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**[6450-01-P]**

**DEPARTMENT OF ENERGY**

**10 CFR Part 431**

**[Docket No. EERE-2013-BT-STD-0030]**

**RIN: 1904-AD01**

**Energy Conservation Standards for Commercial Packaged Boilers: Public Meeting  
and Availability of the Preliminary Technical Support Document**

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

**ACTION:** Notice of public meeting and availability of preliminary technical support document.

**SUMMARY:** The U.S. Department of Energy (DOE) will hold a public meeting to discuss and receive comments about the preliminary analysis it has conducted for purposes of considering amended energy conservation standards for commercial packaged boilers. The meeting will cover: (1) the analytical framework, models, and tools that DOE is using to evaluate potential standards for this equipment; (2) the results of preliminary analyses performed by DOE for this equipment; (3) potential energy conservation standard levels derived from these analyses that DOE could consider for this equipment; and (4) any other issues relevant to the development of amended energy

conservation standards for commercial packaged boilers. In addition, DOE encourages written comments about these subjects. To inform interested parties and to facilitate this process, DOE has prepared a preliminary technical support document (TSD) that is available on the DOE website

at: [http://www1.eere.energy.gov/buildings/appliance\\_standards/rulemaking.aspx/ruleid/79](http://www1.eere.energy.gov/buildings/appliance_standards/rulemaking.aspx/ruleid/79).

**DATES: Meeting:** DOE will hold a public meeting on December 9, 2014, from 9:00 a.m. to 3:30 p.m., in Washington, DC. DOE must receive requests to speak at the meeting before 4:00 p.m. ET, December 1, 2014. DOE must receive a signed original and an electronic copy of any statement to be given at the public meeting before 4:00 p.m. ET, November 24, 2014.

**Comments:** DOE will accept comments, data, and other information regarding this rulemaking before or after the public meeting, but no later than **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]** See section IV, “Public Participation,” of this notice of public meeting (NOPM) for details.

**ADDRESSES:** Additionally, DOE plans to allow for participation in the public meeting via webinar. The public meeting will be held at the U.S. Department of Energy, Forrestal Building, Room 8E-089, 1000 Independence Avenue, SW., Washington, DC 20585-0121. All participants will undergo security processing upon building entry. Any participant with a laptop computer or similar device (*e.g.*, tablets), must undergo additional screening.

Interested persons may submit comments, identified by docket number EERE-2013-BT-STD-0030 and/or Regulation Identification Number (RIN) 1904-AD01, by any of the following methods:

- Federal eRulemaking Portal: [www.regulations.gov](http://www.regulations.gov). Follow the instructions for submitting comments.
- Email: [PkgdBoilers2013STD0030@ee.doe.gov](mailto:PkgdBoilers2013STD0030@ee.doe.gov). Include the docket number EERE-2013-BT-STD-0030 and/or RIN 1904-AD01 in the subject line of the message.
- Postal Mail: Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Office, Mailstop EE-5B, 1000 Independence Avenue, SW., Washington, DC 20585-0121. Comments, data, relevant documents and information may be submitted on printed paper or compact disc (CD) via postal mail. However, such will be necessarily delayed, and may be damaged, during the postal mail screening process.
- Hand Delivery/Courier: Comments, data, relevant documents and information may be submitted in person or by courier. If possible, please submit all items on a CD, in which case it is not necessary to include printed copies. Contact Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Program, 950 L'Enfant Plaza, SW., Suite 600, Washington, DC 20024. Telephone (202) 586-2945.

Docket: The commercial packaged boilers docket (EERE-2013-BT-STD-0030) is available for review at [www.regulations.gov](http://www.regulations.gov). It includes relevant Federal Register notices, the Framework Document, public comments, public meeting attendee lists and

transcripts, and other relevant documents/materials. All documents in the docket are listed in the [www.regulations.gov](http://www.regulations.gov) index. However, not all documents listed in the index may be publicly available, such as information that is exempt from public disclosure. The [www.regulations.gov](http://www.regulations.gov) webpage contains instructions on how to access all documents in the docket, including public comments.

Also, the DOE web page for commercial packaged boilers (which includes additional information about existing standards and test procedures, and the history and impacts of previous DOE regulatory actions for this category of equipment) may be viewed at [http://www1.eere.energy.gov/buildings/appliance\\_standards/product.aspx/productid/74](http://www1.eere.energy.gov/buildings/appliance_standards/product.aspx/productid/74), and contains links to the aforementioned docket.

For detailed instructions on submitting comments and additional information on the rulemaking process, see section IV, “Public Participation,” of this document. 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](mailto:Brenda.Edwards@ee.doe.gov).

**FOR FURTHER INFORMATION CONTACT:** Mr. James Raba, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies, EE-5B, 1000 Independence Avenue, SW., Washington, DC 20585-0121. Telephone: (202) 586-8654. E-mail: [Jim.Raba@ee.doe.gov](mailto:Jim.Raba@ee.doe.gov).

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1000 Independence Avenue, SW., Washington, DC 20585-0121. Telephone: (202) 586-  
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For information on how to submit or review public comments and on how to  
participate in the public meeting, contact Ms. Brenda Edwards, U.S. Department of  
Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies, EE-  
5B, 1000 Independence Avenue SW., Washington, DC 20585-0121. Telephone: (202)  
586-2945. Email: [Brenda.Edwards@ee.doe.gov](mailto:Brenda.Edwards@ee.doe.gov).

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## **I. Authority**

Title III, Part C<sup>1</sup> of the Energy Policy and Conservation Act of 1975 (EPCA), Pub. L. 94-163 (42 U.S.C. 6311-6317, as codified), added by Pub. L. 95-619, Title IV, §441(a), sets forth a variety of provisions designed to improve energy efficiency. It established the "Energy Conservation Program for Certain Industrial Equipment," a program covering certain commercial and industrial equipment (hereafter referred to as "covered equipment"), which includes the commercial packaged boilers that are the subject of this rulemaking.<sup>2</sup> Part A-1 specifically includes definitions (42 U.S.C. 6311), energy conservation standards (42 U.S.C. 6313), test procedures (42 U.S.C. 6314), labeling provisions (42 U.S.C. 6315), and the authority to require compliance information and certification reports from manufacturers of covered equipment (42 U.S.C. 6316).

EPCA established Federal energy conservation standards for commercial heating, air-conditioning, and water-heating equipment that generally correspond to the levels set in the American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE) Standard 90.1, "Energy Standard for Buildings Except Low-Rise Residential Buildings," including commercial packaged boilers.<sup>3</sup> (42 U.S.C. 6313(a)(4)) In particular, the statute sets standards for small, large, and very large commercial package air-conditioning and heating equipment, packaged terminal air conditioners, packaged terminal heat pumps, warm air furnaces, packaged boilers, storage water heaters,

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<sup>1</sup> For editorial reasons, upon codification in the United States Code (U.S.C.), Part C was re-designated Part A-1.

<sup>2</sup> All references to EPCA in this document refer to the statute as amended through the American Energy Manufacturing Technical Corrections Act (AEMTCA), Pub. L. 112-210 (Dec. 18, 2012).

<sup>3</sup> For more information, see [www.ashrae.org](http://www.ashrae.org).

instantaneous water heaters, and unfired hot water storage tanks (collectively “ASHRAE equipment”). (42 U.S.C. 6313(a)) DOE subsequently codified the statutory energy conservation standards for commercial packaged boilers in DOE’s regulations under subpart E of Title 10 of the Code of Federal Regulations (CFR), Part 431 (10 CFR Part 431). The standards for commercial packaged boilers specifically can be found at 10 CFR 431.87.

EPCA directs DOE to consider amending the existing Federal energy conservation standard for each type of covered ASHRAE equipment whenever ASHRAE amends the efficiency levels in Standard 90.1. (42 U.S.C. 6313(a)(6)(A)) For each type of listed equipment, EPCA directs that if ASHRAE amends Standard 90.1, DOE must adopt amended standards at the new ASHRAE efficiency level, unless clear and convincing evidence supports a determination that adoption of a more-stringent level would produce significant additional energy savings and would be technologically feasible and economically justified. (42 U.S.C. 6313(a)(6)(A)(ii)) If DOE decides to adopt as a national standard the efficiency levels specified in the amended ASHRAE Standard 90.1, DOE must establish such standard not later than 18 months after publication of the amended industry standard. (42 U.S.C. 6313(a)(6)(A)(ii)(I)) However, if DOE determines that a more-stringent standard is justified, then it must establish such more-stringent standard not later than 30 months after publication of the amended ASHRAE Standard 90.1. (42 U.S.C. 6313(a)(6)(B)(i))



In the event that ASHRAE does not act to amend Standard 90.1 (thereby triggering DOE to conduct an amended standards rulemaking), EPCA provides an alternative statutory mechanism for initiating such review. More specifically, EPCA requires that every six years, the Secretary of Energy (Secretary) shall consider amending the energy conservation standards for covered commercial equipment and shall publish either a notice of determination that those standards do not need to be amended, or a notice of proposed rulemaking for more-stringent energy efficiency standards. (42 U.S.C. 6313(a)(6)(C))

On December 19, 2007, the Energy Independence and Security Act of 2007 (EISA 2007), Pub. L. 110-140, was signed into law, which further revised the energy conservation standards for commercial and industrial equipment. EISA 2007 amended EPCA, in relevant part, to require that not later than six years after issuance of any final rule establishing or amending a standard, the Secretary of Energy shall publish either a notice of determination that the standards for a given type of equipment do not need to be amended, or a notice of proposed rulemaking (NOPR) including new proposed standards. (42 U.S.C. 6313(a)(6)(C)(i)) This amendment was further modified by the American Energy Manufacturing Technical Corrections Act (AEMTCA), Pub. L. 112-210, which was signed into law on December 18, 2012. AEMTCA, amended EPCA to require that “every” six years, the Secretary of Energy shall take action to determine whether or not more-stringent standards are needed for ASHRAE equipment. (42 U.S.C. 6313(a)(6)(C)(i)) In addition, AEMTCA also amended EPCA so as to trigger DOE to review the energy savings potential of any ASHRAE/IES Standard 90.1 amendment that

changes the standard levels or design requirements applicable to a given type of equipment. (42 U.S.C. 6313(a)(6)(A)(i))

Pursuant to EPCA, DOE's energy conservation program for covered equipment consists essentially of four parts: (1) testing; (2) labeling; (3) the establishment of Federal energy conservation standards; and (4) compliance certification and enforcement procedures. Subject to certain criteria and conditions, DOE has authority, as discussed above, to adopt amended energy conservation standards for commercial packaged boilers. In addition, DOE is required to develop test procedures to measure the energy efficiency, energy use, or estimated annual operating cost of covered equipment. (42 U.S.C. 6314(a)(2)) Manufacturers of covered equipment must use the prescribed DOE test procedure as the basis for certifying to DOE that their equipment comply with the applicable energy conservation standards adopted under EPCA and when making representations to the public regarding the energy use or efficiency of such equipment. (42 U.S.C. 6314(d)(1)) Similarly, DOE must use these test procedures to determine whether the equipment comply with standards adopted pursuant to EPCA. The DOE test procedures for commercial packaged boilers currently appear at 10 CFR 431.86.

When setting standards for the ASHRAE equipment addressed by today's notice, EPCA, as amended by AEMTCA, prescribes certain statutory criteria for DOE to consider. See generally 42 U.S.C. 6313(a)(6)(A)–(D). Any amended standard for covered equipment more stringent than the level contained in ASHRAE Standard 90.1 must be designed to achieve the maximum improvement in energy efficiency that is technologically feasible and economically justified. (42 U.S.C. 6313(a)(6)(A)(ii)(II))

Furthermore, DOE may not adopt any more-stringent standard that would not result in the significant additional conservation of energy. *Id.* In deciding whether a proposed standard is economically justified, DOE must determine whether the benefits of the standard exceed its burdens. DOE must make this determination after receiving comments on the proposed standard, and by considering, to the maximum extent practicable, the following seven factors:

1. The economic impact of the standard on manufacturers and consumers of 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 equipment which are likely to result from the standard;
3. The total projected amount of energy savings likely to result directly from the standard;
4. Any lessening of the utility or the performance of the covered product likely to result from the standard;
5. The impact of any lessening of competition, as determined in writing by the Attorney General, that is likely to result from the standard;
6. The need for national energy conservation; and
7. Other factors the Secretary of Energy considers relevant.

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

EPCA, as codified, also contains what is known as an “anti-backsliding” provision, which prevents the Secretary of Energy from prescribing any amended standard that either increases the maximum allowable energy use or decreases the minimum required energy efficiency of a type of covered equipment. (42 U.S.C. 6313(a)(6)(B)(iii)(I)) 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 of any covered equipment 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. 6313(a)(6)(B)(iii)(II))

Before proposing a standard, DOE typically seeks public input about the analytical framework, models, and tools that it will use to evaluate standards for the product or equipment at issue and the results of preliminary analyses DOE performed for that product or equipment. This NOPM announces the availability of the preliminary Technical Support Document (TSD), which details the preliminary analyses, discusses the comments DOE received from interested parties about the Framework Document, and summarizes the preliminary results of DOE’s analyses. In addition, DOE is announcing a public meeting to solicit comments, data, and other information from interested parties about its analytical framework, models, and preliminary results.

## II. History of Energy Conservation Standards Rulemaking for Commercial

### Packaged Boilers

#### A. Background

The Energy Policy Act of 1992 (EPACT 1992), Public Law 102–486, amended EPCA to add commercial packaged boilers as a type of covered equipment. (42 U.S.C. 6311(1)(J)) EPACT 1992 also amended EPCA with respect to packaged boilers by providing a definition, as well as provisions setting forth applicable requirements for energy conservation standards, test procedures, labeling, and compliance certification. (42 U.S.C. 6311(11)(B); 6313(a)(4); 6314(a)(4); 6315(e); 6316(b))

Most recently, DOE amended its energy conservation standards for commercial packaged boilers through a final rule published in the *Federal Register* (FR) on July 22, 2009 (hereafter referred to as the “July 2009 final rule”). 74 FR 36312. More specifically, the July 2009 final rule updated the energy conservation standards for commercial packaged boilers to correspond to the levels in the 2007 revision of ASHRAE Standard 90.1 (*i.e.*, ASHRAE Standard 90.1–2007). *Id.* at 36355-56 (*codified at* 10 CFR 431.87). Compliance with the amended standards was required beginning on March 2, 2012. These levels are shown in Table II.1 below. Also in the July 2009 final rule, DOE again followed ASHRAE’s approach in Standard 90.1-2007 and adopted a second tier of energy conservation standards for two classes of commercial packaged boilers, which are shown in Table II.2 below. Compliance with the latter standards will be required beginning on March 2, 2022. *Id.*

**Table II.1 Energy Conservation Standards for Commercial Packaged Boilers  
Manufactured on or after March 2, 2012**

<b>Equipment type</b>	<b>Subcategory</b>	<b>Size category (input)</b>	<b>Efficiency level—Effective date: March 2, 2012*</b>
Hot Water Commercial Packaged Boilers	Gas-fired	$\geq 300,000$ Btu/h and $\leq 2,500,000$ Btu/h	80.0% E <sub>T</sub>
Hot Water Commercial Packaged Boilers	Gas-fired	$> 2,500,000$ Btu/h	82.0% E <sub>C</sub>
Hot Water Commercial Packaged Boilers	Oil-fired	$\geq 300,000$ Btu/h and $\leq 2,500,000$ Btu/h	82.0% E <sub>T</sub>
Hot Water Commercial Packaged Boilers	Oil-fired	$> 2,500,000$ Btu/h	84.0% E <sub>C</sub>
Steam Commercial Packaged Boilers	Gas-fired—all, except natural draft	$\geq 300,000$ Btu/h and $\leq 2,500,000$ Btu/h	79.0% E <sub>T</sub>
Steam Commercial Packaged Boilers	Gas-fired—all, except natural draft	$> 2,500,000$ Btu/h	79.0% E <sub>T</sub>
Steam Commercial Packaged Boilers	Gas-fired—natural draft	$\geq 300,000$ Btu/h and $\leq 2,500,000$ Btu/h	77.0% E <sub>T</sub>
Steam Commercial Packaged Boilers	Gas-fired—natural draft	$> 2,500,000$ Btu/h	77.0% E <sub>T</sub>
Steam Commercial Packaged Boilers	Oil-fired	$\geq 300,000$ Btu/h and $\leq 2,500,000$ Btu/h	81.0% E <sub>T</sub>
Steam Commercial Packaged Boilers	Oil-fired	$> 2,500,000$ Btu/h	81.0% E <sub>T</sub>

\* E<sub>T</sub> means “thermal efficiency.” E<sub>C</sub> means “combustion efficiency.”

**Table II.2 Energy Conservation Standards for Commercial Packaged Boilers  
Manufactured on or after March 2, 2022**

<b>Equipment type</b>	<b>Subcategory</b>	<b>Size category (input)</b>	<b>Efficiency level—Effective date: March 2, 2022</b>
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Steam Commercial Packaged Boilers	Gas-fired—natural draft	$\geq 300,000$ Btu/h and $\leq 2,500,000$ Btu/h	79.0% E <sub>T</sub>
Steam Commercial Packaged Boilers	Gas-fired—natural draft	$> 2,500,000$ Btu/h	79.0% E <sub>T</sub>

DOE is initiating this rulemaking pursuant to 42 U.S.C. 6313(a)(6)(C), which requires that every six years, DOE must publish either: (1) a notice of the determination that standards for the equipment do not need to be amended, or (2) a NOPR including proposed energy conservation standards. As noted above, DOE's last final rule for commercial packaged boilers was published on July 22, 2009, so as a result, DOE is required to act to publish one of the above two documents by July 22, 2015. If DOE publishes a NOPR, the agency must proceed to a final rule not later than two years after the NOPR is issued. (42 U.S.C. 6313(a)(6)(C)(iii)(I)) If DOE publishes a determination that the standards do not need to be amended, the agency must make a new determination regarding the need for amended standards not later than three years after the last determination. (42 U.S.C. 6313(a)(6)(C)(iii)(II)) Once completed, this rulemaking will satisfy DOE's statutory obligation under 42 U.S.C. 6313(a)(6)(C).<sup>4</sup>

In addition, DOE notes that on August 13, 2013, DOE published a proposed determination of coverage for natural draft commercial packaged boilers in order to confirm its authority to regulate those products. 78 FR 49202. Because there is currently

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<sup>4</sup> DOE notes that since DOE's last final rule in 2009, ASHRAE has not acted to amend Standard 90.1 in terms of commercial packaged boilers, as would trigger DOE rulemaking action under 42 U.S.C. 6313(a)(6)(A).

no statutory definition of “natural draft commercial packaged boiler,” DOE proposed to define this equipment as follows: “*Natural draft commercial packaged boiler* means a commercial packaged boiler designed to operate with negative pressure in the firebox and in the flue connection created by a chimney or the height of the unit itself, up to the draft control device. Such boilers do not require mechanical drafting equipment to vent combustion gases, but may include mechanical devices such as mechanical flue or stack dampers to limit the heat losses through the flue vent during off-cycle.” DOE plans to include natural draft commercial packaged boilers within the scope of this rulemaking if the outcome of the proposed determination is positive. Accordingly, DOE has considered natural draft equipment for this preliminary analysis.

Lastly, DOE is also currently conducting a separate test procedure rulemaking to consider amended test procedures for commercial packaged boilers. On February 20, 2014, DOE published a request for information (RFI) in the Federal Register that sought comments and information from stakeholders on several issues pertaining to the commercial packaged boiler test procedure. 79 FR 9643. Any amended standard adopted as part of this rulemaking would ultimately be based on the updates to the test procedure (if any) that are adopted in the test procedure rulemaking.

#### B. Current Rulemaking Process

In initiating this rulemaking, DOE prepared a Framework Document, “Energy Conservation Standards Rulemaking Framework Document for Commercial Packaged



Boilers,” which describes the procedural and analytical approaches DOE anticipates using to evaluate energy conservation standards for commercial packaged boilers. DOE published a notice that announced both the availability of the Framework Document and a public meeting to discuss the proposed analytical framework for the rulemaking. That notice also invited written comments from the public. 78 FR 54197 (Sept. 3, 2013). The Framework Document is available

at: [http://www1.eere.energy.gov/buildings/appliance\\_standards/rulemaking.aspx/ruleid/79](http://www1.eere.energy.gov/buildings/appliance_standards/rulemaking.aspx/ruleid/79).

DOE held a public meeting on October 1, 2013, at which it described the various analyses DOE would conduct as part of the rulemaking, such as the engineering analysis, the life-cycle cost (LCC) and payback period (PBP) analyses, and the national impact analysis (NIA). Representatives of manufacturers, trade associations, environmental and energy efficiency advocates, and other interested parties attended the meeting. The participants discussed the following major topics, among others: (1) the rulemaking scope (2) test procedures for commercial packaged boilers; and (3) various issues related to the planned analyses of amended energy conservation standards.

Comments received since publication of the Framework Document have helped DOE identify and resolve issues related to the preliminary analyses. Chapter 2 of the preliminary TSD summarizes and addresses the comments received in response to the Framework Document.

### **III. Summary of the Analyses Performed by DOE**

For the commercial packaged boiler equipment covered in this rulemaking, DOE conducted in-depth technical analyses in the following areas: (1) engineering; (2) markups to determine equipment price; (3) energy use; (4) life-cycle cost and payback period; and (5) national impacts. The preliminary TSD that presents the methodology and results of each of these analyses is available

at [http://www1.eere.energy.gov/buildings/appliance\\_standards/rulemaking.aspx/ruleid/79](http://www1.eere.energy.gov/buildings/appliance_standards/rulemaking.aspx/ruleid/79)

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DOE also conducted, and has included in the preliminary TSD, several other analyses that support the major analyses or are preliminary analyses that will be expanded upon for a NOPR if DOE determines that amended energy conservation standards are technologically feasible, economically justified, and would save a significant amount of energy, based on the information available to DOE. These analyses include: (1) the market and technology assessment; (2) the screening analysis, which contributes to the engineering analysis; and (3) the shipments analysis, which contributes to the LCC and PBP analysis and NIA. In addition to these analyses, DOE has begun preliminary work on the manufacturer impact analysis and has identified the methods to be used for the LCC consumer subgroup analysis, the emissions analysis, the employment impact analysis, the regulatory impact analysis, and the utility impact analysis. DOE will expand on these analyses in the NOPR.

### A. Engineering Analysis

The engineering analysis establishes the relationship between the manufacturer selling price and efficiency levels of the equipment that DOE is evaluating as potential energy conservation standards. This relationship serves as the basis for cost-benefit calculations for individual consumers, manufacturers, and the Nation. The engineering analysis identifies representative baseline equipment, which is the starting point for analyzing technologies that provide energy efficiency improvements. “Baseline equipment” refers to a model or models having features and technologies typically found in minimally-efficient equipment currently available on the market and, for equipment already subject to energy conservation standards, a model that just meets the current standard. After identifying the baseline models, DOE estimated manufacturer selling prices by using a consistent methodology and pricing scheme that includes material costs and manufacturer markups. DOE used these inputs to develop manufacturer selling prices for the baseline and more-efficient designs. Later, in the markups analysis to determine the installed price, DOE converts these manufacturer selling prices into installed prices. Chapter 5 of the preliminary TSD discusses the engineering analysis.

### B. Markups to Determine Commercial Consumer Prices

DOE derives commercial consumer installed prices based on manufacturer markups, retailer markups, distributor markups, contractor markups (where appropriate), and sales taxes. In deriving these markups, DOE determines the major distribution channels for equipment sales, the markup associated with each party in each distribution channel, and the existence and magnitude of differences between markups for baseline equipment (baseline markups) and higher-efficiency equipment (incremental markups).

DOE calculates both overall baseline and overall incremental markups based on the equipment markups at each step in each distribution channel. Chapter 6 of the preliminary TSD addresses the markups analysis.

### C. Energy Use Analysis

The energy use analysis provides estimates of the annual energy consumption of commercial packaged boilers. The energy use analysis seeks to estimate the range of energy consumption of equipment that meets each of the efficiency levels considered in a given rulemaking as they are used in the field. DOE uses these values in the LCC and PBP analyses and in the NIA. Chapter 7 of the preliminary TSD addresses the energy use analysis.

### D. Life-Cycle Cost and Payback Period Analyses

The LCC and PBP analyses determine the economic impact of potential standards on individual commercial consumers. The LCC is the total cost to the commercial consumer of purchasing, installing, and operating the considered commercial packaged boiler equipment over the course of its lifetime. The LCC analysis compares the LCCs of equipment designed to meet possible energy conservation standards with the LCC of the equipment likely to be installed in the absence of standards. DOE determines LCCs by considering: (1) total installed cost to the purchaser (which consists of manufacturer selling price, distribution chain markups, sales taxes, and installation cost); (2) the operating cost of the equipment (energy cost and maintenance and repair cost); (3) equipment lifetime; and (4) a discount rate that reflects the real commercial consumer cost of capital and puts the LCC in present-value terms. The PBP represents the number

of years needed to recover the increase in purchase price (including installation cost) of higher-efficiency equipment through savings in the operating cost of the equipment. PBP is calculated by dividing the incremental increase in installed cost of the higher-efficiency equipment, compared to the baseline equipment, by the annual savings in operating costs. Chapter 8 of the preliminary TSD addresses the LCC and PBP analyses.

#### E. National Impact Analysis

The NIA estimates the national energy savings (NES) and the net present value (NPV) of total consumer costs and savings expected to result from amended standards at specific efficiency levels (referred to as candidate standard levels). DOE calculated NES and NPV for each candidate standard level for commercial packaged boilers as the difference between a base-case forecast (without amended standards) and the standards-case forecast (with standards). DOE determined national annual energy consumption by multiplying the number of units in use (by vintage) by the average unit energy consumption (also by vintage). Cumulative energy savings are the sum of the annual NES determined for the lifetime of the equipment shipped from 2019 to 2048. This 30-year analysis period begins in 2019, the expected first full year of compliance with the amended standards. The NPV is the sum over time of the discounted net savings each year, which consists of the difference between total operating cost savings and increases in total installed costs. Critical inputs to this analysis include shipments projections, estimated equipment lifetimes, equipment installed costs and operating costs, equipment annual energy consumption, the base case efficiency projection, and discount rates. Chapter 10 of the preliminary TSD addresses the NIA.

#### IV. Public Participation

DOE invites input from the public on all the topics described above. The preliminary analytical results are subject to revision following further review and input from the public. A complete and revised TSD will be made available upon issuance of a NOPR. The final rule establishing any amended energy conservation standards will contain the final analytical results and will be accompanied by a final rule TSD.

DOE encourages those who wish to participate in the public meeting to obtain the preliminary TSD from DOE's website and to be prepared to discuss its contents. Once again, a copy of the preliminary TSD is available

at: [http://www1.eere.energy.gov/buildings/appliance\\_standards/rulemaking.aspx/ruleid/7](http://www1.eere.energy.gov/buildings/appliance_standards/rulemaking.aspx/ruleid/7)

9. However, public meeting participants need not limit their comments to the topics identified in the preliminary TSD. DOE is also interested in receiving views concerning other relevant issues that participants believe would affect energy conservation standards for this equipment or that DOE should address in the NOPR.

Furthermore, DOE welcomes all interested parties, regardless of whether they participate in the public meeting, to submit in writing by **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]** comments, data, and other information on matters addressed in the preliminary TSD and on other matters relevant to consideration of energy conservation standards for commercial packaged boilers.

The public meeting will be conducted in an informal conference style. A court reporter will be present to record the proceedings. There shall be no discussion of proprietary information, costs or prices, market shares, or other commercial matters regulated by United States antitrust laws.

After the public meeting and the closing of the comment period, DOE will consider all timely-submitted comments and additional information obtained from interested parties, as well as information obtained through further analyses. Afterward, DOE will publish either a determination that the standards for commercial packaged boilers need not be amended or a NOPR proposing to amend those standards. The NOPR would include proposed energy conservation standards for the equipment covered by the rulemaking, and members of the public would be given an opportunity to submit written and oral comments on the proposed standards.

#### A. Attendance at the Public Meeting

The time and date of the public meeting are listed in the **DATES** and **ADDRESSES** sections at the beginning of this notice. The public meeting will be held at the U.S. Department of Energy, Forrestal Building, Room 8E-089, 1000 Independence Avenue, SW., Washington, DC 20585-0121. To attend the public meeting, please notify Ms. Brenda Edwards at (202) 586-2945. 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. 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 e-

mail: [Regina.Washington@ee.doe.gov](mailto:Regina.Washington@ee.doe.gov) so that the necessary procedures can be completed.

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 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.

Attendees may participate in the public meeting via webinar. Registration information, participant instructions, and information about the capabilities available to



webinar participants will be published on the following

website: [http://www1.eere.energy.gov/buildings/appliance\\_standards/rulemaking.aspx/ruleid/79](http://www1.eere.energy.gov/buildings/appliance_standards/rulemaking.aspx/ruleid/79).

Participants are responsible for ensuring their computer systems are compatible with the webinar software.

The purpose of the meeting is to receive oral and written comments, data, and other information that would provide understanding about potential issues associated with this rulemaking. DOE must receive requests to speak at the meeting before 4:00 p.m. ET, December 1, 2014. DOE must receive a signed original and an electronic copy of any statement to be given at the public meeting before 4:00 p.m. ET, November 24, 2014.

#### B. Procedure for Submitting Requests to Speak

Any person who has an interest in this NOPM or who is a representative of a group or class of persons that has an interest in these issues may request an opportunity to make an oral presentation. Such persons may hand-deliver requests to speak, along with a computer diskette or CD in WordPerfect, Microsoft Word, portable data format (PDF), or text (ASCII) file format to Ms. Brenda Edwards at the address shown in the **ADDRESSES** section at the beginning of this NOPM between 9:00 a.m. and 4:00 p.m. Monday through Friday, except Federal holidays. Requests may also be sent by mail to the address shown in the **ADDRESSES** section or email to [Brenda.Edwards@ee.doe.gov](mailto:Brenda.Edwards@ee.doe.gov).

Persons requesting to speak should briefly describe the nature of their interest in

this rulemaking and provide a telephone number for contact. DOE requests persons selected to be heard to submit an advance copy of their statements at least two weeks before the public meeting. At its discretion, DOE may permit any person who cannot supply an advance copy of their statement to participate, if that person has made advance alternative arrangements with the Building Technologies Office. The request to give an oral presentation should ask for such alternative arrangements.

### C. Conduct of the Public Meeting

DOE will designate a DOE official to preside at the public meeting and may also employ 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 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 presentations by participants, and encourage all interested parties to share their views on issues affecting this rulemaking. Each participant will be allowed to make a prepared general statement (within DOE-determined time limits) prior to the discussion of specific topics. DOE will permit 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 from DOE and 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 posted on the DOE website and will also 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 other information regarding this rulemaking before or after the public meeting, but no later than the date provided at the beginning of this notice. Please submit comments, data, and other information as provided in the **ADDRESSES** section. Submit electronic comments in WordPerfect, Microsoft Word, PDF, or text (ASCII) file format and avoid the use of special characters or any form of encryption. Comments in electronic format should be identified by the Docket Number EERE-2013-BT-STD-0030 and/or RIN 1904-AD01 and, wherever possible, carry the electronic signature of the author. No telefacsimiles (faxes) will be accepted.

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 two copies: one copy of the document including all the information believed to be confidential and one copy of the document with the information believed to be confidential deleted. DOE will make its own determination as to 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) a date upon which such information might lose its confidential nature due to the passage of time; and (7) why disclosure of the information would be contrary to the public interest.

## **V. Approval of the Office of the Secretary**

The Secretary of Energy has approved publication of this notice of public meeting and availability of the preliminary technical support document.

Issued in Washington, DC, on November 13, 2014.



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Kathleen B. Hogan  
Deputy Assistant Secretary for Energy Efficiency  
Energy Efficiency and Renewable Energy