

This document, concerning direct heating equipment is an action issued by the Department of Energy. Though it is not intended or expected, should any discrepancy occur between the document posted here and the document published in the Federal Register, the Federal Register publication controls. This document is being made available through the Internet solely as a means to facilitate the public's access to this document.

[6450-01-P]

DEPARTMENT OF ENERGY

10 CFR Part 430

[Docket Number EERE-2016-BT-STD-0007]

RIN 1904-AD65

Energy Conservation Program: Energy Conservation Standards for Direct Heating Equipment

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

ACTION: Notice of proposed determination (NOPD).

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 direct heating equipment (DHE). 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 document, DOE has tentatively determined that more stringent DHE standards would not be economically justified, and, thus, proposes not to amend its energy conservation standards for DHE.

DATES: DOE will accept comments, data, and information regarding this NOPD no later than [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. See section V, “Public Participation,” for details.

ADDRESSES: Any comments submitted must identify the NOPD on Energy Conservation Standards for Direct Heating Equipment, and provide docket number EERE-2016-BT-STD-0007 and/or regulatory information number (RIN) 1904-AD65. Comments may be submitted using any of the following methods:

1. Federal eRulemaking Portal: www.regulations.gov. Follow the instructions for submitting comments.
2. E-mail: DHE2016STD0007@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., Room 6094,

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 telefacsimilies (faxes) will be accepted. For detailed instructions on submitting comments and additional information on the rulemaking process, see section V of this document (“Public Participation”).

Docket: The docket, which includes Federal Register notices, 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://www.regulations.gov/#!docketDetail;D=EERE-2016-BT-STD-0007>. This webpage contains a link to the docket for this notice on the www.regulations.gov site.

The www.regulations.gov webpage contains simple instructions on how to access all documents, including public comments, in the docket. See section V, “Public Participation,” for further information on how to submit comments through www.regulations.gov.

FOR FURTHER INFORMATION CONTACT:

John Cymbalsky, 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) 287-1692. E-mail: direct_heating_equipment@ee.doe.gov.

Ms. Sarah Butler, U.S. Department of Energy, Office of the General Counsel, GC-33, 1000 Independence Avenue, SW., Washington, DC, 20585-0121. Telephone: (202) 586-1777. E-mail: Sarah.Butler@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:

Table of Contents

- I. Summary of the Proposed Determination
 - A. Authority
 - B. Background
 - 1. Current Standards
 - 2. History of Rulemakings for Direct Heating Equipment
- II. Rationale
- III. Proposed Determination
- IV. Procedural Issues and Regulatory Review
 - A. Review Under Executive Orders 12866 and 13563
 - B. Review Under the Regulatory Flexibility Act
 - C. Review Under the Paperwork Reduction Act
 - D. Review Under the National Environmental Policy Act of 1969
 - E. Review Under Executive Order 13132
 - F. Review Under Executive Order 12988
 - G. Review Under the Unfunded Mandates Reform Act of 1995
 - H. Review Under the Treasury and General Government Appropriations Act, 1999

- I. Review Under Executive Order 12630
- J. Review Under the Treasury and General Government Appropriations Act, 2001
- K. Review Under Executive Order 13211
- L. Review Under the Information Quality Bulletin for Peer Review
- V. Public Participation
 - A. Public Meeting Requests
 - B. Submission of Comments
 - C. Issues on Which DOE Seeks Comment
- VI. Approval of the Office of the Secretary

I. Summary of the Proposed Determination

DOE proposes to determine that energy conservation standards should not be amended for direct heating equipment (DHE). DOE has tentatively determined that the DHE market characteristics are largely similar to those analyzed in the previous rulemaking and the technologies available for improving DHE energy efficiency have not advanced significantly since the previous rulemaking analyses¹ (concluding with the publication of a final rule on April 16, 2010, hereafter “April 2010 Final Rule”). 75 FR 20112. In addition, DOE believes the conclusions reached in the April 2010 Final Rule regarding the benefits and burdens of more stringent standards for DHE are still relevant to the DHE market today. Therefore, DOE has tentatively determined that amended energy conservation standards would not be economically justified.

A. Authority

Title III, Part B² of the Energy Policy and Conservation Act of 1975 (“EPCA” or “the Act”), Public Law 94-163 (codified at 42 U.S.C. 6291-6309) established the Energy Conservation Program for Consumer Products Other Than Automobiles.³ This program covers most major household appliances (collectively referred to as “covered products”) including the DHE, which are the subject of this document. (42 U.S.C. 6292 (a)(9)) EPCA prescribed initial energy conservation standards for DHE and directs DOE to conduct future rulemakings to determine whether to amend these standards. (42 U.S.C. 6295(e)(3) and (4)) DOE is issuing this notice pursuant to that requirement, in addition

¹ With the exception of condensing technology for fan-type wall furnaces, discussed in section II.

² For editorial reasons, upon codification in the U.S. Code, Part B was redesignated as Part A.

³ All references to EPCA in this document refer to the statute as amended through the Energy Efficiency Improvement Act, Pub. L. 114-11 (April 30, 2015).

to the requirement under 42 U.S.C. 6295(m), which states that DOE must periodically review its already established energy conservation standards for a covered product not later than six years after issuance of any final rule establishing or amending such standards. As a result of such review, DOE must either publish a notice of proposed rulemaking to amend the standards or publish a notice of determination indicating that the existing standards do not need to be amended. (42 U.S.C. 6295(m)(1)(A) and (B))

Pursuant to the requirements set forth under EPCA, 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)) Furthermore, DOE may not adopt any standard that would not result in the significant conservation of energy. (42 U.S.C. 6295(o)(3)(B)) Moreover, DOE may not prescribe a standard: (1) for certain products, including DHE, if no test procedure has been established for the product,⁴ 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 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;

⁴ The DOE test procedures for DHE appear at title 10 of the Code of Federal Regulations (CFR) part 430, subpart B, appendix O and 10 CFR 430, subpart B, appendix G (Appendix G).

- (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))

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, 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’s current test procedures for vented home heating equipment address standby mode fossil-fuel energy use.

B. Background

1. Current Standards

In the April 2010 Final Rule, DOE prescribed the current energy conservation standards for DHE manufactured on and after April 16, 2013. 75 FR 20112. These standards are set forth in DOE's regulations at 10 CFR 430.32(i)(2) and are shown in Table I-1.⁵

Table I-1 Federal Energy Conservation Standards for DHE (10 CFR 430.32(i)(2))

Product class	Annual Fuel Utilization Efficiency, April 16, 2013 (percent)
Gas wall fan type up to 42,000 Btu/h	75
Gas wall fan type over 42,000 Btu/h	76
Gas wall gravity type up to 27,000 Btu/h	65
Gas wall gravity type over 27,000 Btu/h up to 46,000 Btu/h	66
Gas wall gravity type over 46,000 Btu/h	67
Gas floor up to 37,000 Btu/h	57
Gas floor over 37,000 Btu/h	58
Gas room up to 20,000 Btu/h	61
Gas room over 20,000 Btu/h up to 27,000 Btu/h	66
Gas room over 27,000 Btu/h up to 46,000 Btu/h	67
Gas room over 46,000 Btu/h	68

⁵ DOE notes that DHE is defined at 10 CFR 430.2 as vented home heating equipment and unvented home heating equipment; however, the existing energy conservation standards apply only to product classes of vented home heating equipment. There are no existing energy conservation standards for unvented home heating equipment.

2. History of Rulemakings for Direct Heating Equipment

EPCA, as codified, initially set forth energy conservation standards for certain DHE product classes that are the subject of this document and directed DOE to conduct two subsequent rulemakings to determine whether the existing standards should be amended. (42 U.S.C. 6295(e)(3) and (4)) The first of these two rulemakings included both DHE and pool heaters and concluded with the April 2010 Final Rule (codified at 10 CFR 430.32(i) and (k)). 75 FR 20112. With respect to DHE, the first rulemaking amended the energy conservation standards for vented home heating equipment, a subset of DHE, and consolidated some of the product classes from the previous standards established by EPCA. Compliance with the amended standards was required beginning on April 16, 2013. Id. DOE did not issue standards for unvented home heating equipment, a subset of DHE, finding that such standards would produce insignificant energy savings. 75 FR 20112, 20130.

This rulemaking satisfies the statutory requirement under EPCA to (1) conduct a second round of review of the DHE standards (42 U.S.C. 6295(e)(4)(B)) and (2) publish either a notice of determination that standards for DHE do not need to be amended or a notice of proposed rulemaking proposing to amend the DHE energy conservation standards (42 U.S.C. 6295(m)(1)). To initiate this rulemaking, DOE issued a Request for Information (RFI) in the Federal Register on March 26, 2015 (hereafter “March 2015 RFI”). 80 FR 15922. Through that RFI, DOE requested data and information pertaining to its planned technical and economic analyses for DHE and pool heaters. Although the March 2015 RFI and the previous energy conservation standards rulemaking included both DHE and

pool heaters, going forward DOE has elected to conduct separate rulemakings for each of these products. This rulemaking pertains solely to the energy conservation standards for DHE. As such, a new docket has been created that pertains solely to this DHE rulemaking, which has been populated with relevant comments from the March 2015 RFI (the docket is available <http://www.regulations.gov/#!docketDetail;D=EERE-2016-BT-STD-0007>).

April 2010 Final Rule

In the most recent DOE rulemaking for DHE energy conservation standards, DOE initially proposed standards for vented home heating products in a NOPR published on December 11, 2009 (“December 2009 NOPR”) that represented a six AFUE percentage point (weighted-average across all product classes) increase over the standards initially established by EPCA and codified at 42 U.S.C. 6295(e)(3). 74 FR 65852 (December 11, 2009). The December 2009 NOPR proposed standard level, TSL 3, represented an improvement in efficiency from the previous baseline level of 74-percent AFUE to 77-percent for gas wall fan DHE, an improvement in efficiency from the previous baseline level of 64-percent AFUE to 71-percent AFUE for gas wall gravity units, an improvement in efficiency from the previous baseline level of 57- percent AFUE to 58-percent AFUE for gas floor DHE (the max-tech level), and an improvement in efficiency from the previous baseline level of 64-percent AFUE to 68-percent for gas room DHE at the representative input rating ranges. 74 FR 65852, 65943 (December 11, 2009).

DOE's initial analysis in the December 2009 NOPR showed that TSL 3 could result in as much as a \$6.0 million (33.54%) decrease in the Industry Net Present Value, or INPV, with total conversion costs (costs for redesigning and retooling product lines not already meeting the amended standards) potentially amounting to \$6.39 million. 74 FR 65852, 65942 (December 11, 2009).

In response to the December 2009 NOPR several commenters recommended that DOE not adopt amended standards for DHE due to significant impact on manufacturers and low shipments of DHE (and therefore low energy savings potential). Commenters indicated that the manufacturer investments needed to comply with standards set at TSL 3 would not be justified due to the large investment needed to upgrade product lines and the declining shipments through which DHE manufacturers would need to recoup their expenditures. Various comments also suggested that product offerings would be reduced or manufacturers would leave the market entirely if TSL 3 were selected. The U.S. Department of Justice commented that there was significant risk of reducing competition resulting from businesses leaving the market and requested that DOE consider the possible impact on competition in determining standards for the final rule. DOE agreed that TSL 3 posed the risk of reduced product lines or manufacturers exiting the market. Commenters also expressed concern that employment in the DHE industry would be negatively affected by amended energy conservation standards. Several manufacturers of DHE believed that the proposed standard would harm employment due to elimination of non-compliant product lines and/or insufficient return on the investment necessary to meet new standards.

After considering these comments responding to the proposed TSL 3 in the December 2009 NOPR, DOE ultimately rejected TSL 3 and all higher TSLs in the final rule, on the grounds that capital conversion costs would lead to a large reduction in INPV and that small businesses would be disproportionately impacted. In the analysis for the April 2010 Final Rule, DOE updated its estimate for the maximum decrease in INPV to 42.4% (or \$7.0 million) from the 33.54% maximum decrease estimated in the December 2009 NOPR. 75 FR 20112, 20218-20219 (April 16, 2010). DOE also notes that the life-cycle cost (LCC) and payback period analyses (PBP) for TSL 4 and higher suggested that benefits to consumers were outweighed by initial costs. 75 FR 20112, 20215-20218 (April 16, 2010).

In the previous DHE rulemaking, DOE found that the DHE industry had undergone significant consolidation, with three manufacturers, including two small businesses, controlling the vast majority of the market. DOE determined that a steady decline in shipments drove industry consolidation and found that the remaining DHE manufacturers maintained a variety of legacy brands and product lines in order to meet the needs of consumers replacing their existing DHE products, rather than product lines for new construction. DOE determined in the April 2010 Final Rule that a standard above TSL 2 would have required manufacturers to undertake significant investments in order to upgrade a series of product lines intended primarily for replacement applications. Because the DHE market is a low-volume market, manufacturers would have to spread their product development costs and capital investments over relatively few shipments.

At levels above TSL 2, DOE determined that there would be limited opportunity for manufacturers to recoup these costs, leading to significant declines in industry profitability. Furthermore, DOE found that small business manufacturers could be disproportionately disadvantaged by a more stringent standard based on a combination of low shipment volumes and a high ratio of anticipated investment costs to annual earnings. As a result, DOE concluded that TSLs higher than TSL 2 would likely induce small business manufacturers to reduce their product offerings or to exit the market entirely. 75 FR 20112, 20217-20219 (April 16, 2010). DOE, therefore, adopted standards at TSL 2 for vented home heating equipment. Compliance with the adopted standards (codified at 10 CFR 430.32(i)(2)) was required for all vented home heating equipment manufactured on or after April 16, 2013.

II. Rationale

For this rulemaking DOE conducted a review of the current DHE market, including product literature and product listings in the DOE Compliance Certification Management System (CCMS) database and Air-Conditioning, Heating, and Refrigeration Institute (AHRI) product directory.⁶ DOE contractors also analyzed current products through product teardowns and engaged in manufacturer interviews to obtain further information in support of its analysis. Through this analysis, DOE has determined that few changes to the industry and product offerings have occurred since the April 2010 Final Rule. As

⁶ The AHRI directory for DHE can be found at: <https://www.ahridirectory.org/ahridirectory/pages/dht/defaultSearch.aspx>. The DOE CCMS database can be found at: <http://www.regulations.doe.gov/certification-data/>.

such, DOE has tentatively determined that the conclusions presented in the April 2010 Final Rule are still valid. Furthermore, in response to the March 2015 RFI, DOE received seven comment submissions. Only one submission, submitted by AHRI,⁷ contained comments pertaining to DHE.⁸ (Docket EERE-2016-BT-STD-0007: AHRI, No. 1 at p. 5-8)⁹ The following discussion addresses the status of the current DHE market as well as issues raised in the comments submitted by AHRI and during manufacturer interviews.

As part of the analysis for this proposed determination, DOE reviewed the products offered on the market by analyzing the DOE CCMS database¹⁰ and AHRI product directory¹¹ for DHE. DOE found that the number of models offered in each of the DHE product classes has decreased overall since the previous rulemaking. Table II-1 presents the number of models for each product class in the current DOE CCMS database along with the number of models identified for the April 2010 Final Rule.

⁷ AHRI's comment submission in response to the March 2015 RFI contained comments pertaining to DOE's standards NOPR rulemaking analyses, including the shipments analysis, life cycle cost (LCC) and payback period (PBP) analyses, and energy use analysis. DOE is not responding to these particular comments at this time because DOE is proposing not to amend its standards for DHE, and therefore is not conducting the analyses to which these comments apply. If, in response to feedback regarding this document, DOE elects to conduct a rulemaking that would amend DHE standards, DOE will respond to these comments at that time.

⁸ The remaining six submissions contained comments only relevant to pool heaters.

⁹ 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 DHE (Docket No. EERE-2016-BT-STD-0007), which is maintained at www.regulations.gov. This notation indicates that the statement preceding the reference was made by AHRI, is from document number 1 in the docket, and appears at pages 5-8 of that document.

¹⁰ This database can be found at: <http://www.regulations.doe.gov/certification-data/>.

¹¹ This database can be found at: <https://www.ahridirectory.org/ahridirectory/pages/home.aspx>.

Table II-1 DHE Model Counts by Product Class for Current and Previous Rulemakings

Product Class	2015 Model Count*	2010 Rulemaking Model Count
Gas floor type with an input capacity over 37,000 Btu/h	15	15
Gas floor type with an input capacity up to 37,000 Btu/h		
Gas room type with an input capacity over 20,000 Btu/h up to 27,000 Btu/h	28	29**
Gas room type with an input capacity over 27,000 Btu/h up to 46,000 Btu/h		
Gas room type with an input capacity over 46,000 Btu/h		
Gas room type with an input capacity up to 20,000 Btu/h		
Gas wall fan type with an input capacity over 42,000 Btu/h	68	82
Gas wall fan type with an input capacity up to 42,000 Btu/h		
Gas wall gravity type with an input capacity over 27,000 Btu/h up to 46,000 Btu/h	56	52
Gas wall gravity type with an input capacity over 46,000 Btu/h		
Gas wall gravity type with an input capacity up to 27,000 Btu/h		

*Using DOE CCMS database.

**The total room heater model count for the 2010 Final Rule was 123 models, however 94 of those models would no longer be considered DHE and, as such, have been excluded from this count.

DOE also examined available technologies used to improve the efficiency of DHE. In the previous DHE rulemaking, DOE considered the following technology options in the engineering analysis for improving the efficiency of vented home heating equipment.

- Improved heat exchanger
- Two-speed blower (fan-type wall furnaces)
- Induced draft
- Electronic ignition

74 FR 65852, 65887 (December 11, 2009).

AHRI commented in response to the March 2015 RFI that the current energy conservation standards are close to if not at the maximum technology level for most product classes of DHE. (Docket EERE-2016-BT-STD-0007: AHRI, No. 1 at p. 4) During confidential manufacturer interviews, DOE received similar feedback regarding the small potential for improving efficiency over current standards for most product classes. Manufacturers suggested that the efficiency of these products is at or near the maximum attainable by improving the heat exchanger. Manufacturers indicated that because DHE are primarily sold as replacement units they are constrained by the footprint of the DHE unit which they are replacing, and so the opportunity to increase the heat exchanger size (and therefore size of the unit) is limited. They indicated that blowers and induced draft technologies requiring electricity are not currently found on

the market or in any prototypes for gravity-type floor furnaces, room heaters, and floor furnaces because these products are designed to function entirely without electricity. Moreover, they suggested that because these units are primarily sold as replacement units, new designs or prototypes are generally not being pursued. DOE notes that the same technology options were considered as part of the previous DHE rulemaking analysis, and agrees that the technology options available for DHE likely have limited potential for achieving energy savings.¹²

Furthermore, the costs of these technology options are anticipated to be similar or higher than in the previous rulemaking analysis. As shipments have continued to decrease, DOE anticipates that the purchasing power of DHE manufacturers may have decreased because purchasing quantities for materials or parts (e.g. blower motors, electronic ignition components) have likely decreased. Therefore the incremental costs of manufacturing DHE units at higher efficiency levels may be similar or higher as compared to the previous rulemaking.

DOE seeks comment on its conclusion that the DHE market and technology options (except for condensing technology, discussed below) are similar to the previous rulemaking. This is identified as Issue 1 in section V.C.

¹² DOE notes that for room heaters with input capacity up to 20,000 Btu/h, the maximum AFUE available on the market increased from 59% in 2009 (only one unit at this input capacity was available on the market at that time) to 71% in 2015. DOE anticipates that this due to heat exchanger improvements only because these units do not use electricity. Due to the small input capacity, DOE does not believe that this increase in AFUE (based on heat exchanger improvements relative to input capacity) is representative of or feasible for other room heater product classes.

In addition to these technology options, DOE notes that a condensing fan-type wall furnace has become available since the last rulemaking. Two input capacities are available: 17,500 Btu/h with a 90.2% AFUE rating, and 35,000 Btu/h with a 91.8% AFUE rating. DOE considers this basic model the maximum technology (“max-tech”) option for fan-type wall furnaces. By statute, DOE must set amended standards that result in the maximum improvement in efficiency that is technologically feasible (42 U.S.C. 6295(p)(1)) and economically justified. (42 U.S.C. 6295(o)(2)(A)) DOE generally considers technologies available in the market or in prototype products in its list of technologies for improving efficiency. Therefore, DOE considers 91% AFUE the max-tech efficiency level for fan-type wall furnaces for this rulemaking. DOE notes that the max-tech efficiency level for fan-type wall furnaces in the April 2010 Final Rule was 80% AFUE.

With respect to the condensing max-tech efficiency level for fan-type wall furnaces, DOE received feedback during manufacturer interviews regarding the manufacturer production cost for the unit, as well as information regarding shipments, which indicated that condensing models are significantly more expensive to manufacture than non-condensing models and that shipments are currently negligible compared to overall DHE shipments. DOE conducted a teardown analysis (“reverse engineering”) of the condensing fan-type wall furnace to confirm the manufacturer production cost. As anticipated, the manufacturer production cost for a condensing unit with 91% AFUE is the highest among fan-type wall furnaces, and represents a 23% incremental cost increase over a unit at 80%

AFUE.¹³ Manufacturer feedback indicated that shipments of these units are so low as to be negligible, as consumers are not willing to pay the high initial cost for such products. Furthermore, only one manufacturer currently makes a condensing fan-type wall furnace and others would need to make substantial investments in order to produce these units on a scale large enough to support a Federal minimum standard. Therefore, DOE has tentatively concluded that this technology option, which was not considered in the analysis for the April 2010 Final Rule, would not be economically justified today when analyzed for the Nation as a whole. DOE believes that severe manufacturer impacts would be expected if an energy conservation standard were adopted at this level. DOE seeks feedback on its determination that adopting a condensing efficiency level for fan-type wall furnaces would not be economically justified. This is identified in Issue 2 in section V.C.

Since the April 2010 Final Rule, the DHE industry has seen further consolidation, with the total number of manufacturers declining from six to four. Furthermore, according to manufacturers,¹⁴ shipments have further decreased since the April 2010 Final Rule, and therefore it would be more difficult for manufacturers to recover capital expenditures resulting from increased standards. DOE acknowledges that DHE units continue to be produced primarily as replacements and that the market is small. DOE expects that shipments will continue to decrease and amended standards would likely accelerate the trend of declining shipments. Moreover, DOE anticipates small business impacts may be

¹³ Manufacturer production costs assumes production volumes in the case that 91% AFUE is the energy conservation standard for this product class.

¹⁴ Information obtained during confidential manufacturer interviews.

significant, as two of the four remaining manufacturers subject to DHE standards are small businesses. DOE believes that its conclusions regarding small businesses from the April 2010 Final Rule (i.e., that small businesses would be likely to reduce product offerings or leave the DHE market entirely if the standard was set above the level adopted in that rulemaking) are still valid concerns. In addition, DOE continues to believe that an energy conservation standard for unvented home heating equipment would produce negligible energy savings, as DOE concluded in the April 2010 Final Rule.

Shipments of DHE have continued to decrease since the last DHE energy conservation standards rulemaking. Low and decreasing shipments were cited by several commenters in response to the December 2009 NOPR as a reason that manufacturers would be unlikely to recoup investments after redeveloping product lines to meet more stringent standards. In the shipments analysis published in the April 2010 Final Rule, DOE forecasted DHE shipments would decrease 30% over the analysis period (30 years) from the 2005 level (see Chapter 9 of the TSD for the April 2010 Final Rule¹⁵). This analysis predicted total DHE shipments of approximately 150,000 units in 2014. Based on feedback obtained during confidential manufacturer interviews in 2015, DOE believes actual shipments in 2014 were closer to 120,000. DOE notes that low and decreasing shipment volume is primarily due to these products being sold predominantly as replacements. AHRI commented in response to the March 2015 RFI that the DHE market is already shrinking due to DHE being a replacement product, and that less than 5

¹⁵ This document is available at regulations.gov, docket number EERE-2006-STD-0129.

percent of industry sales are for new construction. (Docket EERE-2016-BT-STD-0007: AHRI, No. 1 at p. 4) DOE has tentatively concluded that low shipment volumes remains a primary concern for manufacturers in light of potentially amended energy conservation standards. DOE seeks information and data related to shipments for DHE and this identified as Issue 3 in section V.C.

III. Proposed Determination

Due to the lack of advancement in the DHE industry since the April 2010 final rule in terms of product offerings, available technology options and associated costs, and declining shipment volumes, DOE believes that amending the DHE energy conservation standards would impose a substantial burden on manufacturers of DHE, particularly to small manufacturers. DOE rejected higher TSLs during the previous DHE rulemaking due to significant impacts on industry profitability, risks of accelerated industry consolidation, and the likelihood that small manufacturers would experience disproportionate impacts that could lead them to discontinue product lines or exit the market altogether. DOE believes that the market and the manufacturers' circumstances are similar to those found when DOE last evaluated amended energy conservation standards for DHE for the April 2010 Final Rule. As such, DOE believes that amended energy conservation standards for DHE would not be economically justified at any level above the current standard level because benefits of more stringent standards would not outweigh the burdens. Therefore, DOE has tentatively determined not to amend the DHE energy conservation standards. DOE seeks comment on its tentative determination not to

amend its energy conservation standards for DHE and this is identified as Issue 4 in section V.C.

As discussed in section I.A, EPCA requires DOE to incorporate standby mode and off mode energy use into a single amended or new standard (if feasible) or prescribe a separate standard for standby mode and off mode energy consumption in any final rule establishing or revising a standard for a covered product, adopted after July 1, 2010. (42 U.S.C. 6295(gg)(3)(A)-(B)) Because DOE does not propose to amend standards for DHE in this document, DOE is not required to propose amended standards that include standby and off mode energy use. DOE notes that fossil fuel energy use in standby mode and off mode is already included in the AFUE metric, and DOE anticipates that electric standby and off mode energy use is small in comparison to fossil fuel energy use. DOE seeks comment on its proposal not to amend its standards for DHE to include electric standby and off mode energy use. This is identified as Issue 5 in section V.C.

IV. Procedural Issues and Regulatory Review

A. Review Under Executive Orders 12866 and 13563

This proposed determination is not subject to review under Executive Order (E.O.) 12866, “Regulatory Planning and Review.” 58 FR 51735 (October 4, 1993).

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 reviewed this proposed determination under the provisions of the Regulatory Flexibility Act and the policies and procedures published on February 19, 2003. In this proposed determination, DOE finds that amended energy conservation standards for DHE would not be economically justified at any level above the current standard level because benefits of more stringent standards would not outweigh the burdens. If finalized, the determination would not establish amended energy conservation standards for DHE. On the basis of the foregoing, DOE certifies that the proposed determination, if adopted, would have no significant economic impact on a substantial number of small entities. Accordingly, DOE has not prepared an IRFA for this proposed determination. DOE will transmit this certification and supporting statement of factual basis to the Chief Counsel for Advocacy of the Small Business Administration for review under 5 U.S.C. 605(b).

C. Review Under the Paperwork Reduction Act

This proposed determination, which proposes to determine that amended energy conservation standards for DHE would not be economically justified at any level above the current standard level because benefits of more stringent standards would not outweigh the burdens, would impose no new information or record keeping requirements. Accordingly, the Office of Management and Budget (OMB) clearance is not required under the Paperwork Reduction Act. (44 U.S.C. 3501 et seq.)

D. Review Under the National Environmental Policy Act of 1969

In this NOPD, DOE tentatively determines that amended energy conservation standards for DHE would not be economically justified at any level above the current standard level because benefits of more stringent standards would not outweigh the burdens. DOE has determined that review under the National Environmental Policy Act of 1969 (NEPA), Pub. L. 91-190, codified at 42 U.S.C. 4321 et seq. is not required at this time because standards are not being proposed.

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. As this NOPD determines that amended standards are not likely to be warranted for DHE, there is no impact on the policymaking discretion of the states. Therefore, no 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 determination 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. This proposed determination contains neither an intergovernmental mandate nor a mandate that may

result in the expenditure of \$100 million or more in any year, so these UMRA 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 proposed determination 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 determination 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 NOPD 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.

Because the NOPD tentatively determines that amended standards for DHE are not warranted, it is not a significant energy action, nor has it been designated as such by the Administrator at OIRA. Accordingly, DOE has not prepared a Statement of Energy Effects.

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 website:

www1.eere.energy.gov/buildings/appliance_standards/peer_review.html.

V. Public Participation

A. Public Meeting Requests

Interested parties may submit comments requesting that a public meeting discussing this NOPD be held at DOE Headquarters. DOE will accept such requests no later than the date provided in the DATES section at the beginning of this document. As with other comments regarding this determination, interested parties may submit requests using any of the methods described in the ADDRESSES section at the beginning of this document.

B. 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 document.

Submitting comments via www.regulations.gov. The www.regulations.gov webpage 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 (CBI)). Comments submitted through www.regulations.gov cannot be claimed as CBI. Comments received through the website will waive any CBI claims for the information submitted. For information on submitting CBI, see the Confidential Business Information section 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).

C. 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 assumptions that only minor changes to the DHE market have occurred since the last DOE rulemaking and that overall shipments of DHE have continued to decrease. See section II.
2. DOE seeks comment on its determination that adopting a condensing efficiency level for fan-type wall furnaces would not be economically justified. See section II.
3. DOE seeks data and information pertaining to DHE shipments. See section II.
4. DOE seeks comment on its proposal not to amend energy conservation standards for DHE because more stringent standards would not be economically justified. See section III.
5. DOE seeks comment on its proposal not to amend its standards for DHE to include standby and off mode electrical consumption. See section III.

VI. Approval of the Office of the Secretary

The Secretary of Energy has approved publication of this notice of proposed rulemaking.

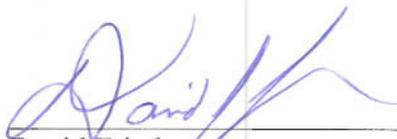
VI. Approval of the Office of the Secretary

The Secretary of Energy has approved publication of this notice of proposed rulemaking.

List of Subjects in 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 March 25, 2016.



David Friedman
Principal Deputy Assistant Secretary
Energy Efficiency and Renewable Energy