4.1), particularly the abbreviated test form and the heat loss method incorporated therein. Cleaver-Brooks added that ASME PTC 4.1 is the most common standard used by manufacturers of larger commercial packaged boilers (*i.e.,* boilers greater than 2,500,000 Btu/h rated input), and that the heat loss method in that standard essentially provides the same efficiency values as BTS–2000 combustion efficiency if radiation losses are included. (Docket EERE–2013–BT–STD–0030, Cleaver-Brooks, No. 12 at p. 2) ABMA agreed that ASME PTC–4.1 is the more appropriate testing standard for larger boilers. ABMA cited general concerns about BTS–2000 from its member manufacturers, including (1) the high cost of testing larger boilers; (2) the 0–2 psig test pressure requirement that causes high steam velocity and poor steam quality; (3) large temperature rises causing high strain and fatigue in larger boilers; (4) the custom-built nature of larger combustion equipment; and (5) safety compliance requirements of other entities such as the National Board of Boiler and Pressure Vessel Inspectors. (Docket EERE–2013–BT–STD–0030, ABMA, No. 14 at pp. 2, 3) ABMA suggested in its comments responding to the November 2014 Preliminary Analysis that ASME PTC 4 (note: not PTC–4.1) should be used for testing. (Docket EERE–2013–BT–STD–0030, ABMA No. 33 at p. 2)

As part of the energy conservation standards and test procedure rulemaking for commercial packaged boilers that concluded with the final rule published in the **Federal Register** on October 21, 2004 (69 FR 61949), DOE evaluated five other industry test procedures for potential incorporation by reference under 10 CFR 431.85.[16] At

[15] See Lochinvar Web site for example efficiency curves at various firing rates: *http://www.lochinvar.com/products/documentation.aspx?mode=filetype&filetypeid=25.*

[16] The version of ASHRAE Standard 90.1 in effect on June 30, 1992, referenced five industry test standards that apply to gas-fired boilers or oil-fired boilers or both. These are the ANSI Standard Z21.13–1987 for gas-fired boilers (revised as ANSI Z21.13–1991 with Addendum ANSI Z21.13–1993a);

Continued

that time, DOE considered both ASME PTC 4–1998, ''Fired Steam Generators Test Codes,'' and ASME PTC 4.1–1964, ''Steam Generating Units Power Test Codes,'' as potential alternatives to BTS–2000. However, DOE adopted-BTS–2000 for testing all covered commercial packaged boilers manufactured after October 21, 2006. Prior to that date, a manufacturer could use either BTS–2000 or the alternative test method ASME PTC 4.1–1964 for steel commercial packaged boilers. 69 FR 61949, 61961.

For this NOPR, DOE re-examined the test procedures and public comments addressed in the October 21, 2004 final rule and the rationale behind each. For example, public comments from GAMA about ASME PTC 4.1 included the following observations and critiques: (1) It lacks ''tolerances for input, pressure, number of tests required, and when the boiler has achieved steady-state conditions;'' (2) test duration of 4 hours is too long for a combustion test, and the locations ''of temperature, pressure, flue sampling, and stack configuration are not specified;'' (3) it is a test standard for the acceptance test of a boiler after it is installed where the test conditions are less controllable than a laboratory test; and (4) it has been replaced by the standard ASME PTC 4–1998 which is vastly different from the original ASME PTC 4.1. As such, DOE believed then and continues to believe that ASME PTC 4.1 would be too burdensome, that hours of testing are longer than needed, and that there are differences in results between PTC 4.1 and BTS–2000. In the October 2004 final rule, DOE found that ASME PTC 4.1–1964 (PTC 4.1) and its successor ASME PTC 4–1998 (PTC 4) were not fit for adoption as the required test procedure for the following reasons:

- The abbreviated test form of PTC 4.1, while a sound test, was removed in the PTC 4 version and its use was discouraged by the PTC 4 standard.
- Since the abbreviated test form of PTC 4.1 was not part of PTC 4, the test burden of the new standard was excessive for the purposes of rating smaller commercial packaged boilers.
- DOE believed there may be some differences in efficiency ratings between the PTC 4.1 and BTS–2000 tests, and, therefore, only one test method would be adopted.[17]
- BTS–2000 was simple to conduct, and converting from the abbreviated test form of PTC 4.1 to BTS–2000 would not be overly burdensome.

69 FR 61949, 61954–57.

DOE notes that these findings from the October 2004 final rule concerning BTS–2000 continue to apply to ANSI/AHRI Standard 1500–2015 because ANSI/AHRI Standard 1500–2015 is an updated version of BTS–2000.

On July 22, 2009, DOE published a final rule adopting the thermal efficiency metric as the energy efficiency descriptor for eight of ten equipment classes of commercial packaged boilers in order to conform to ASHRAE Standard 90.1–2007. 74 FR 36314. The thermal efficiency metric was required for purposes of compliance starting March 2, 2012. DOE notes that BTS–2000 was incorporated by reference as the foundation of the DOE test procedure on October 21, 2004. 69 FR 61949. Manufacturers have been required to use BTS–2000 for purposes of compliance since October 24, 2006. 69 FR 61961. DOE has not been provided with new data that substantiate claims from ABMA or manufacturers regarding possible test complications or burden since these previous rulemakings were undertaken.

With regard to ABMA's specific claims concerning the BTS–2000 methodology (Docket EERE–2013–BT–STD–0030, ABMA, No. 14 at p. 2, 3), DOE proposes modified inlet and outlet water temperatures for hot water commercial packaged boiler tests (section III.D) and a wider allowable range of steam operating pressures for steam commercial packaged boiler tests (see section III.C.4), as provided in ANSI/AHRI Standard 1500–2015. DOE believes these proposals would alleviate ABMA's concerns regarding excessive commercial packaged boiler stresses and steam quality and are consistent with ABMA's suggestions. (Docket EERE–2013–BT–STD–0030, ABMA, No. 14 at p. 4)

AHRI commented that ASHRAE Standard 155, ''Method of Testing for Rating Commercial Space Heating Boiler Systems,'' is being developed as a replacement for BTS–2000 (and ANSI/AHRI Standard 1500–2015) and that DOE could adopt this new standard as a new reference for the commercial packaged boiler test procedure. (Docket EERE–2014–BT–TP–0006, AHRI, No. 6 at pp. 2–3) AHRI suggested that DOE should defer considering alterations to its test procedure until ASHRAE Standard 155 is published. PGE and SCE also urged DOE to consider using the ASHRAE Standard 155, which is currently under development, as the basis for the Federal test procedure. (Docket EERE–2013–BT–STD–0030, Joint Utilities, No. 38 at p. 3) DOE understands that the development of ASHRAE Standard 155 is currently a proposed standards project.[18] DOE is not aware of any scheduled publication date, and is now subject to a statutory requirement to review the test procedure. As stated previously, DOE last reviewed the test procedures for commercial packaged boilers in a final rule published in the **Federal Register** on July 22, 2009 (74 FR 36312), and thus is required to re-evaluate the test procedures no later than July 22, 2016. Consequently, DOE plans to move forward with this test procedure rulemaking for commercial packaged boilers. However, DOE will monitor developments related to ASHRAE Standard 155 and may consider incorporation of that standard in a future test procedure rulemaking. As noted previously, in this NOPR, DOE proposes to incorporate by reference the recently published ANSI/AHRI Standard 1500–2015 that supersedes the BTS–2000 standard and corrects some minor issues therein.

IV. Procedural Issues and Regulatory Review

A. Review Under Executive Order 12866

The Office of Management and Budget (OMB) has determined that test procedure rulemakings do not constitute ''significant regulatory actions'' under section 3(f) of Executive Order 12866, ''Regulatory Planning and Review,'' 58 FR 51735 (October 4, 1993). Accordingly, this regulatory action was not subject to review under the Executive Order by the Office of Information and Regulatory Affairs (OIRA) in OMB.

B. Review Under the Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) requires preparation

the HI Testing and Rating Standard for Heating Boilers, sixth edition, 1989, for gas and oil-fired boilers (HI 1989); ASME Power Test Codes (PTC) 4.1–1964 (reaffirmed R1991) for Steam Generating Units for fossil fuel boilers (revised in 1998 as ASME PTC 4–1998, *Fired Steam Generators,* issued on December 31, 1999); the Underwriters Laboratory Standard 795–1973 for gas heating equipment (UL 795, revised in 1994 as UL 795–94); and the Underwriters Laboratory Standard UL Standard 726–1990 for oil-fired boilers (UL 726). *See* 69 FR 61955 (October 21, 2004).

[17] The analysis conducted at the time of the NOPR used the document's previous version, HI–1989. 65 FR 48838 (August 9, 2000). At the time of final rule, DOE was provided with the updated BTS–2000 and found sufficient similarity such that BTS–2000 could be adopted as the test procedure without further analysis. 69 FR 61949, 61955–56 (October 21, 2004).

[18] ASHRAE Standard 155 (currently identified as SPC 155P) is a proposed standards project, the purpose of which is to develop procedures for determining the steady-state thermal efficiency, part-load efficiency, and idling energy input rate of space heating boilers. See *https://www.ashrae.org/standards-research—technology/standards—guidelines/titles-purposes-and-scopes#SPC155P.*

of an initial regulatory flexibility analysis (IFRA) for any rule that by law must be proposed for public comment, unless the agency certifies that the rule, if promulgated, will not have a significant economic impact on a substantial number of small entities. As required by Executive Order 13272, ''Proper Consideration of Small Entities in Agency Rulemaking,'' 67 FR 53461 (August 16, 2002), DOE published procedures and policies on February 19, 2003, to ensure that the potential impacts of its rules on small entities are properly considered during the DOE rulemaking process. 68 FR 7990. DOE has made its procedures and policies available on the Office of the General Counsel's Web site: *http://energy.gov/gc/office-general-counsel.*

This proposed rule prescribes test procedure amendments that would be used to determine compliance with energy conservation standards for commercial packaged boilers. The proposed amendments modify the inlet and outlet water temperatures for hot water tests, increase the allowable steam pressure for steam tests, implement more specific criteria for determining when steady-state has been reached during testing, and establish room temperature and relative humidity limits.

DOE reviewed this proposed rule under the provisions of the Regulatory Flexibility Act and DOE's own procedures and policies published on February 19, 2003. DOE has concluded that the proposed rule would not have a significant impact on a substantial number of small entities. The factual basis for this certification is as follows.

The Small Business Administration (SBA) considers a business entity to be a small business, if, together with its affiliates, it employs less than a threshold number of workers specified in 13 CFR part 121. These size standards and codes are established by the North American Industry Classification System (NAICS). The threshold number for NAICS classification code 333414, which applies to ''heating equipment (except warm air furnaces) manufacturing' and includes commercial packaged boilers, is 500 employees.

To estimate the number of companies that could be small business manufacturers of the equipment affected by this rulemaking, DOE conducted a market survey using available public information to identify potential small manufacturers. DOE's research involved reviewing the AHRI directory (a product database), individual company Web sites, and marketing research tools (*e.g.,* Hoover's reports) to create a list of all domestic small business manufacturers of equipment affected by this rulemaking. DOE identified 23 manufacturers of commercial packaged boilers as domestic small business manufacturers. DOE was able to discuss the DOE test procedures with 5 of these small businesses. DOE also obtained information about small businesses and potential impacts on small businesses while interviewing manufacturers in the context of the standards rulemaking. However, DOE did not receive any detailed quantifications about the incremental burden small businesses would face as compared to larger businesses in light of the proposed methods.

The proposed amendments would alter water temperatures for hot water commercial packaged boilers tests, increase the allowable steam pressure for steam tests, add specific criteria for establishing steady-state, and place limits on the ambient temperature and relative humidity during testing. DOE recognizes that by reducing the temperature rise across the commercial packaged boiler, the water flow rate will necessarily increase proportionally. The required flow rate for a 10 million Btu/h fuel input rate commercial packaged boiler with a 100 °F minimum temperature rise (as is the case currently for non-condensing commercial packaged boilers) would be approximately 200 gallons per minute (gpm). Reducing the temperature rise across the commercial packaged boiler to 40 °F would increase the water flow rate requirement to approximately 500 gpm for a 10 million Btu/h fuel input rate commercial packaged boiler. If a laboratory or manufacturer does not currently have a pump capable of handling the flow rates of the commercial packaged boilers they are testing, they may need to purchase a pump rated for a higher flow rate. Based on internet research of several HVAC equipment vendors, DOE estimates that the cost of a pump capable of 500 gpm is $3,000. The number of models for which this investment would be required would vary by manufacturer and laboratory; however, DOE estimates the average to be 15 models.[19] Therefore, DOE estimates the cost per model of this investment to be approximately $200, which DOE believes to be a modest amount compared to the total product development and certification costs of a model, which can be in the tens of thousands of dollars.[20]

Regarding the increase in allowable steam pressure for steam commercial packaged boiler tests, manufacturers will likely initiate a test at low pressure (much less than 15 psi) and increase as necessary (up to 15 psi) to achieve the necessary steam quality. While the setup and operation of the test is unchanged, this process may increase the amount of time necessary to perform the test. DOE estimates that this would increase test time by, at most, 2 hours. For a 10 million Btu/h fuel input rate commercial packaged boiler, and assuming a rate of $40 per hour for a laboratory technician, $8.89 per thousand cubic feet of natural gas, and 1,025 Btu per cubic foot high heating value (HHV), DOE estimates the additional testing cost to be $253.46.[21] DOE believes this amount is modest in comparison to the overall cost of product development and certification.

In the case of the criteria for establishing steady-state, DOE believes that the requirements do not add to the time or cost necessary to conduct the test. The test procedure already requires a period of 30 minutes prior to starting the test, during which steady-state is established. DOE is clarifying the conditions that must be satisfied to meet steady-state, and does not believe any additional time is required to meet such conditions.

With regard to the test room ambient temperature and relative humidity limits, DOE notes that the limits are intended to prevent the test from being conducted in extreme ambient conditions, and that the allowable temperature and relative humidity ranges are typical for building heating, ventilating, and air-conditioning systems in normal operating conditions. DOE is aware that the proposed constraints may in some cases require laboratories to move testing from an uncontrolled environment (*i.e.,* outdoors or facilities open to the outdoors) to a controlled environment. However, DOE believes this to be a

[19] Based on product model listing compiled for commercial packaged boilers standards rulemaking using the AHRI directory, docket EERE–2013–BT–STD–0030.

[20] Based on information obtained during confidential manufacturer interviews as part of the commercial packaged boilers standards rulemaking, docket EERE–2013–BT–STD–0030.

[21] The laboratory technician hourly wage is based on mean hourly wage of $26.67 from the Bureau of Labor Statistics for a Mechanical Engineering Technician, occupational code 17–3027: *http://www.bls.gov/oes/current/oes173027.htm.* (Last accessed January 21, 2016.) Mean hourly wage is multiplied by 1.5 to estimate associated benefits and overhead. The price of natural gas is the 5-year average (May 2009 to May 2014) obtained from the ''U.S. Price of Natural Gas Sold to Commercial Consumers'' from U.S. Energy Information Administration (EIA) (Available at: *http://www.eia.gov/dnav/ng/hist/n3020us3m.htm*).

small number of cases, and that typically testing is performed in a laboratory setting with typical heating, ventilating, and air-conditioning systems and controls. DOE notes that the limits are intended to prevent the test from being conducted in extreme ambient conditions, and that the ambient temperature requirements are typical for building heating, ventilating, and air-conditioning systems in normal operating condition. However, if the ambient temperature or relative humidity in the testing area do not already meet these tolerances, the manufacturer may need to improve climate regulation of the test environment, possibly by improving the controls of their thermostats, or preventing hot or cold drafts from entering the testing environment. DOE estimates that improving the controls of the thermostat and preventing hot or cold drafts from entering the testing environment could involve four to eight hours of labor by a general technician. At a rate of $40 per hour for a laboratory technician, DOE estimates the cost for this amount of labor to be between $160 and $320, which DOE believes is modest in comparison to the overall cost of product development and certification.

Finally, DOE acknowledges that the proposal to require digital data acquisition may add additional test burden. DOE has estimated the following costs associated with digital data acquisition:

TABLE IV.1—ESTIMATED ONE-TIME COSTS ASSOCIATED WITH DIGITAL DATA ACQUISITION

Description	Cost
Laptop	$1,500
Data Acquisition Module	2,000
Data Acquisition Software	3,000
Installation and Setup (16 hours laboratory technician time × $40/hour)	640
Total	7,140

The data acquisition system could be used by the manufacturer or laboratory to test all commercial packaged boiler models. Again, DOE believes these costs are modest in comparison to the overall cost of product development and certification.

For the reasons stated previously, DOE concludes that this proposed rule would not have a significant economic impact on a substantial number of small entities, so DOE has not prepared a regulatory flexibility analysis for this rulemaking. DOE will provide its certification and supporting statement of factual basis to the Chief Counsel for Advocacy of the SBA for review under 5 U.S.C. 605(b).

DOE seeks comment on whether the proposed test procedure changes will have a significant impact on a substantial number of small entities. This is identified as Issue 34 in section V.E.

C. Review Under the Paperwork Reduction Act of 1995

Manufacturers of commercial packaged boilers must certify to DOE that their equipment complies with all applicable energy conservation standards. In certifying compliance, manufacturers must test their equipment according to the DOE test procedure for commercial packaged boilers under 10 CFR 431.86, including any amendments adopted for those test procedures, on the date that compliance is required. DOE has established regulations for the certification and recordkeeping requirements for all covered consumer products and commercial equipment, including commercial packaged boilers. *See* 10 CFR part 429, subpart B. The collection-of-information requirement for certification and recordkeeping is subject to review and approval by OMB under the Paperwork Reduction Act (PRA). This requirement has been approved by OMB under OMB Control Number 1910–1400. Public reporting burden for the certification is estimated to average 30 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the PRA, unless that collection of information displays a currently valid OMB Control Number.

D. Review Under the National Environmental Policy Act of 1969

In this proposed rule, DOE proposes test procedure amendments that it expects will be used to develop and implement future energy conservation standards for commercial packaged boilers. DOE has determined that this rule falls into a class of actions that are categorically excluded from review under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*) and DOE's implementing regulations at 10 CFR part 1021. Specifically, this proposed rule would amend the existing test procedures without affecting the amount, quality, or distribution of energy usage, and, therefore, would not result in any environmental impacts. Thus, this rulemaking is covered by Categorical Exclusion A5 under 10 CFR part 1021, subpart D, which applies to any rulemaking that interprets or amends an existing rule without changing the environmental effect of that rule. Accordingly, neither an environmental assessment nor an environmental impact statement is required.

E. Review Under Executive Order 13132

Executive Order 13132, ''Federalism,'' 64 FR 43255 (August 10, 1999), imposes certain requirements on Federal agencies formulating and implementing policies or regulations that preempt State law or that have Federalism implications. The Executive Order requires agencies to examine the constitutional and statutory authority supporting any action that would limit the policymaking discretion of the States, and to carefully assess the necessity for such actions. The Executive Order also requires agencies to have an accountability process to ensure meaningful and timely input by State and local officials in the development of regulatory policies that have Federalism implications. On March 14, 2000, DOE published a statement of policy describing the intergovernmental consultation process it will follow in the development of such regulations. 65 FR 13735. DOE has examined this proposed rule and has determined that it would not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. EPCA governs and prescribes Federal preemption of State regulations as to energy conservation for the equipment that is the subject of this proposed rule. States can petition DOE for exemption from such preemption to the extent, and based on criteria, set forth in EPCA. (42 U.S.C. 6297(d); 42 U.S.C. 6316(a)) No further action is required by Executive Order 13132.

F. Review Under Executive Order 12988

Regarding the review of existing regulations and the promulgation of new regulations, section 3(a) of Executive Order 12988, ''Civil Justice Reform,'' 61 FR 4729 (Feb. 7, 1996), imposes on Federal agencies the general duty to adhere to the following requirements: (1) eliminate drafting errors and ambiguity; (2) write regulations to minimize litigation; (3) provide a clear legal standard for

affected conduct rather than a general standard; and (4) promote simplification and burden reduction. Section 3(b) of Executive Order 12988 specifically requires that Executive agencies make every reasonable effort to ensure that the regulation: (1) clearly specifies the preemptive effect, if any; (2) clearly specifies any effect on existing Federal law or regulation; (3) provides a clear legal standard for affected conduct while promoting simplification and burden reduction; (4) specifies the retroactive effect, if any; (5) adequately defines key terms; and (6) addresses other important issues affecting clarity and general draftsmanship under any guidelines issued by the Attorney General. Section 3(c) of Executive Order 12988 requires Executive agencies to review regulations in light of applicable standards in sections 3(a) and 3(b) to determine whether they are met or it is unreasonable to meet one or more of them. DOE has completed the required review and determined that, to the extent permitted by law, the proposed rule meets the relevant standards of Executive Order 12988.

G. Review Under the Unfunded Mandates Reform Act of 1995

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA) requires each Federal agency to assess the effects of Federal regulatory actions on State, local, and Tribal governments and the private sector. Pub. L. 104–4, sec. 201 (codified at 2 U.S.C. 1531). For a proposed regulatory action likely to result in a rule that may cause the expenditure by State, local, and Tribal governments, in the aggregate, or by the private sector of $100 million or more in any one year (adjusted annually for inflation), section 202 of UMRA requires a Federal agency to publish a written statement that estimates the resulting costs, benefits, and other effects on the national economy. (2 U.S.C. 1532(a), (b)) The UMRA also requires a Federal agency to develop an effective process to permit timely input by elected officers of State, local, and Tribal governments on a proposed ''significant intergovernmental mandate,'' and requires an agency plan for giving notice and opportunity for timely input to potentially affected small governments before establishing any requirements that might significantly or uniquely affect small governments. On March 18, 1997, DOE published a statement of policy on its process for intergovernmental consultation under UMRA. 62 FR 12820; also available at *http://energy.gov/gc/office-general-counsel*. DOE examined this proposed rule according to UMRA and its statement of policy and determined that the rule contains neither an intergovernmental mandate, nor a mandate that may result in the expenditure of $100 million or more in any year, so these requirements do not apply.

H. Review Under the Treasury and General Government Appropriations Act, 1999

Section 654 of the Treasury and General Government Appropriations Act, 1999 (Pub. L. 105–277) requires Federal agencies to issue a Family Policymaking Assessment for any rule that may affect family well-being. This rule would not have any impact on the autonomy or integrity of the family as an institution. Accordingly, DOE has concluded that it is not necessary to prepare a Family Policymaking Assessment.

I. Review Under Executive Order 12630

DOE has determined, under Executive Order 12630, ''Governmental Actions and Interference with Constitutionally Protected Property Rights'' 53 FR 8859 (March 18, 1988), that this regulation would not result in any takings that might require compensation under the Fifth Amendment to the U.S. Constitution.

J. Review Under Treasury and General Government Appropriations Act, 2001

Section 515 of the Treasury and General Government Appropriations Act, 2001 (44 U.S.C. 3516 note) provides for agencies to review most disseminations of information to the public under guidelines established by each agency pursuant to general guidelines issued by OMB. OMB's guidelines were published at 67 FR 8452 (Feb. 22, 2002), and DOE's guidelines were published at 67 FR 62446 (Oct. 7, 2002). DOE has reviewed this proposed rule under the OMB and DOE guidelines and has concluded that it is consistent with applicable policies in those guidelines.

K. Review Under Executive Order 13211

Executive Order 13211, ''Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use,'' 66 FR 28355 (May 22, 2001), requires Federal agencies to prepare and submit to OMB, a Statement of Energy Effects for any proposed significant energy action. A ''significant energy action'' is defined as any action by an agency that promulgated or is expected to lead to promulgation of a final rule, and that: (1) is a significant regulatory action under Executive Order 12866, or any successor order; and (2) is likely to have a significant adverse effect on the supply, distribution, or use of energy; or (3) is designated by the Administrator of OIRA as a significant energy action. For any proposed significant energy action, the agency must give a detailed statement of any adverse effects on energy supply, distribution, or use should the proposal be implemented, and of reasonable alternatives to the action and their expected benefits on energy supply, distribution, and use.

The proposed regulatory action to amend the test procedure for measuring the energy efficiency of commercial packaged boilers is not a significant regulatory action under Executive Order 12866. Moreover, it would not have a significant adverse effect on the supply, distribution, or use of energy, nor has it been designated as a significant energy action by the Administrator of OIRA. Therefore, it is not a significant energy action, and, accordingly, DOE has not prepared a Statement of Energy Effects.

L. Review Under Section 32 of the Federal Energy Administration Act of 1974

Under section 301 of the Department of Energy Organization Act (Pub. L. 95–91; 42 U.S.C. 7101), DOE must comply with section 32 of the Federal Energy Administration Act of 1974, as amended by the Federal Energy Administration Authorization Act of 1977. (15 U.S.C. 788; FEAA) Section 32 essentially provides in relevant part that, where a proposed rule authorizes or requires use of commercial standards, the notice of proposed rulemaking must inform the public of the use and background of such standards. In addition, section 32(c) requires DOE to consult with the Attorney General and the Chairman of the Federal Trade Commission (FTC) concerning the impact of the commercial or industry standards on competition.

This proposed rule incorporates testing methods contained in the commercial standard ANSI/AHRI Standard 1500–2015, ''2015 Standard for Performance Rating of Commercial Space Heating Boilers.'' While this NOPR proposes amendments that supplant various provisions of that industry standard, the test procedure is largely adopted directly from the commercial standard without amendment. DOE has evaluated this standard and is unable to conclude whether it fully complies with the requirements of section 32(b) of the FEAA, (*i.e.,* that it was developed in a manner that fully provides for public participation, comment, and review). DOE will consult with the Attorney

General and the Chairwoman of the FTC concerning the impact on competition of requiring manufacturers to use the test methods contained in this industry standard prior to prescribing a final rule.

M. Description of Materials Incorporated by Reference

In this NOPR, DOE proposes to incorporate by reference certain sections of ANSI/AHRI Standard 1500–2015, ''2015 Standard for Performance Rating of Commercial Space Heating Boilers.'' ANSI/AHRI Standard 1500–2015 is an industry-accepted test procedure that provides methods, requirements, and calculations for determining the thermal and/or combustion efficiency of a commercial space heating boiler. ANSI/AHRI Standard 1500–2015 is available at *http://www.ahrinet.org/App_Content/ahri/files/standards%20pdfs/ANSI%20standards%20pdfs/ANSI.AHRI_Standard_1500-2015.pdf*.

V. Public Participation

A. Attendance at the Public Meeting

The time, date, and location of the public meeting are listed in the **DATES** and **ADDRESSES** sections at the beginning of this document. If you plan to attend the public meeting, please notify Ms. Brenda Edwards at (202) 586–2945 or *Brenda.Edwards@ee.doe.gov.*

Please note that foreign nationals participating in the public meeting are subject to advance security screening procedures which require advance notice prior to attendance at the public meeting. Any foreign national wishing to participate in the public meeting should inform DOE as soon as possible by contacting Ms. Regina Washington at (202) 586–1214 or by email: *Regina.Washington@ee.doe.gov* so that the necessary procedures can be completed.

DOE requires visitors with laptop computers and other devices, such as tablets, to be checked upon entry into the building. Any person wishing to bring these devices into the Forrestal Building will be required to obtain a property pass. Visitors should avoid bringing these devices, or allow an extra 45 minutes to check in. Please report to the visitor's desk to have devices checked before proceeding through security.

Due to the REAL ID Act implemented by the Department of Homeland Security (DHS), there have been recent changes regarding identification (ID) requirements for individuals wishing to enter Federal buildings from specific states and U.S. territories. As a result, driver's licenses from the following states or territory will not be accepted for building entry and one of the alternate forms of ID listed below will be required. DHS has determined that regular driver's licenses (and ID cards) from the following jurisdictions are not acceptable for entry into DOE facilities: Alaska, American Samoa, Arizona, Louisiana, Maine, Massachusetts, Minnesota, New York, Oklahoma, and Washington. Acceptable alternate forms of Photo-ID include: U.S. Passport or Passport Card; an Enhanced Driver's License or Enhanced ID-Card issued by the states of Minnesota, New York or Washington (Enhanced licenses issued by these states are clearly marked Enhanced or Enhanced Driver's License); a military ID or other Federal government issued Photo-ID card.

In addition, you can attend the public meeting via webinar. Webinar registration information, participant instructions, and information about the capabilities available to webinar participants will be published on DOE's Web site at: *https://www1.eere.energy.gov/buildings/appliance_standards/rulemaking.aspx?ruleid=87*. Participants are responsible for ensuring their systems are compatible with the webinar software.

B. Procedure for Submitting Prepared General Statements for Distribution

Any person who has plans to present a prepared general statement may request that copies of his or her statement be made available at the public meeting. Such persons may submit requests, along with an advance electronic copy of their statement in PDF (preferred), Microsoft Word or Excel, WordPerfect, or text (ASCII) file format, to the appropriate address shown in the **ADDRESSES** section at the beginning of this NOPR. The request and advance copy of statements must be received at least one week before the public meeting and may be emailed, hand-delivered, or sent by mail. DOE prefers to receive requests and advance copies via email. Please include a telephone number to enable DOE staff to make a follow-up contact, if needed.

C. Conduct of the Public Meeting

DOE will designate a DOE official to preside at the public meeting and may also use a professional facilitator to aid discussion. The meeting will not be a judicial or evidentiary-type public hearing, but DOE will conduct it in accordance with section 336 of EPCA (42 U.S.C. 6306). A court reporter will be present to record the proceedings and prepare a transcript. DOE reserves the right to schedule the order of presentations and to establish the procedures governing the conduct of the public meeting. After the public meeting, interested parties may submit further comments on the proceedings, as well as on any aspect of the rulemaking, until the end of the comment period.

The public meeting will be conducted in an informal, conference style. DOE will present summaries of comments received before the public meeting, allow time for prepared general statements by participants, and encourage all interested parties to share their views on issues affecting this rulemaking. Each participant will be allowed to make a general statement (within time limits determined by DOE), before the discussion of specific topics. DOE will allow, as time permits, other participants to comment briefly on any general statements.

At the end of all prepared statements on a topic, DOE will permit participants to clarify their statements briefly and comment on statements made by others. Participants should be prepared to answer questions by DOE and by other participants concerning these issues. DOE representatives may also ask questions of participants concerning other matters relevant to this rulemaking. The official conducting the public meeting will accept additional comments or questions from those attending, as time permits. The presiding official will announce any further procedural rules or modification of the above procedures that may be needed for the proper conduct of the public meeting.

A transcript of the public meeting will be included in the docket, which can be viewed as described in the *Docket* section at the beginning of this notice. In addition, any person may buy a copy of the transcript from the transcribing reporter.

D. Submission of Comments

DOE will accept comments, data, and information regarding this proposed rule before or after the public meeting, but no later than the date provided in the **DATES** section at the beginning of this proposed rule. Interested parties may submit comments using any of the methods described in the **ADDRESSES** section at the beginning of this proposed rule.

Submitting comments via www.regulations.gov. The *www.regulations.gov* Web page will require you to provide your name and contact information. Your contact information will be viewable to DOE Building Technologies staff only. Your contact information will not be publicly viewable except for your first and last

names, organization name (if any), and submitter representative name (if any). If your comment is not processed properly because of technical difficulties, DOE will use this information to contact you. If DOE cannot read your comment due to technical difficulties and cannot contact you for clarification, DOE may not be able to consider your comment.

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

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

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

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

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

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

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

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

Factors of interest to DOE when evaluating requests to treat submitted information as confidential include: (1) a description of the items; (2) whether and why such items are customarily treated as confidential within the industry; (3) whether the information is generally known by or available from other sources; (4) whether the information has previously been made available to others without obligation concerning its confidentiality; (5) an explanation of the competitive injury to the submitting person which would result from public disclosure; (6) when such information might lose its confidential character due to the passage of time; and (7) why disclosure of the information would be contrary to the public interest.

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

E. Issues on Which DOE Seeks Comment

Although DOE welcomes comments on any aspect of this proposal, DOE is particularly interested in receiving comments and views of interested parties concerning the following issues:

1. DOE seeks comment on its proposal to replace BTS–2000 with ANSI/AHRI Standard 1500–2015 in its test procedure for commercial packaged boilers (section III.A).

2. DOE seeks comment on its proposal to remove its definition for packaged low pressure boiler and modify its definitions for commercial packaged boiler (section III.B.1).

3. DOE seeks comment on its proposed definition for ''field-constructed.'' (section III.B.2)

4. DOE seeks comment on the feasibility of conducting a combustion efficiency test in the field for steam and hot water commercial packaged boilers with fuel input rate greater than 5,000,000 Btu/h (section III.C.1).

5. DOE seeks comment on whether the thermal efficiency test can be conducted for steam commercial packaged boilers with fuel input rate greater than 2,500,000 Btu/h and less than or equal to 5,000,000 Btu/h (section III.C.1).

6. DOE seeks comment on the specific limitations, if they exist, that preclude combustion efficiency testing in a laboratory setting for steam commercial packaged boilers with fuel input rate greater than 2,500,000 Btu/h and less than or equal to 5,000,000 Btu/h (section III.C.1).

7. DOE seeks comment on the specific additional equipment or facilities and their associated cost that would be required to accommodate testing commercial packaged boilers with fuel input rate greater than 2,500,000 Btu/h and less than or equal to 5,000,000 Btu/h in a laboratory setting (section III.C.1).

8. DOE seeks comment on whether the 5,000,000 Btu/h fuel input rate is an adequate threshold for the allowance of the field combustion test and conversion methodology, and if not, what threshold should be used (section III.C.1).

9. DOE seeks comment on whether certification should be permitted for field tested units after distribution in commerce and after commissioning, in particular the impact of this approach on building inspectors (section III.C.1).

10. DOE seeks comment on its proposed conversion method for calculating thermal efficiency based on combustion efficiency for steam commercial packaged boilers with fuel

input rate greater than 5,000,000 Btu/h (section III.C.2).

11. DOE seeks comment on the proposed value for the difference between the combustion efficiency and thermal efficiency in the conversion method (proposed value of 2 percent of the combustion efficiency), whether the value would result in conservative ratings, and what number DOE should use instead if the proposed value is not adequate (section III.C.2).

12. DOE seeks comment on whether the 5,000,000 Btu/h fuel input rate is an adequate threshold for the allowance of the field combustion test and/or conversion methodology, and if not, what threshold should be used (section III.C.2).

13. DOE seeks comment on if the field combustion test (for hot water and steam commercial packaged boilers) and conversion methodology (for steam commercial packaged boilers) do not adequately accommodate commercial packaged boilers with fuel input rate greater than 5,000,000 Btu/h, what procedure should DOE implement in order to do so (section III.C.2).

14. DOE seeks comments, data, and information about pressures recommended by manufacturers and relevance to actual operating conditions in buildings (section III.C.4).

15. DOE seeks comment on whether DOE should require testing to be performed at the lowest possible steam pressure where steam quality requirements can be met (section III.C.4).

16. DOE also requests comment on if there are any commercial packaged boilers that require steam pressures greater than 15 psig to maintain 2 percent moisture in the produced steam (see section III.C.4).

17. DOE seeks comments, data, and information about whether the proposed testing conditions related to water temperatures are appropriate both for a non-condensing commercial packaged boiler and a condensing commercial packaged boiler (section III.D.2).

18. DOE also requests comment on the proposed test provisions to accommodate commercial packaged boilers that cannot be tested with a temperature rise of 40 °F across the commercial packaged boiler (Point B to Point C); (section III.D.2).

19. DOE seeks additional comments, data, and analysis concerning thermal efficiency test measurement uncertainty (section III.D.2).

20. DOE seeks comment regarding the current prevalence of using recirculating loops in testing; specifically, DOE requests comment about the kinds of commercial packaged boilers utilizing recirculation loops and the conditions at which these commercial packaged boilers and recirculating loops operate (section III.D.4).

21. DOE seeks further comments, data, and information concerning the capabilities of test laboratories, particularly in light of the specific proposed conditions contained in this NOPR (section III.D.4).

22. DOE seeks comments, data, and information about room ambient relative humidity, whether the proposed constraints are appropriate, and if not, what are appropriate constraints on room ambient relative humidity when testing commercial packaged boilers (section III.E).

23. DOE seeks comment, data, and information about the aforementioned proposed room ambient temperatures, whether the proposed constraints are appropriate and if not, what are appropriate constraints on room ambient temperature (section III.E)

24. DOE seeks comments based upon the proposed changes to the steam riser, header, and return water loop requirements (section III.F).

25. DOE seeks comments regarding the specification of burners for oil-fired commercial packaged boilers (section III.F).

26. DOE seeks additional comment, and particularly data, about whether the oxygen combustion analyzer produces equivalent combustion efficiencies to the carbon monoxide (CO) and carbon dioxide (CO_2) calculations provided by ANSI/AHRI Standard 1500–2015 and BTS–2000 (section III.F).

27. DOE seeks comment on the proposal to require digital data acquisition (section III.F).

28. DOE seeks comment as to the proposed clarifications in set up and instrumentation (section III.F).

29. DOE seeks comment regarding its proposed definition and methodology for measuring and verifying fuel input rate and steady-state (section III.G).

30. DOE seeks comment on its proposed clerical corrections and clarifications (section III.H).

31. DOE seeks comments, as well as sample stack temperature data, sample calculations and estimates of the impact of the stack temperature adjustment methodology (section III.I.1).

32. DOE seeks comment regarding its proposed provision to conduct enforcement testing in both steam mode and hot water mode for those commercial packaged boilers capable of producing both and using either result in determining noncompliance with energy conservation standards. (section III.I.1)

33. DOE seeks further comment concerning part-load testing (section III.I.2).

34. DOE seeks comment on whether the proposed test procedure changes will have a significant impact on a substantial number of small entities (section IV.B).

VI. Approval of the Office of the Secretary

The Secretary of Energy has approved publication of this notice of proposed rulemaking.

List of Subjects

10 CFR Part 429

Administrative practice and procedure, Confidential business information, Energy conservation, Household appliances, Imports, Incorporation by reference, Reporting and recordkeeping requirements.

10 CFR Part 431

Administrative practice and procedure, Confidential business information, Energy conservation, Incorporation by reference, Reporting and recordkeeping requirements, Test procedures.

Issued in Washington, DC, on February 22, 2016.

Kathleen B. Hogan,

Deputy Assistant Secretary for Energy Efficiency, Energy Efficiency and Renewable Energy.

For the reasons stated in the preamble, DOE proposes to amend parts 429 and 431 of chapter II, subchapter D of title 10, Code of Federal Regulations, as set forth below:

PART 429—CERTIFICATION, COMPLIANCE, AND ENFORCEMENT FOR CONSUMER PRODUCTS AND COMMERCIAL AND INDUSTRIAL EQUIPMENT

■ 1. The authority citation for part 429 continues to read as follows:

Authority: 42 U.S.C. 6291–6317.

■ 2. Section 429.4 is amended by adding paragraph (c)(2) to read as follows:

§ 429.4 Materials incorporated by reference.

* * * * *

(c) * * *

(2) AHRI Standard 1500–2015, ''2015 Standard for Performance Rating of Commercial Space Heating Boilers,'' approved November 28, 2014: Section 3 ''Definitions;''; Section 5 ''Rating Requirements;'' Appendix C ''Methods of Testing for Rating Commercial Space Heating Boilers—Normative,'' excluding Figures C5 and C7; Appendix D

''Properties of Saturated Steam—Normative;'' and Appendix E ''Correction Factors for Heating Values of Fuel Gases—Normative;'' IBR approved for § 429.60.

* * * * *

■ 3. Section 429.11 is amended by revising paragraph (b) to read as follows:

§ 429.11 General sampling requirements for selecting units to be tested.

* * * * *

(b) The minimum number of units tested shall be no less than two, except where:

(1) A different minimum limit is specified in §§ 429.14 through 429.65; or

(2) Only one unit of the basic model is produced, in which case, that unit must be tested and the test results must demonstrate that the basic model performs at or better than the applicable standard(s). If one or more units of the basic model are manufactured subsequently, compliance with the default sampling and representations provisions is required.

■ 4. Section 429.60 is amended by:

■ a. Revising paragraph (a)(1)(i);

■ b. Adding paragraphs (a)(3), (4), and (5);

■ c. Revising paragraph (b)(2); and

■ d. Adding paragraphs (b)(3)(iii) and (b)(5).

The revisions and additions read as follows:

§ 429.60 Commercial packaged boilers.

(a) * * *

(1) * * *

(i) If the represented value is determined through testing, the general requirements of § 429.11 are applicable, except that, if the represented value is determined through testing pursuant to § 431.86(c) of this chapter, the number of units selected for testing may be one; and

* * * * *

(3) The representative value of fuel input rate of a basic model reported in accordance with paragraph (b)(2) of this section must be either the mean of the fuel input rate(s) measured for each tested unit of the basic model and determined in accordance with the test procedure in § 431.86 of this chapter, or the value determined with an AEDM, and rounded to the nearest 1,000 Btu/h.

(4) The representative value of thermal or combustion efficiency of a basic model reported in accordance with paragraph (b)(2) of this section must be either the mean of the thermal or combustion efficiency measured for each tested unit of the basic model and determined in accordance with the test procedure in § 431.86 of this chapter, or the value determined with an AEDM, and rounded to the nearest tenth of one percent.

(5) For a model of commercial packaged boiler capable of supplying either steam or hot water, representative values for steam mode must be based on performance in steam mode and representative values for hot water mode must be based on either the efficiency in hot water mode or steam mode in accordance with the test procedure in § 431.86 of this chapter and the provisions of this section.

(b) * * *

(2) Pursuant to § 429.12(b)(13), a certification report must include the following public, equipment-specific information:

(i) The manufacturer (including brand, if applicable) and model number of the burner;

(ii) The fuel input rate in British thermal units per hour (Btu/h) rounded to the nearest 1,000 Btu/h;

(iii) The representative value of combustion efficiency in percent (%) to the nearest tenth of one percent or the representative value of thermal efficiency in percent (%) to the nearest one tenth of one percent, as specified in § 431.87 of this chapter; and

(iv) For a basic model of commercial packaged boiler that cannot be tested using the standard inlet temperatures required in appendix A to subpart E of part 431 of this chapter, the average inlet water temperature measured at Point B (in Figure C9 of ANSI/AHRI Standard 1500–2015) (incorporated by reference, see § 429.4) at which the model was tested.

(3) * * *

(iii) For basic models of commercial packaged boilers that have a certified fuel input rate greater than 5,000,000 Btu/h, a declaration about whether the certified rating is based on testing conducted pursuant to § 431.86(c) of this chapter.

* * * * *

(5) Any field tested (pursuant to § 431.86(c) of this chapter) basic model of a commercial packaged boiler that has not been previously certified through testing or an AEDM must be certified within 15 days of commissioning.

* * * * *

■ 5. Section 429.70 is amended by adding paragraph (c)(2)(iii)(D) to read as follows:

§ 429.70 Alternative methods for determining energy efficiency and energy use.

* * * * *

(c) * * *

(2) * * *

(iii) * * *

(D) An AEDM that is validated based on test results obtained from one or more field tests (commercial packaged boilers only) can only be used to certify the performance of basic models of commercial packaged boilers with a certified fuel input rate greater than 5,000,000 Btu/h.

* * * * *

■ 6. Section 429.110 is amended by:

■ a. Revising paragraph (a)(3); and

■ b. Adding paragraph (c)(1)(iii).

The addition and revision reads as follows:

§ 429.110 Enforcement testing.

(a) * * *

(3) Testing will be conducted at a lab accredited to the International Organization for Standardization (ISO)/International Electrotechnical Commission (IEC), ''General requirements 'for the competence of testing and calibration laboratories,'' ISO/IEC 17025:2005(E) (incorporated by reference; see § 429.4). If testing cannot be completed at an independent lab, DOE, at its discretion, may allow enforcement testing at a manufacturer's lab, so long as the lab is accredited to ISO/IEC 17025:2005(E) and DOE representatives witness the testing. In addition, for commercial packaged boilers with certified fuel input rate greater than 5,000,000 Btu/h, DOE, at its discretion, may allow enforcement testing of a commissioned commercial packaged boiler in the location in which it was commissioned for use, pursuant to the test provisions at § 431.86(c) of this chapter.

* * * * *

(c) * * *

(1) * * *

(iii) Of basic models of previously commissioned commercial packaged boilers with a certified fuel input rate greater than 5,000,000 Btu/h, DOE may test a sample of at least one unit in the location in which it was commissioned for use.

* * * * *

■ 7. Section 429.134 is amended by adding paragraph (k) to read as follows:

§ 429.134 Product-specific enforcement provisions.

* * * * *

(k) *Commercial packaged boilers*—(1) *Verification of fuel input rate.* The fuel input rate of each tested unit will be measured pursuant to the test requirements of § 431.86 of this chapter. The results of the measurement(s) will be compared to the value of fuel input rate certified by the manufacturer. The certified fuel input rate will be

considered valid only if the measurement(s) (either the measured fuel input rate for a single unit sample or the average of the measured fuel input rates for a multiple unit sample) is within two percent of the certified fuel input rate.

(i) If the representative value of fuel input rate is found to be valid, the certified fuel input rate will serve as the basis for determination of the appropriate equipment class(es) and the mean measured fuel input rate will be used as the basis for calculation of combustion and/or thermal efficiency for the basic model.

(ii) If the representative value of fuel input rate is not within two percent of the certified fuel input rate, DOE will first attempt to increase or decrease the gas pressure within the range specified in manufacturer's installation and operation manual shipped with the commercial packaged boiler being tested (or, if not provided in the manual, in supplemental instructions provided by the manufacturer pursuant to § 429.60(b)(4)) to achieve the certified fuel input rate (within two percent). If the fuel input rate is still not within two percent of the certified fuel input rate, DOE will attempt to modify the gas inlet orifice. If the fuel input rate still is not within two percent of the certified fuel input rate, the mean measured fuel input rate will serve as the basis for determination of the appropriate equipment class(es) and calculation of combustion and/or thermal efficiency for the basic model.

(2) *Models capable of producing both hot water and steam.* For a model of commercial packaged boiler that is capable of producing both hot water and steam, DOE may measure the thermal or combustion efficiency as applicable pursuant to § 431.87 of this chapter for steam and/or hot water modes. DOE will evaluate compliance based on the measured thermal or combustion efficiency in steam and hot water modes, independently.

PART 431—ENERGY EFFICIENCY PROGRAM FOR CERTAIN COMMERCIAL AND INDUSTRIAL EQUIPMENT

■ 8. The authority citation for part 431 continues to read as follows:

Authority: 42 U.S.C. 6291–6317.

■ 9. Section 431.82 is amended by:

■ a. Revising the definitions for ''Combustion efficiency'' and ''Commercial packaged boiler'';

■ b. Adding in alphabetical order definitions for ''Field-constructed,'' and ''Fuel input rate'';

■ c. Revising the definition for ''Packaged boiler''; and

■ d. Removing the definitions for ''Packaged high pressure boiler'' and ''Packaged low pressure boiler''.

The revisions and additions read as follows:

§ 431.82 Definitions concerning commercial packaged boilers.

* * * * *

Combustion efficiency for a commercial packaged boiler is a measurement of how much of the fuel input energy is converted to useful heat in combustion and is calculated as 100 percent minus percent flue loss, as determined with the test procedures prescribed under § 431.86.

Commercial packaged boiler means a packaged boiler that meets all of the following criteria:

(1) Has fuel input rate of 300,000 Btu/h or greater;

(2) Is, to any significant extent, distributed in commerce for space conditioning and/or service water heating in buildings but does not meet the definition of ''hot water supply boiler'' in this part;

(3) Does not meet the definition of ''field-constructed'' in this section; and

(4) Is designed to:

(i) Operate at a steam pressure at or below 15 psig;

(ii) Operate at or below a water pressure of 160 psig and water temperature of 250 °F; or

(iii) Operate at the conditions specified in both paragraphs (4)(i) and (ii) of this definition.

* * * * *

Field-constructed means custom-designed equipment that requires welding of structural components in the field during installation; for the purposes of this definition, welding does not include attachment using mechanical fasteners or brazing; any jackets, shrouds, venting, burner, or burner mounting hardware are not structural components.

* * * * *

Fuel input rate for a commercial packaged boiler means the maximum rate at which the commercial packaged boiler uses energy and is determined using test procedures prescribed under § 431.86.

* * * * *

Packaged boiler means a boiler that is shipped complete with heating equipment, mechanical draft equipment, and automatic controls and is usually shipped in one or more sections. If the boiler is shipped in more than one section, the sections may be produced by more than one manufacturer, and may be originated or shipped at different times and from more than one location.

* * * * *

■ 10. Section 431.85 is amended by revising paragraph (b) to read as follows:

§ 431.85 Materials incorporated by reference.

* * * * *

(b) *AHRI.* Air-Conditioning, Heating, and Refrigeration Institute, 2111 Wilson Blvd., Suite 500, Arlington, VA 22201, (703) 524–8800, or go to: *http://www.ahrinet.org.*

(1) AHRI Standard 1500–2015, ''2015 Standard for Performance Rating of Commercial Space Heating Boilers,'' approved November 28, 2014: Section 3 ''Definitions;''; Section 5 ''Rating Requirements;'' Appendix C ''Methods of Testing for Rating Commercial Space Heating Boilers—Normative,'' excluding Figures C5 and C7; Appendix D ''Properties of Saturated Steam—Normative;'' and Appendix E ''Correction Factors for Heating Values of Fuel Gases—Normative;'' IBR approved for appendix A to subpart E.

(2) [Reserved]

■ 11. Section 431.86 is revised to read as follows:

§ 431.86 Uniform test method for the measurement of energy efficiency of commercial packaged boilers.

(a) *Scope.* This section provides test procedures, pursuant to the Energy Policy and Conservation Act (EPCA), as amended, which must be followed for measuring the combustion efficiency and/or thermal efficiency of a gas- or oil-fired commercial packaged boiler.

(b) *Testing and calculations.* Determine the thermal efficiency or combustion efficiency of covered commercial packaged boilers by conducting the appropriate test procedure(s) indicated in Table 1 of this section.

TABLE 1 TO § 431.86—TEST REQUIREMENTS FOR COMMERCIAL PACKAGED BOILER EQUIPMENT CLASSES

Equipment Type	Subcategory	Fuel Input Rate Btu/h	Standards efficiency rating (§ 431.87)	Test procedure (corresponding to standards efficiency metric required by § 431.87)
Hot Water	Gas-fired	≥300,000 and ≤2,500,000	Thermal Efficiency	Appendix A, Section 2.
Hot Water	Gas-fired	>2,500,000	Combustion Efficiency	Appendix A, Section 3.
Hot Water	Oil-fired	≥300,000 and ≤2,500,000	Thermal Efficiency	Appendix A, Section 2.
Hot Water	Oil-fired	>2,500,000	Combustion Efficiency	Appendix A, Section 3.
Steam	Gas-fired (all*)	≥300,000 and ≤2,500,000	Thermal Efficiency	Appendix A, Section 2.
Steam	Gas-fired (all*)	>2,500,000 and ≤5,000,000.	Thermal Efficiency	Appendix A, Section 2.
		>5,000,000	Thermal Efficiency	Appendix A, Section 2. OR Appendix A, Section 3 with Section 2.4.3.2.
Steam	Oil-fired	≥300,000 and ≤2,500,000	Thermal Efficiency	Appendix A, Section 2.
Steam	Oil-fired	>2,500,000 and ≤5,000,000.	Thermal Efficiency	Appendix A, Section 2.
		>5,000,000	Thermal Efficiency	Appendix A, Section 2. OR Appendix A, Section 3. with Section 2.4.3.2.

* Product classes for commercial packaged boilers as of July 22, 2009 (74 FR 36355) distinguish between gas-fired natural draft and all other gas-fired (except natural draft). The test procedure indicated in Table 1 applies to both of these equipment classes. If these equipment classes are amended, the test procedure will continue to apply as indicated in Table 1 to all gas-fired commercial packaged boilers.

(c) *Field tests.* The field test provisions of appendix A may be used only to test a commissioned unit of commercial packaged boiler with fuel input rate greater than 5,000,000 Btu/h.

■ 12. Section 431.87 is revised to read as follows:

§ 431.87 Energy conservation standards and their effective dates.

(a) Each commercial packaged boiler listed in Table 1 of this section and manufactured on or after the effective date listed must meet the indicated energy conservation standard.

TABLE 1 TO § 431.87—COMMERCIAL PACKAGED BOILER ENERGY CONSERVATION STANDARDS

Equipment type	Subcategory	Fuel input rate*	Efficiency level—effective date: March 2, 2012 *
Hot Water Commercial Packaged Boilers	Gas-fired	≥300,000 Btu/h and ≤2,500,000 Btu/h.	80.0% E_T.
Hot Water Commercial Packaged Boilers	Gas-fired	>2,500,000 Btu/h	82.0% E_C.
Hot Water Commercial Packaged Boilers	Oil-fired	≥300,000 Btu/h and ≤2,500,000 Btu/h.	82.0% E_T.
Hot Water Commercial Packaged Boilers	Oil-fired	>2,500,000 Btu/h	84.0% E_C.
Steam Commercial Packaged Boilers	Gas-fired—all, except natural draft	≥300,000 Btu/h and ≤2,500,000 Btu/h.	79.0% E_T.
Steam Commercial Packaged Boilers	Gas-fired—all, except natural draft	>2,500,000 Btu/h	79.0% E_T.
Steam Commercial Packaged Boilers	Gas-fired—natural draft	≥300,000 Btu/h and ≤2,500,000 Btu/h.	77.0% E_T.
Steam Commercial Packaged Boilers	Gas-fired—natural draft	>2,500,000 Btu/h	77.0% E_T.
Steam Commercial Packaged Boilers	Oil-fired	≥300,000 Btu/h and ≤2,500,000 Btu/h.	81.0% E_T.
Steam Commercial Packaged Boilers	Oil-fired	>2,500,000 Btu/h	81.0% E_T.

* "Fuel Input Rate" is the representative value of input (Btu/h) of the commercial packaged boiler model.
* Where E_C is combustion efficiency and E_T is thermal efficiency.

(b) Each commercial packaged boiler listed in Table 2 of this section and manufactured on or after the effective date listed in Table 2 of this section must meet the indicated energy conservation standard.

TABLE 2 TO § 431.87—COMMERCIAL PACKAGED BOILER ENERGY CONSERVATION STANDARDS

Equipment type	Subcategory	Fuel input rate *	Efficiency level—effective date: March 2, 2022 *
Steam Commercial Packaged Boilers	Gas-fired—natural draft	≥300,000 Btu/h and ≤2,500,000 Btu/h	79.0% E_T.
Steam Commercial Packaged Boilers	Gas-fired—natural draft	>2,500,000 Btu/h	79.0% E_T.

* "Fuel Input Rate" is the representative value of input (Btu/h) of the commercial packaged boiler model
* Where E_T is thermal efficiency.

■ 13. Add appendix A to subpart E of part 431 to read as follows:

Appendix A to Subpart E of Part 431—Uniform Test Method for the Measurement of Thermal Efficiency of Commercial Packaged Boilers.

Note: Prior to [DATE 360 DAYS AFTER PUBLICATION OF THE FINAL RULE IN THE **Federal Register**], manufacturers must make any representations with respect to the energy use or efficiency of commercial packaged boilers in accordance with the results of testing pursuant to appendix A to subpart E of part 431 or the test procedures as they appeared in 10 CFR 431.86, revised as of January 1, 2016. After [DATE 360 DAYS AFTER DATE OF PUBLICATION OF THE FINAL RULE], manufacturers must make any representations with respect to energy use or efficiency in accordance with the results of testing pursuant to this appendix.

1. Definitions

For purposes of this appendix, the Department of Energy incorporates by reference the definitions established in section 3 of the American National Standards Institute (ANSI) and Air-Conditioning, Heating, and Refrigeration Institute (AHRI) Standard 1500, ''2015 Standard for Performance Rating of Commercial Space Heating Boilers,'' beginning with 3.1 and ending with 3.35 (incorporated by reference, see § 431.85; hereafter ''ANSI/AHRI Standard 1500–2015''), excluding section 3.23, ''Input Rating''; section 3.24, ''Net Rating''; and section 3.26, ''Published Rating,'' and section 3.26.1 ''Standard Rating.'' In cases where there is a conflict, the language of the test procedure in this appendix takes precedence over ANSI/AHRI Standard 1500–2015.

1.1. In all incorporated sections of ANSI/AHRI Standard 1500–2015, references to the manufacturer's ''specifications,'' ''recommendations,'' ''directions,'' or ''requests'' mean the manufacturer's instructions in the installation and operation manual shipped with the commercial packaged boiler being tested or in supplemental instructions provided by the manufacturer pursuant to § 429.60(b)(4) of this chapter. For parameters or considerations not specified in this appendix, refer to the manual shipped with the commercial packaged boiler. Should the manual shipped with the commercial packaged boiler not provide the necessary information, refer to the supplemental instructions for the basic model pursuant to § 429.60(b)(4) of this chapter. The supplemental instructions provided pursuant to § 429.60(b)(4) of this chapter do not replace or alter any requirements in this appendix nor do they override the manual shipped with the commercial packaged boiler. In cases where these supplemental instructions conflict with any instructions or provisions provided in the manual shipped with the commercial packaged boiler, use the manual shipped with the commercial packaged boiler.

1.2. Unless otherwise noted, in all incorporated sections of ANSI/AHRI Standard 1500–2015, the term ''boiler'' means a commercial packaged boiler as defined in § 431.82.

2. Thermal Efficiency Test

2.1. *Test Setup.*

2.1.1. *Instrumentation.* Use instrumentation meeting the minimum requirements found in Table C1 of Appendix C of ANSI/AHRI Standard 1500–2015 (incorporated by reference, see § 431.85).

2.1.2. *Data collection and sampling.* Unless otherwise specified in Table 2.1 to this appendix, obtain all data digitally and conduct sampling at a rate not less frequently than once per 30 seconds. Digital data representing a flow, rate, or flux must be integrated over 15-minute periods (pursuant to Table 2.1 to this appendix) with the resulting values recorded. All other digital data must be averaged over 15-minute periods with the resulting values recorded. Table 2.1 to this appendix specifies the data recording interval for all relevant measured quantities and replaces Table C4 of Appendix C of ANSI/AHRI Standard 1500–2015.

Table 2.1. to Appendix A to Subpart E of Part 431—Data to be Recorded Before and During Testing

Item Recorded	Before Test	Every 30 Seconds	Every 15 Minutes[1]
Date of Test	X		
Manufacturer	X		
Boiler Model Number	X		
Burner Model Number & Manufacturer	X		
Nozzle description and oil pressure	X		
Oil Analysis - H, C, API Gravity, lb/gal and Btu/lb	X		
Gas Manifold Pressure	Start and End only		
Gas line pressure at meter	X[2]		
Gas temperature	X[2]		
Barometric Pressure (Steam and Natural Gas Only)	X[2]		
Gas Heating Value, Btu/ft^3	Start and End only		
Time, minutes/seconds		X	
Flue Gas Temperature, °F		X[3]	
Pressure in Firebox, in H_2O (if required per Section C3.4)			X[3]
Flue Gas Smoke Spot Reading (oil)			X[2]
Room Air Temperature		X[3]	
Fuel Weight or volume, lb (oil) or ft^3 (gas)			X[4]
Inlet Water Temperature at Point A[4], °F		X[3]	
Test Air Temperature, °F		X[3]	
Draft in Vent, in H_2O (oil and non-atmospheric gas)			X[3]
Flue Gas CO_2 or O_2, %			X[2]
Flue Gas CO, ppm			Start and End only[2]
Relative Humidity, %		X	

2.1.3. *Instrument Calibration.* Instruments must be calibrated at least once per year and a calibration record containing the date of calibration and the method of calibration must be maintained as part of the data underlying each basic model certification, pursuant to § 429.71 of this chapter. Combustion measurement equipment (instruments listed in the ''Gas Chemistry'' row of Table C1 in ANSI/AHRI Standard 1500–2015) must be calibrated using standard gases with purities of greater than 99.9995 percent for all constituents analyzed.

2.1.4. *Test Setup and Apparatus.* Set up the commercial packaged boiler for thermal efficiency testing according to the provisions of section C2 of Appendix C of ANSI/AHRI Standard 1500–2015.

2.1.4.1. For tests of oil-fired commercial packaged boilers, determine the weight of

fuel consumed using one of the methods specified in paragraph 2.1.4.1.1. or 2.1.4.1.2. of this appendix:

2.1.4.1.1. If using a scale, determine the weight of fuel consumed as the difference between the weight of the oil vessel before and after each measurement period, as specified in paragraph 2.1.4.1.3.1. or 2.1.4.1.3.2. of this appendix, determined using a scale meeting the accuracy requirements of Table C1 of Appendix C of ANSI/AHRI Standard 1500–2015.

2.1.4.1.2. If using a flow meter, first determine the volume of fuel consumed as the total volume over the applicable measurement period as specified in paragraph 2.1.4.1.3.1. or 2.1.4.1.3.2. of this appendix and as measured by a flow meter meeting the accuracy requirements of Table C1 of Appendix C of ANSI/AHRI Standard 1500–2015 upstream of the oil inlet port of the commercial packaged boiler. Then determine the weight of fuel consumed by multiplying the total volume of fuel over the applicable measurement period by the density of oil, in pounds per gallon, as determined pursuant to C3.2.1.1.3. of Appendix C of ANSI/AHRI Standard 1500–2015.

2.1.4.1.3. The applicable measurement period for the purposes of determining fuel input rate must be as specified in section 2.1.4.1.3.1. of this appendix for the ''Warm-Up Period'' or section 2.1.4.1.3.2. of this appendix for the ''Test Period.''

2.1.4.1.3.1. For the purposes of confirming steady-state operation during the ''Warm-Up Period,'' the measurement period must be 15 minutes and t_T in equation C2 in section C7.2.3.1 of Appendix A of ANSI/AHRI Standard 1500–2015 must be 0.25 hours to determine fuel input rate.

2.1.4.1.3.2. For the purposes of determining thermal efficiency during the ''Test Period,'' the measurement period and t_T are as specified in section C4.1.1.2.3 of Appendix C of ANSI/AHRI Standard 1500–2015.

2.1.4.2 For tests of gas-fired commercial packaged boilers, install a volumetric gas meter meeting the accuracy requirements of Table C1 of Appendix C of ANSI/AHRI Standard 1500–2015 upstream of the gas inlet port of the commercial packaged boiler. Record the accumulated gas volume consumed for each applicable measurement period. Use equation C7.2.3.2. of Appendix C of ANSI/AHRI Standard 1500–2015 to calculate fuel input rate.

2.1.4.2.1. The applicable measurement period for the purposes of determining fuel input rate must be as specified in section 2.1.4.2.1.1. of this appendix for the ''Warm-Up Period'' and 2.1.4.2.1.2. of this appendix for the ''Test Period.''

2.1.4.2.1.1. For the purposes of confirming steady-state operation during the ''Warm-Up Period,'' the measurement period must be 15 minutes and t_T in equation C2 in section C7.2.3.1 of Appendix C of ANSI/AHRI Standard 1500–2015 must be 0.25 hours to determine fuel input rate.

2.1.4.2.1.2. For the purposes of determining thermal efficiency during the ''Test Period,'' the measurement period and t_T are as specified in section C4.1.1.2.3 of Appendix C of ANSI/AHRI Standard 1500–2015.

2.1.5. *Additional Requirements for Outdoor Commercial Packaged Boilers.* If the manufacturer provides more than one outdoor venting arrangement, the outdoor commercial packaged boiler (as defined in section 3.2.6 of ANSI/AHRI Standard 1500–2015; must be tested with the shortest total venting arrangement as measured by adding the straight lengths of venting supplied with the equipment. If the manufacturer does not provide an outdoor venting arrangement, install the outdoor commercial packaged boiler venting consistent with the procedure specified in section C2.2 of Appendix C of ANSI/AHRI Standard 1500–2015.

2.1.6. *Additional Requirements for Steam Tests.* In addition to the provisions of section C2 of Appendix C of ANSI/AHRI Standard 1500–2015, the following requirements apply for steam tests.

2.1.6.1. Set up steam piping according to section C2.3 of Appendix C of ANSI/AHRI Standard 1500–2015 and using the following general instructions:

2.1.6.1.1. Figures C5 and C7 are prohibited from use and are not to be used to comply with the test procedure.

2.1.6.1.2. For piping above the water level specified in the installation and operation manual shipped with the commercial packaged boiler, or in manufacturer's supplemental instructions (pursuant to § 429.60(b)(4) of this chapter), if a reduction in the piping diameter is necessary, reduce the vertical portion of the steam condensate return pipe diameter to no less than one half of the riser pipe diameter.

2.1.6.1.3. Insulate all steam piping from the commercial packaged boiler to the steam separator, and extend insulation at least one foot (1 ft.) beyond the steam separator, using insulation meeting the requirements specified in Table 2.2. of this appendix.

TABLE 2.2. TO APPENDIX A TO SUBPART E OF PART 431—MINIMUM PIPING INSULATION THICKNESS REQUIREMENTS

Fluid temperature range °F	Insulation conductivity		Nominal pipe size				
	Conductivity BTU×in/(h×ft²×°F)	Mean rating temperature °F	inches	<1	1 to < 1½	1½ to < 4	4 to <8
201 °F–250 °F	0.27–0.30	150	2.5	2.5	2.5	3.0	3.0
141 °F–200 °F	0.25–0.29	125	1.5	1.5	2.0	2.0	2.0
105 °F–140 °F	0.22–0.28	100	1.0	1.0	1.5	1.5	1.5

2.1.6.1.4. If a separator is used, piping must pitch downward to the separator at a rate of at least ¼ inch per foot of pipe length.

2.1.6.2. If the pipe diameters of the header and return loop are not specified in the installation and operation manual shipped with the commercial packaged boiler or in supplemental testing instructions provided in the unit's basic model certification report (pursuant to § 429.60 of this chapter), then make the header pipe diameter equal to the commercial packaged boiler's steam take-off fitting pipe diameter. Do not reduce the diameter in any horizontal pipe. For commercial packaged boilers with multiple steam risers, do not reduce the diameter in any horizontal header pipe, and ensure that the cross-sectional area of the header is not less than 80 percent of the total cross-sectional area of the risers.

2.1.6.3. If the height of the header above the water level is not specified by the installation and operation manual shipped with the commercial packaged boiler or in supplemental testing instructions provided in the unit's basic model certification report (pursuant to § 429.60 of this chapter), then ensure that the height of the header above the water level is not less than the larger of 24 inches or 6 times the header nominal pipe diameter as defined in paragraph 2.1.6.2. of this appendix.

2.1.6.4. If the minimum distance between the last vertical steam take-off and the condensate return pipe is not specified in the installation and operation manual shipped with the commercial packaged boiler or in the manufacturer's supplemental testing instructions provided in the unit's basic model certification report (pursuant to § 429.60 of this chapter), then the distance between the vertical steam take-off leading to the water separator and the elbow leading to the condensate return pipe must be a minimum of three (3) header pipe diameters.

2.1.6.5. A vented water seal must be located between the drain and the separator. Insulate the separator and the piping connecting it to the commercial packaged boiler to prevent the heat loss from separator and piping, using the minimum piping insulation requirements specified in Table 2.2. of this appendix. A temperature sensing device must be installed in the insulated steam piping prior to the water separator if the commercial packaged boiler produces superheated steam.

2.1.6.6. Water entrained in the steam and water condensing within the steam piping must be collected and used to calculate the

quality of steam during the ''Test Period.'' Steam condensate must be collected and measured using either a cumulative (totalizing) flow rate or by measuring the mass of the steam condensate. Instrumentation used to determine the amount of steam condensate must meet the requirements identified in Table C1 in Appendix C of ANSI/AHRI Standard 1500–2015.

2.1.6.7. All steam commercial packaged boiler setups must include a steam condensate return pipe as shown in Figures C6 and C8 of ANSI/AHRI Standard 1500–2015; labeled ''Return Loop Connection''). This setup may also be used for commercial packaged boilers with multiple or single steam risers (take-offs) from the commercial packaged boiler.

2.1.6.8. Section C2.7.2.2.2 of ANSI/AHRI Standard 1500–2015 is not to be used for water meter calibration.

2.1.7. *Additional Requirements for Water Tests.* In addition to the provisions of section C2 of Appendix C of ANSI/AHRI Standard 1500–2015, the following requirements apply for water tests.

2.1.7.1 Insulate all water piping between the commercial packaged boiler and the location of the temperature measuring equipment, including one foot (1 ft.) beyond the sensor, using insulation meeting the requirements specified in Table 2.2. of this appendix.

2.1.7.2 In addition to the temperature measuring device at Point A in Figure C9 of ANSI/AHRI Standard 1500–2015, install a temperature measuring device at Point B of the same figure.

2.2. *Test Conditions.*

2.2.1. *General.* Use the test conditions from section 5 and section C3 of Appendix C of ANSI/AHRI Standard 1500–2015 for thermal efficiency testing but do not use section 5.1, 5.2, 5.3.5, 5.3.8, 5.3.9, or C3.1.3 of ANSI/AHRI Standard 1500–2015.

2.2.2. *Burners for Oil-Fired Commercial Packaged Boilers.* In addition to section C3.3 of Appendix C of ANSI/AHRI Standard 1500–2015, the following applies: for oil-fired commercial packaged boilers, test the unit with the particular make and model of burner as certified by the manufacturer. If multiple burners are specified in the certification report for that basic model, then use any of the listed burners for testing.

2.2.3. *Non-condensing Commercial Packaged Boiler Water Temperatures.* For tests of non-condensing boilers (as defined in section 3.2.5 of ANSI/AHRI Standard 1500–2015, maintain the outlet temperature measured at Point C in Figure C9 at 180 °F ± 1 °F and maintain the inlet temperature measured at Point B at 140 °F ± 1 °F during the ''Warm-up Period'' and ''Test Period'' as indicated by 30-second interval data pursuant to Table 2.1. of this appendix. If the commercial packaged boiler cannot be tested at the standard inlet water temperature of 140 °F ± 1 °F, as indicated in the manufacturer literature, test the equipment at the temperature closest to the standard 140 °F ± 1 °F that the equipment is capable of operating, as indicated in the manufacturer literature. Use the inlet temperature measured at Point A in Figure C9 of Appendix C of ANSI/AHRI Standard 1500–2015 for calculation of thermal efficiency.

2.2.4. *Condensing Commercial Packaged Boiler Water Temperatures.* For tests of condensing boilers (as defined in section 3.2.2 of ANSI/AHRI Standard 1500–2015); maintain the outlet temperature measured at Point C in Figure C9 of Appendix C of ANSI/AHRI Standard 1500–2015 to 120 °F ± 1 °F, and maintain the commercial packaged boiler inlet temperature at Point B to 80 °F ± 1 °F during the ''Warm-up Period'' and ''Test Period'' as indicated by 30-second interval data pursuant to Table 2.1. of this appendix. If the commercial packaged boiler cannot be tested at the standard inlet water temperature of 80 °F ± 1 °F, as indicated in the manufacturer literature, test the equipment at the temperature closest to the standard 80 °F ± 1 °F that the equipment is capable of operating, as indicated in the manufacturer literature. Use the inlet temperature measured at Point A in Figure C9 of Appendix C of ANSI/AHRI Standard 1500–2015 for calculation of thermal efficiency.

2.2.5 *Air Temperature.* Maintain ambient room temperature at 75 °F ± 5 °F at all times during the ''Warm-up Period'' and ''Test Period'' (as described in section C4 of Appendix C of ANSI/AHRI Standard 1500–2015; as indicated by 30-second interval data pursuant to Table 2.1. of this appendix. The ambient room temperature may not differ by more than ± 2 °F from the average ambient room temperature during the entire ''Test Period'' at any reading.

2.2.6. *Ambient Humidity.* Maintain ambient room relative humidity at 60 ± 5 percent relative humidity at all times during both the ''Warm-up Period'' and ''Test Period'' (as described in section C4 of Appendix C of ANSI/AHRI Standard 1500–2015; as indicated by 30-second interval data pursuant to Table 2.1. of this appendix.

2.3. *Test Method.*

2.3.1. *General.* Conduct the thermal efficiency test as prescribed in section C4.1 of Appendix C of ANSI/AHRI Standard 1500–2015.

2.3.1.1. Do not use section C4.1.1.1.2 of ANSI/AHRI Standard 1500–2015. Instead, adjust oil or non-atmospheric gas to produce the required firebox pressure and CO_2 or O_2 concentration in the flue gas, as described in section 5.3.1 of ANSI/AHRI Standard 1500–2015. Conduct steam tests with steam pressure at the pressure specified in the manufacturer literature shipped with the commercial packaged boiler or in the manufacturer's supplemental testing instructions pursuant to § 429.60(b)(4) of this chapter, but not exceeding 15 psig. If no pressure is specified in the manufacturer literature shipped with the commercial packaged boiler or in the manufacturer's supplemental testing instructions (pursuant to § 429.60(b)(4)) of this chapter, or if a range of operating pressures is specified, conduct testing at a steam pressure equal to atmospheric pressure. If necessary to maintain steam quality as required by section 5.3.7 of ANSI/AHRI Standard 1500–2015, increase steam pressure in 1 psig increments by throttling with a valve beyond the separator until the test is completed and the steam quality requirements have been satisfied, but do not increase the steam pressure to greater than 15 psig.

2.3.2. *Steam Test Steady-State.* Replace section C4.1.1.1.4 of ANSI/AHRI Standard 1500–2015 with the following: Ensure that a steady-state is reached by confirming that three consecutive readings have been recorded at 15-minute intervals that indicate that:

2.3.2.1. The measured fuel input rate does not vary by more than ± 2 percent between any two readings; and

2.3.2.2. The steam pressure varies by no more than ± 5 percent between any two readings.

2.3.3. *Water Test Steady-State.* Replace section C4.1.2.1.5 of ANSI/AHRI Standard 1500–2015 with the following: Ensure that a steady-state is reached by confirming that three consecutive readings have been recorded at 15-minute intervals that indicate that the measured fuel input rate does not vary by more than ± 2 percent between any two readings.

2.3.4. *Condensate Collection for Condensing Commercial Packaged Boilers.* Collect condensate in a covered vessel so as to prevent evaporation.

2.3.5. *Total Fuel Input.* In sections C4.1.1.2.3 and C4.1.2.2.3 of ANSI/AHRI Standard 1500–2015, do not use the last sentence which reads: ''The total Heat Input measured during the Test Period shall be within ± 2% of the boiler Input Rating.''

2.4. *Calculations.*

2.4.1. *General.* To determine the thermal efficiency of commercial packaged boilers, use the calculation procedure for the thermal efficiency test specified in section C7 of Appendix C of the ANSI/AHRI Standard 1500–2015. For water tests as described in section C4.1.2 of ANSI/AHRI Standard 1500–2015, if a recirculating loop is used, use the average temperature during the ''Test Period'' measured at Point A for the inlet water temperature for all calculations.

2.4.2. *Use of Steam Properties Table.* If the average measured temperature of the steam is higher than the value in Table D in Appendix D1 of ANSI/AHRI Standard 1500–2015 that corresponds to the average measured steam pressure, then use Table 2.3 of this appendix to determine the latent heat of superheated steam in (Btu/lb). Use linear interpolation for determining the latent heat of steam in Btu/lb if the measured steam pressure is between two values listed in Table D in Appendix D1 of ANSI/AHRI Standard 1500–2015 or in Table 2.3.

Table 2.3. to Appendix A to Subpart E of Part 431—Latent Heat (Btu/lb) of Superheated Steam.

Average Measured Steam Pressure psi	Temperature °F							
	220	240	260	280	300	320	340	360
13	1155.1	1164.7	1174.3	1183.8	1193.2	1202.6	1212.0	1221.4
14	1154.6	1164.4	1174.0	1183.5	1193.0	1202.4	1211.8	1221.2
14.696	1154.4	1164.2	1173.8	1183.3	1192.8	1202.3	1211.7	1221.1
15	1154.3	1164.1	1173.7	1183.2	1192.8	1202.2	1211.7	1221.1
16	1153.8	1163.7	1173.4	1183.0	1192.5	1202.0	1211.5	1220.9
17	1153.4	1163.4	1173.1	1182.7	1192.3	1201.8	1211.3	1220.7
18		1163.0	1172.8	1182.5	1192.1	1201.6	1211.1	1220.6
19		1162.7	1172.5	1182.2	1191.9	1201.4	1210.9	1220.4
20		1162.3	1172.2	1182.0	1191.6	1201.2	1210.8	1220.3
21		1162.0	1171.9	1181.7	1191.4	1201.0	1210.6	1220.1
22		1161.6	1171.6	1181.4	1191.2	1200.8	1210.4	1219.9
23		1161.2	1171.3	1181.2	1190.9	1200.6	1210.2	1219.8
24		1160.9	1171.0	1180.9	1190.7	1200.4	1210.0	1219.6
25			1170.7	1180.6	1190.5	1200.2	1209.8	1219.4
26			1170.4	1180.4	1190.2	1200.0	1209.7	1219.3
27			1170.1	1180.1	1190.0	1199.8	1209.5	1219.1
28			1169.7	1179.8	1189.8	1199.6	1209.3	1218.9
29			1169.4	1179.6	1189.5	1199.3	1209.1	1218.8
30			1169.1	1179.3	1189.3	1199.1	1208.9	1218.6
31			1168.8	1179.0	1189.0	1198.9	1208.7	1218.4
Absolute Pressure psi	**Temperature °F**							
	380	**400**	**420**	**440**	**460**	**480**	**500**	**600**
13	1230.8	1240.2	1249.5	1258.9	1268.4	1277.8	1287.3	1334.9
14	1230.6	1240.0	1249.4	1258.8	1268.3	1277.7	1287.2	1334.8
14.696	1230.5	1239.9	1249.3	1258.8	1268.2	1277.6	1287.1	1334.8
15	1230.5	1239.9	1249.3	1258.7	1268.2	1277.6	1287.1	1334.8
16	1230.3	1239.8	1249.2	1258.6	1268.0	1277.5	1287.0	1334.7
17	1230.2	1239.6	1249.1	1258.5	1267.9	1277.4	1286.9	1334.6
18	1230.0	1239.5	1248.9	1258.4	1267.8	1277.3	1286.8	1334.6
19	1229.9	1239.4	1248.8	1258.3	1267.7	1277.2	1286.7	1334.5
20	1229.7	1239.2	1248.7	1258.2	1267.6	1277.1	1286.6	1334.4
21	1229.6	1239.1	1248.6	1258.1	1267.5	1277.0	1286.5	1334.4
22	1229.5	1239.0	1248.4	1257.9	1267.4	1276.9	1286.4	1334.3
23	1229.3	1238.8	1248.3	1257.8	1267.3	1276.8	1286.7	1334.2

24	1229.2	1238.7	1248.2	1257.7	1267.2	1276.7	1286.3	1334.2
25	1229.0	1238.5	1248.1	1257.6	1267.1	1276.6	1286.2	1334.1
26	1228.9	1238.4	1248.0	1257.5	1267.0	1276.5	1286.1	1334.0
27	1228.7	1238.3	1247.8	1257.4	1266.9	1276.4	1286.0	1334.0
28	1228.6	1238.1	1247.7	1257.2	1266.8	1276.3	1285.9	1333.9
29	1228.4	1238.0	1247.6	1257.1	1266.7	1276.2	1285.8	1333.9
30	1228.3	1237.9	1247.5	1257.0	1266.6	1276.2	1285.7	1333.8
31	1228.1	1237.7	1247.3	1256.9	1266.5	1276.1	1285.6	1333.7

Absolute Pressure psi	**Temperature °F**						
	700	**800**	**900**	**1000**	**1200**	**1400**	**1600**
13	1383.2	1432.4	1482.3	1533.2	1637.5	1745.5	1857.3
14	1383.2	1432.3	1482.3	1533.1	1637.5	1745.5	1857.3
14.696	1383.2	1432.3	1482.3	1533.1	1637.5	1745.5	1857.3
15	1383.1	1432.3	1482.3	1533.1	1637.5	1745.5	1857.3
16	1383.1	1432.3	1482.2	1533.1	1637.4	1745.5	1857.3
17	1383.0	1432.2	1482.2	1533.1	1637.4	1745.5	1857.3
18	1383.0	1432.2	1482.2	1533.0	1637.4	1745.5	1857.2
19	1382.9	1432.1	1482.1	1533.0	1637.4	1745.4	1857.2
20	1382.9	1432.1	1482.1	1533.0	1637.4	1745.4	1857.2
21	1382.8	1432.0	1482.1	1532.9	1637.3	1745.4	1857.2
22	1382.8	1432.0	1482.0	1532.9	1637.3	1745.4	1857.2
23	1382.7	1432.0	1482.0	1532.9	1637.3	1745.4	1857.2
24	1382.7	1431.9	1482.0	1532.9	1637.3	1745.4	1857.2
25	1382.6	1431.9	1481.9	1532.8	1637.3	1745.3	1857.2
26	1382.6	1431.8	1481.9	1532.8	1637.2	1745.3	1857.1
27	1382.5	1431.8	1481.9	1532.8	1637.2	1745.3	1857.1
28	1382.5	1431.8	1481.8	1532.8	1637.2	1745.3	1857.1
29	1382.4	1431.7	1481.8	1532.7	1637.2	1745.3	1857.1
30	1382.4	1431.7	1481.8	1532.7	1637.2	1745.3	1857.1
31	1382.3	1431.6	1481.7	1532.7	1637.1	1745.2	1857.1

2.4.3. *Alternative Thermal Efficiency Calculation for Large Steam Commercial Packaged Boilers.* To determine the thermal efficiency of commercial packaged boilers with a fuel input rate greater than 5,000,000 Btu/h according to the steam test (pursuant to section C4.1.1 of ANSI/AHRI Standard 1500–2015, either:

2.4.3.1. Calculate the thermal efficiency of commercial packaged boiler models in steam mode in accordance with the provisions of section 2.4.1. of this appendix; or

2.4.3.2. Measure and calculate combustion efficiency $Effy_{SS}$ in steam mode according to section 3. *Combustion Efficiency Test* of this appendix and convert to thermal efficiency using the following equation:

$Effy_G + Effy_{SS} - 2.0$

where $Effy_T$ is the thermal efficiency and $Effy_{SS}$ is the combustion efficiency as defined in C6 of ANSI/AHRI Standard 1500–2015. The combustion efficiency $Effy_{SS}$ is as calculated in section C7.2.14 of ANSI/AHRI Standard 1500–2015.

2.4.4. *Rounding.* Round the final thermal efficiency value to nearest one tenth of one percent. Round fuel input rate to nearest 1,000 Btu/h.

3. Combustion Efficiency Test.

3.1. *Test Setup.*

3.1.1. *Instrumentation.* Use instrumentation meeting the minimum requirements found in Table C1 of ANSI/AHRI Standard 1500–2015 (incorporated by reference, see § 431.85).

3.1.2. *Data collection and sampling.* Unless otherwise specified, obtain all data digitally with the exception of measuring the weight of the combustion condensate and steam condensation, and conduct sampling at a rate not less than once per 30 seconds. Digital data representing a flow, rate, or flux must be integrated over 15-minute periods (pursuant to Table 3.1 of this appendix) with the resulting values recorded. All other digital data must be averaged over 15-minute periods with the resulting values recorded. Table 3.1. of this appendix specifies the data recording interval for all relevant measured quantities and replaces Table C4 of Appendix C in ANSI/AHRI Standard 1500–2015.

Table 3.1. to Appendix A to Subpart E of Part 431— Data to be Recorded Before and During Testing

Item Recorded	Before Test	Every 30 Seconds	Every 15 Minutes[1]
Date of Test	X		
Manufacturer	X		
Commercial Packaged Boiler Model Number	X		
Burner Model Number & Manufacturer	X		
Nozzle description and oil pressure	X		
Oil Analysis - H, C, API Gravity, lb/gal and Btu/lb	X		
Gas Manifold Pressure	Start and End only		
Gas line pressure at meter	X[2]		
Gas temperature	X[2]		
Barometric Pressure (Steam and Natural Gas Only)	X[2]		
Gas Heating Value, Btu/ft^3	Start and End only		
Time, minutes/seconds		X	
Flue Gas Temperature, °F		X[3]	
Pressure in Firebox, in H_2O (if required per Section C3.4)			X[3]
Flue Gas Smoke Spot Reading (oil)			X[2]
Room Air Temperature		X	
Fuel Weight or volume, lb (oil) or ft^3 (gas)			X[4]
Inlet Water Temperature at Point A[4], °F		X	
Test Air Temperature, °F		X	
Draft in Vent, in H_2O (oil and non-atmospheric gas)			X[3]
Flue Gas CO_2 or O_2, %			X[2]
Flue Gas CO, ppm			Start and End only[2]
Relative Humidity, %		X	

Item Recorded		Before Test	Every 30 Seconds	Every 15 Minutes[1]
Flue Condensate Weight, lb (Condensing Commercial Packaged Boilers only)			X[1,2, 4]	
STEAM	Separator water weight, lb			At a minimum at Start and End[2, 5]
	Steam Pressure, in Hg			X[3]
	Steam Temperature, °F (if used)		X[3]	
	Condensate collected, or water fed, lb		X[1, 2]	
WATER	Outlet Water Temperature, °F		X[3]	
	Water fed, lb		X[1, 2]	
	Inlet Water Temperature at Points A and B, °F		X[3]	

Notes:
1. If measured manually, this measurement may be taken once every 15 minutes.
2. Measurement may be made manually.
3. Record the average value of the data over the specified time period.
4. Report the integrated value of the data over the specified time period.

3.1.3. *Instrument Calibration.* Instruments must be calibrated at least once per year and a record must be kept as part of the data underlying each basic model certification, pursuant to § 429.71 of this chapter, containing, at least, the date of calibration and the method of calibration. Combustion measurement equipment (instruments listed in the ''Gas Chemistry'' row of Table C1 in ANSI/AHRI Standard 1500–2015) must be calibrated using standard gasses with purities of greater than 99.9995 percent for all constituents analyzed.

3.1.4. *Test Setup and Apparatus.* Set up the commercial packaged boiler for combustion efficiency testing according to the provisions of section C2 of Appendix C of ANSI/AHRI Standard 1500–2015.

3.1.4.1. For tests of oil-fired commercial packaged boilers, determine the weight of fuel consumed using one of the methods specified in paragraph 3.1.4.1.1. or 3.1.4.1.2. of this appendix:

3.1.4.1.1. If using a scale, determine the weight of fuel consumed as the difference between the weight of the oil vessel before and after each measurement period, as specified in paragraph 3.1.4.1.3.1. or 3.1.4.1.3.2. of this appendix, determined using a scale meeting the accuracy requirements of Table C1 of ANSI/AHRI Standard 1500–2015.

3.1.4.1.2. If using a flow meter, first determine the volume of fuel consumed as the total volume over the applicable measurement period, as specified in paragraphs 3.1.4.1.3.1. or 3.1.4.1.3.2. of this appendix, and as measured by a flow meter meeting the accuracy requirements of Table C1 of ANSI/AHRI Standard 1500–2015 upstream of the oil inlet port of the commercial packaged boiler. Then determine the weight of fuel consumed by multiplying the total volume of fuel over the applicable measurement period by the density of oil, in pounds per gallon, as determined pursuant to section C3.2.1.1.3. of ANSI/AHRI Standard 1500–2015.

3.1.4.1.3. The applicable measurement period for the purposes of determining fuel input rate must be as specified in section 3.1.4.1.3.1. of this appendix for the ''Warm-Up Period'' or 3.1.4.1.3.2. of this appendix for the ''Test Period.''

3.1.4.1.3.1. For the purposes of confirming steady-state operation during the ''Warm-Up Period,'' the measurement period must be 15 minutes and t_T in equation C2 in section C7.2.3.1 of ANSI/AHRI Standard 1500–2015 must be 0.25 hours to determine fuel input rate.

3.1.4.1.3.2. For the purposes of determining combustion efficiency during the ''Test Period,'' the measurement period and t_T are 0.5 hours pursuant to section 3.3.1.1. of section 3. *Combustion Efficiency* of this appendix.

3.1.4.2 For tests of gas-fired commercial packaged boilers, install a volumetric gas meter meeting the accuracy requirements of Table C1 of ANSI/AHRI Standard 1500–2015 upstream of the gas inlet port of the commercial packaged boiler. Record the accumulated gas volume consumed for each applicable measurement period. Use equation C7.2.3.2. of ANSI/AHRI Standard 1500–2015 to calculate fuel input rate.

3.1.4.2.1. The applicable measurement period for the purposes of determining fuel input rate must be as specified in section 3.1.4.2.1.1. of this appendix for the ''Warm-Up Period'' and 3.1.4.2.1.2. of this appendix for the ''Test Period.''

3.1.4.2.1.1. For the purposes of confirming steady-state operation during the ''Warm-Up Period,'' the measurement period must be 15 minutes and t_T in equation C2 in section C7.2.3.1 of ANSI/AHRI Standard 1500–2015 must be 0.25 hours to determine fuel input rate.

3.1.4.2.1.2. For the purposes of determining combustion efficiency during the ''Test Period,'' the measurement period and t_T are 0.5 hours pursuant to section 3.3.1.1. of this appendix.

3.1.5. *Additional Requirements for Outdoor Commercial Packaged Boilers.* If the manufacturer provides more than one outdoor venting arrangement, the outdoor commercial packaged boiler (as defined in section 3.2.6 of ANSI/AHRI Standard 1500–2015; must be tested with the shortest total venting arrangement as measured by adding the straight lengths of venting supplied with the equipment.

3.1.6. *Additional Requirements for Field Tests.*

3.1.6.1 Field tests are exempt from the requirements of section C2.2 of Appendix C of ANSI/AHRI Standard 1500–2015. Measure the flue gas temperature according to section C2.5.1 of Appendix C of ANSI/AHRI Standard 1500–2015 and the thermocouple grids identified in Figure C12 of ANSI/AHRI Standard 1500–2015, with the following modification: the thermocouple grid may be staggered vertically by up to 1.5 inches to allow the use of instrumented rods to be inserted through holes drilled in the venting.

3.1.6.3. Field tests are exempt from the requirements of section C2.6.3 of Appendix C of ANSI/AHRI Standard 1500–2015.

3.1.7. *Additional Requirements for Water Tests.* In addition to the provisions of section C2 of Appendix C of ANSI/AHRI Standard 1500–2015 (incorporated by reference, see § 431.85) and to the temperature measuring device at Point A in Figure C9 of ANSI/AHRI Standard 1500–2015, install a temperature

measuring device at Point B of the same figure.

3.2. *Test Conditions.*

3.2.1. *General.* Use the test conditions from sections 5 and C3 of Appendix C of ANSI/AHRI Standard 1500–2015 for combustion efficiency testing but do not use section 5.1, 5.3.5, 5.3.7 (excluded for field tests only), 5.3.8, 5.3.9, or C3.1.3 of ANSI/AHRI Standard 1500–2015.

3.2.2. *Burners for Oil-Fired Commercial Packaged Boilers.* In addition to section C3.3 of Appendix C of ANSI/AHRI Standard 1500–2015, the following applies: for oil-fired commercial packaged boilers, test the unit with the particular make and model of burner as certified by the manufacturer. If multiple burners are specified in the certification report for that basic model, then use any of the listed burners for testing.

3.2.3. *Non-condensing Commercial Packaged Boiler Water Temperatures.* For tests of non-condensing boilers (as defined in section 3.2.5 of ANSI/AHRI Standard 1500–2015; maintain the outlet temperature measured at Point C in Figure C9 to 180 °F ± 1 °F and maintain the inlet temperature measured at Point B at 140 °F ± 1 °F during the ''Warm-up Period'' and ''Test Period'' as verified by 30-second interval data pursuant to Table 3.1. of this appendix. If the commercial packaged boiler cannot be tested at the standard inlet water temperature of 140 °F ± 1 °F at Point B, as indicated in the manufacturer literature, test the equipment at the temperature closest to the standard 140 °F ± 1 °F that the equipment is capable of operating, as indicated in the manufacturer literature. Field tests are exempt from this requirement and instead must comply with the requirements of section 3.2.3.1 of this appendix.

3.2.3.1. For field tests, the inlet temperature measured at Point B in Figure C9 and the outlet temperature measured and Point C in Figure C9 of ANSI/AHRI Standard 1500–2015 must be recorded in the data underlying that model's certification pursuant to § 429.71 of this chapter, and the difference between the inlet (measured at Point B) and outlet temperature (measured at Point C) must not be less than 20 °F at any point during the ''Warm-up Period'' and ''Test Period,'' after stabilization has been achieved, as indicated by 30-second interval data pursuant to Table 3.1. of this appendix.

3.2.4. *Condensing Commercial Packaged Boiler Water Temperatures.* For tests of condensing boilers (as defined in section 3.2.2 of ANSI/AHRI Standard 1500–2015; maintain the outlet temperature measured at Point C in Figure C9 to 120 °F ± 1 °F, and maintain the commercial packaged boiler inlet temperature to 80 °F ± 1 °F during the ''Warm-up Period'' and ''Test Period'' as verified by 30-second interval data pursuant to Table 3.1. of this appendix. If the commercial packaged boiler cannot be tested at the standard inlet water temperature of 80 °F ± 1 °F at Point B, as indicated in the manufacturer literature, test the equipment at the temperature closest to the standard 80 °F ± 1 °F that the equipment is capable of operating, as indicated in the manufacturer literature. Field tests are exempt from this requirement and instead must comply with the requirements of section 3.2.4.1 of this appendix.

3.2.4.1. For field tests, the inlet temperature measured at Point B in Figure C9 and the outlet temperature measured and Point C in Figure C9 of ANSI/AHRI Standard 1500–2015 must be recorded in the data underlying that model's certification pursuant to § 429.71 of this chapter, and the difference between the inlet (measured at Point B) and outlet temperature (measured at Point C) must not be less than 20 °F at any point during the ''Warm-up Period'' or ''Test Period,'' after stabilization has been achieved, as verified by 30-second interval data pursuant to Table 3.1. of this appendix.

3.2.5. *Air Temperature.* Maintain ambient room temperature at 75 °F ± 5 °F at all times during the ''Warm-up Period'' and ''Test Period'' (as described in section C4 of Appendix C of ANSI/AHRI Standard 1500–2015; as indicated by 30-second interval data pursuant to Table 3.1. of this appendix. The ambient room temperature may not differ by more than ± 2 °F from the average ambient room temperature during the entire ''Test Period'' at any reading. Field tests are exempt from this requirement, but ambient room temperature must be recorded (using 30-second interval data) as part of the test data underlying that model's certification pursuant to § 429.71 of this chapter.

3.2.6. *Ambient Humidity.* Maintain ambient room relative humidity at 60 percent ± 5 percent relative humidity at all times during both the ''Warm-up Period'' and ''Test Period'' (as described in section C4 of Appendix C of ANSI/AHRI Standard 1500–2015; as indicated by 30-second interval data pursuant to Table 3.1. of this appendix. Field tests are exempt from this requirement, but ambient room relative humidity must be recorded (using 30-second interval data) as part of the test data underlying that model's certification pursuant to § 429.71 of this chapter.

3.3. *Test Method.*

3.3.1. *General.* Conduct the combustion efficiency test using the test method prescribed in section C4.1 ''Thermal Efficiency,'' of Appendix C of ANSI/AHRI Standard 1500–2015. Do not use section C4.2.1 of ANSI/AHRI Standard 1500–2015 and make the following exceptions:

3.3.1.1. The duration of the ''Test Period'' outlined in sections C4.1.1.2 of Appendix C of ANSI/AHRI Standard 1500–2015 (incorporated by reference, see § 431.85) and C4.1.2.2 of Appendix C of ANSI/AHRI Standard 1500–2015 is 30 minutes.

3.3.1.2. In section C4.1.1.1.2 of Appendix C of ANSI/AHRI Standard 1500–2015, replace ''Section 5.3.5'' with ''Section 5.3.6.''

3.3.2. *Steam Test Steady-State.* Replace section C4.1.1.1.4 of ANSI/AHRI Standard 1500–2015 with the following: Ensure that a steady-state is reached by confirming that three consecutive readings have been recorded at 15-minute intervals that indicate that:

3.3.2.1. The measured fuel input rate does not vary by more than ± 2 percent between any two readings; and

3.3.2.2. The steam pressure varies by no more than ± 5 percent between any two readings.

3.3.3. *Water Test Steady-State.* Replace section C4.1.2.1.5 of ANSI/AHRI Standard 1500–2015 with the following: Ensure that a steady-state is reached by confirming that three consecutive readings have been recorded at 15-minute intervals that indicate that the measured fuel input rate does not vary by more than ± 2 percent between any two readings.

3.3.4. *Procedure for the Measurement of Condensate for a Condensing Commercial Packaged Boiler.* Collect flue condensate as specified in section C4.2.2 of Appendix C of ANSI/AHRI Standard 1500–2015 using a covered vessel so as to prevent evaporation. Measure the condensate from the flue gas during the ''Test Period.'' Flue condensate mass must be measured within 5 minutes after the end of the ''Test Period'' (defined in C4.1.1.2 and C4.1.2.2 of ANSI/AHRI Standard 1500–2015; to prevent evaporation loss from the sample. Determine the mass of flue condensate for the ''Test Period'' by subtracting the tare container weight from the total weight of the container and flue condensate measured at the end of the ''Warm-up Period.''

3.3.5. *Total Fuel Input.* In sections C4.1.1.2.3 and C4.1.2.2.3 of ANSI/AHRI Standard 1500–2015, do not use the last sentence which reads: ''The total Heat Input measured during the Test Period shall be within ± 2% of the boiler Input Rating.''

3.4. *Calculations.*

3.4.1. *General.* Use the calculation procedure for the combustion efficiency test specified in section C7.3 of Appendix C (including the specified subsections of C7.2) of ANSI/AHRI Standard 1500–2015. If a recirculating loop is used, use the temperature at Point A for the inlet water temperature for all calculations.

3.4.2. *Adjustment to Steady-State Flue Temperature for Using Steam Mode Combustion Efficiency to Represent Hot Water Mode.* For commercial packaged boilers with fuel input rate greater than 2,500,000 Btu/h and using combustion efficiency in steam mode to represent combustion efficiency in hot water mode pursuant to § 429.60(a)(5) through (6) of this chapter, adjust the steady-state stack temperature $T_{F,SS}$ (as defined in section C6 of ANSI/AHRI Standard 1500–2015; using the following equation before calculating combustion efficiency. Replace $T_{F,SS}$ with $T_{F,SS,adjusted}$ as calculated below for all calculations in deriving combustion efficiency.

$T_{F,SS,adjusted} = T_{F,SS} - T_{sat} + 180$

Where:

$T_{F,SS,adjusted}$ is the adjusted steady-state flue temperature used for subsequent calculations of combustion efficiency,

$T_{F,SS}$ is the measured steady-state flue temperature during combustion efficiency testing in steam mode,

T_{sat} is the saturated steam temperature from Table D1 in Appendix D of ANSI/AHRI Standard 1500–2015 that corresponds to the measured steam pressure, and

180 is the required hot water outlet temperature pursuant to section 3.2.3.

3.4.3. *Rounding.* Round combustion efficiency to nearest one tenth of a percent. Round fuel input rate to nearest 1,000 Btu/h.

[FR Doc. 2016–05138 Filed 3–16–16; 8:45 am]

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The President

Proclamation 9406—To Take Certain Actions Under the African Growth and Opportunity Act

Executive Order 13721—Developing an Integrated Global Engagement Center To Support Government-wide Counterterrorism Communications Activities Directed Abroad and Revoking Executive Order 13584

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Presidential Documents

Title 3—

The President

Proclamation 9406 of March 14, 2016

To Take Certain Actions Under the African Growth and Opportunity Act

By the President of the United States of America

A Proclamation

1. In Proclamation 7350 of October 2, 2000, the President designated the Republic of South Africa (South Africa) as a beneficiary sub-Saharan African country for purposes of section 506A(a)(1) of the Trade Act of 1974 (the ''1974 Act'') (19 U.S.C. 2466a(a)(1)), as added by section 111(a) of the African Growth and Opportunity Act (title I of Public Law 106–200) (AGOA).

2. Sections 506A(d)(4)(C) (19 U.S.C. 2466a(d)(4)(C)) and 506A(c)(1) (19 U.S.C. 2466a(c)(1)) of the 1974 Act authorize the President to suspend the application of duty-free treatment provided for any article described in section 506A(b)(1) of the 1974 Act (19 U.S.C. 2466a(b)(1)) or 19 U.S.C. 3721 with respect to a beneficiary sub-Saharan African country if he determines that the beneficiary country is not meeting the requirements described in section 506A(a)(1) of the 1974 Act and that suspending such duty-free treatment would be more effective in promoting compliance by the country with those requirements than terminating the designation of the country as a beneficiary sub-Saharan African country for purposes of section 506A of the 1974 Act.

3. In Proclamation 9388 of January 11, 2016, pursuant to section 506A(c)(1) of the 1974 Act, I determined that South Africa was not meeting the requirements described in section 506A(a)(1) of the 1974 Act and that suspending the application of duty-free treatment to certain goods would be more effective in promoting compliance by South Africa with such requirements than terminating the designation of South Africa as a beneficiary sub-Saharan African country. Thus, pursuant to section 506A(c)(1) of the 1974 Act, I suspended the application of duty-free treatment for all AGOA-eligible goods in the agricultural sector from South Africa for purposes of section 506A of the 1974 Act, effective on March 15, 2016.

4. Pursuant to section 506A of the 1974 Act, based on actions that the Government of South Africa has taken to come into compliance with the requirements described in section 506A(a)(1) of the 1974 Act, I have determined that suspending the application of duty-free treatment to certain goods is no longer necessary to promote compliance by South Africa with such requirements.

NOW, THEREFORE, I, BARACK OBAMA, President of the United States of America, by virtue of the authority vested in me by the Constitution and the laws of the United States of America, including but not limited to sections 506A(d)(4)(C) and 506A(c)(1) of the 1974 Act, do proclaim that:

(1) Proclamation 9388 of January 11, 2016, is hereby revoked.

(2) Any provisions of previous proclamations and Executive Orders that are inconsistent with the actions taken in this proclamation are superseded to the extent of such inconsistency.

IN WITNESS WHEREOF, I have hereunto set my hand this fourteenth day of March, in the year of our Lord two thousand sixteen, and of the Independence of the United States of America the two hundred and fortieth.

[FR Doc. 2016–06249
Filed 3–16–16; 11:15 am]
Billing code 3295–F6–P

Presidential Documents

Executive Order 13721 of March 14, 2016

Developing an Integrated Global Engagement Center To Support Government-wide Counterterrorism Communications Activities Directed Abroad and Revoking Executive Order 13584

By the authority vested in me as President by the Constitution and the laws of the United States of America, including section 2656 of title 22, United States Code, and section 3161 of title 5, United States Code, it is hereby ordered as follows:

Section 1. *Establishment of the Global Engagement Center.* The Secretary of State (Secretary) shall establish the Global Engagement Center (Center) which shall lead the coordination, integration, and synchronization of Government-wide communications activities directed at foreign audiences abroad in order to counter the messaging and diminish the influence of international terrorist organizations, including the Islamic State of Iraq and the Levant (ISIL), al Qa'ida, and other violent extremists abroad, with specific responsibilities as set forth in section 3 of this order. The executive director of the Center shall be the Special Envoy and Coordinator for Global Engagement Communications (Coordinator), who shall report to the Secretary through the Under Secretary of State for Public Diplomacy.

Sec. 2. *Revocation.* Executive Order 13584 of September 9, 2011 (Developing an Integrated Strategic Counterterrorism Communications Initiative and Establishing a Temporary Organization to Support Certain Government-Wide Communications Activities Directed Abroad), is revoked.

Sec. 3. *Responsibilities Assigned to the Center.* Recognizing the need for innovation and new approaches to counter the messaging and diminish the influence of international terrorist organizations, including ISIL, al Qa'ida, and other violent extremists abroad, and in order to protect the vital national interests of the United States, while also recognizing the importance of protections for freedom of expression, including those under the First Amendment to the Constitution of the United States and international human rights obligations, the responsibilities and functions of the Center shall include the following:

(a) coordinating, integrating, and synchronizing all public communications of the United States Government directed toward foreign audiences abroad in order to counter the messaging and diminish the influence of international terrorist organizations and other violent extremists abroad;

(b) developing and promulgating throughout the executive branch, on the basis of rigorous research and modern data analysis, the U.S. strategic counterterrorism narratives, guidance, and associated communications strategies directed toward foreign audiences abroad in order to counter the messaging and diminish the influence of international terrorist organizations and other violent extremists abroad;

(c) consulting and engaging, in coordination with agencies and the Countering Violent Extremism Task Force, as appropriate, with a range of communications-related actors and entities, within the United States and abroad, including governments, private sector and civil society entities, in order to contribute to U.S. Government efforts to counter the communications-related radicalization to violence and recruitment activities of international terrorist organizations and other violent extremists abroad, while also building the capacity of partners to create resonant positive alternative narratives

and to diminish the influence of such international terrorist organizations and other violent extremists abroad;

(d) identifying, engaging, employing, or acquiring the best available talent across the U.S. and from global private sectors, academia, and elsewhere to support the Center's mission;

(e) identifying shortfalls in any U.S. capabilities in any areas relevant to the Center's mission and implementing or recommending, as appropriate, necessary enhancements or changes; and

(f) developing, supporting, and sustaining networks of governmental and non-governmental partners, to provide original content and disseminate messaging products to foreign audiences abroad and to create, develop, and sustain effective positive alternative narratives consistent with U.S. policy objectives.

Sec. 4. *Establishment of a Steering Committee.* The Secretary shall establish a Steering Committee composed of senior representatives of agencies relevant to the Center's mission to provide advice to the Secretary on the operations and strategic orientation of the Center and to ensure adequate support for the Center. The Steering Committee shall be chaired by the Under Secretary of State for Public Diplomacy. The Steering Committee shall include one senior representative designated by the head of each of the following agencies: the Department of Defense, the Department of Justice, the Department of Homeland Security, the Department of the Treasury, the Small Business Administration, the National Counterterrorism Center, the Joint Chiefs of Staff, the Counterterrorism Center of the Central Intelligence Agency, the Broadcast Board of Governors, and the United States Agency for International Development. Other agencies may be invited to participate in the Steering Committee at the discretion of the Chair.

Sec. 5. *Interagency Support.* Agencies are hereby directed, consistent with budget priorities and mission constraints, upon request by the Secretary and to the extent permitted by law and consistent with the need to protect intelligence and law enforcement sources, methods, operations, and investigations, to provide to the Center, and the Center is authorized to use, for the purpose of carrying out the responsibilities outlined in this order:

(a) details or assignments of personnel, which shall be based on reasonable requests in light of the need for specific domain expertise, and after consultation with the relevant agency to ensure that such requests align with their authorities and resources;

(b) the use of physical premises, equipment, and logistical or administrative support;

(c) relevant information, research, intelligence, and analysis; and

(d) such other resources and assistance as the Coordinator may request for the purpose of carrying out the responsibilities outlined in this order.

Sec. 6. *Establishment of a Temporary Organization.* (a) There is established within the Department of State, in accordance with section 3161 of title 5, United States Code, a temporary organization to be known as the Global Engagement Center Coordination Office (GECCO).

(b) The purpose of the GECCO shall be to perform the specific project of providing technical, marketing, management, and operational support to the Center in its efforts to build and maintain a network of partners outside the U.S. Government, including private sector entities and non-governmental organizations, and to develop research and analytics to enable measurement and evaluation of the activities of the Center and related activities conducted by other agencies.

(c) In carrying out the purposes set forth in subsection (b) of this section, the GECCO shall:

(i) provide technical, marketing, management, and operational support for the management of contracts, grants, and cooperative agreements;

(ii) assist the Center in building and maintaining partnerships with private sector entities, non-governmental organizations, and others as appropriate in support of the Center's mission;

(iii) design and develop sustained campaigns, in coordination with and primarily for use by private sector entities and non-governmental organizations, on specific areas of interest to foreign audiences abroad in support of the Center's mission;

(iv) conduct or commission baseline research to establish the basis for evaluation of the activities of the Center and related activities conducted by other agencies;

(v) develop analytical models and metrics, consistent with the Center's responsibilities, in order to enable measurement and evaluation of the activities of the Center in coordinating effective strategies to counter the messaging and diminish the influence of international terrorist organizations and other violent extremists abroad, and related activities conducted by other agencies; and

(vi) perform such other functions related to the specific project set forth in subsection (b) of this section as the Secretary may assign.

(d) The GECCO shall be headed by the Coordinator. Its staff may include, as determined by the Coordinator: (1) personnel with relevant expertise detailed on a non-reimbursable basis from other agencies; (2) senior and other technical advisers; (3) executive-level personnel; and (4) such other personnel as the Secretary may request to support the GECCO. To accomplish this mission, the heads of agencies shall, upon request, provide to the GECCO, on a non-reimbursable basis, assistance, services, and other support including but not limited to logistical and administrative support and details of personnel to the extent permitted by law. Non-reimbursable details to the GECCO shall be based on reasonable requests from the Coordinator in light of the need for specific expertise, and after consultation with the relevant agency, to the extent permitted by law.

(e) The GECCO shall terminate at the end of the maximum period permitted by section 3161(a)(1) of title 5, United States Code, unless sooner terminated by the Secretary consistent with section 3161(a)(2) of such title.

(f) The termination of the GECCO as required by subsection (e) of this section shall not be interpreted to imply the termination, attenuation or amendment of any other authority or provision of this order.

Sec. 7. *General Provisions.* (a) Nothing in this order shall be construed to impair or otherwise affect:

(i) authority granted by law to an agency, or the head thereof; or

(ii) functions of the Director of the Office of Management and Budget relating to budgetary, administrative, or legislative proposals.

(b) This order shall be implemented consistent with applicable law and subject to the availability of appropriations.

(c) This order is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.

THE WHITE HOUSE,
March 14, 2016.

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