BUILDING TECHNOLOGIES PROGRAM

U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy

Direct Heating Equipment Energy Conservation Standards Notice of Proposed Rulemaking

September 1, 2011

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Energy Efficiency & Renewable Energy
DHE-2011-STD-0047@ee.doe.gov

Welcome and Introduction

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- Introductions
- Role of the Facilitator
- Ground Rules (norms)
  - Listen as an ally
  - Use short, succinct statements/keep to the point
  - Hold sidebar conversations outside the room
  - Focus on issues, not personalities
  - One person speak at a time (raise hand to be recognized; state your name for the record)
  - Set cell phones to silent/vibrate
- Housekeeping Items

Public Meeting Agenda

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1. Introduction
2. Regulatory History
3. Proposed Amended Definition of Vented Hearth Heater
4. Analysis of National Energy Savings
5. Small Business Impacts
6. Closing Remarks

Introduction

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Introduction

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- Purpose of this Public Meeting:
  - Present the analysis and justification for amending the definition of “vented hearth heater”;
  - Inform interested parties and facilitate the rulemaking process;
  - Provide a forum for public comment on rulemaking issues; and
  - Encourage interested parties to submit data, information, and written comments.

Introduction

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- Issue Boxes:

Issue Box: DOE welcomes comment on its Notice of Proposed Rulemaking for Direct Heating Equipment. Throughout this presentation, specific issues will be raised for comment on slides with issue boxes such as this, ***with identifying numbers corresponding to those in the Notice of Proposed Rulemaking***. Nonetheless, comments concerning any part of that document or this presentation are welcome.

Introduction

- At this time DOE welcomes opening statements from Interested Parties.

Regulatory History

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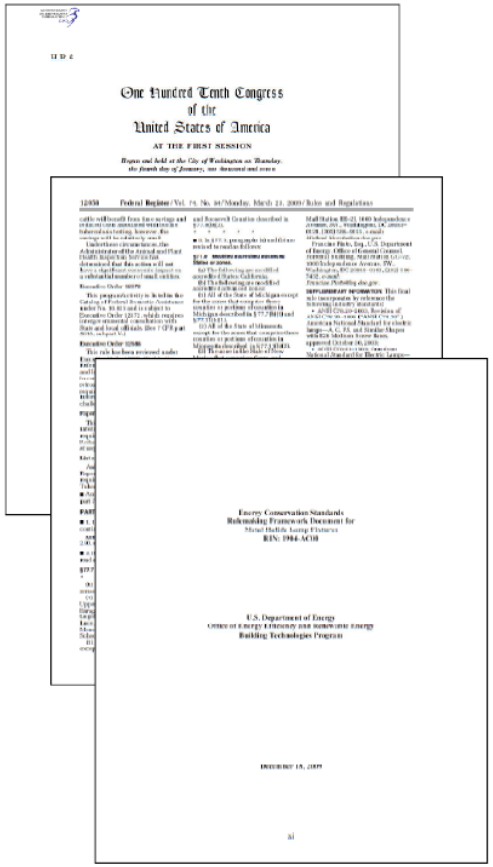
Regulatory History

- Energy Policy and Conservation Act (EPCA) of 1975 (Public Law 94-163)
  - Prior to being amended in 1987, EPCA included “home heating equipment” as covered products.
  - The National Appliance Energy Conservation Act of 1987 (NAECA; Pub. L. 100-12) amended EPCA to replace the term “home heating equipment” with “direct heating equipment,” establish standards for the direct heating equipment, and require that DOE determine whether these standards should be amended. (42 U.S.C. 6295(e)(3)-(4)).



Regulatory History

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- DOE amended the statutorily-prescribed standards for direct heating equipment (DHE) for the first time in a final rule published on April 16, 2010. 75 FR 20112.
- The April 2010 final rule:
  - Created a definition for "vented hearth heater"
  - Established product classes for gas hearth direct heating equipment (*i.e.*, vented hearth heaters)
  - Amended the minimum standards for direct heating equipment, including gas hearth direct heating equipment.
- EPCA does not define "direct heating equipment." DOE established definitions for: (1) "direct heating equipment"; (2) "vented home heating equipment" or "vented heater"; and (3) "vented hearth heater."

Regulatory History

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- DOE interprets the term "vented hearth heater" as including vented heating hearth products, decorative hearth products, and gas log sets.
  - DOE believes that because these products provide heat to the living space, they meet the definition of "direct heating equipment."

Issue #1: Given the lack of a statutory definition for "direct heating equipment," DOE requests comment on whether DOE's interpretation that decorative vented hearth products and vented gas log sets are types of direct heating equipment is reasonable.

Proposed Amended Definition of Vented Hearth Heater

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Proposed Amended Definition of Vented Hearth Heater

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- Upon further consideration of the April 2010 final rule, DOE developed its current proposal, which it believes would result in significant additional energy savings, preserve consumer choice, and reduce the burden on the industry.
- DOE is proposing to amend the criteria for a vented gas hearth product or vented gas log set to be considered decorative in nature, and thereby eligible for exclusion from DOE energy conservation standards for vented hearth heaters.

Proposed Amended Definition of Vented Hearth Heater

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- The proposed exclusion criteria are:
  - Certified to ANSI Z21.50 and not ANSI Z21.88 (for vented gas hearth products only [*e.g.*, gas fireplaces, gas fireplace inserts, gas stoves]);
  - Certified to ANSI Z21.60 (for vented gas log sets only);
  - Sold without a thermostat and with a warranty provision expressly voiding all manufacturer warranties in the event the product is used with a thermostat;
  - Expressly and conspicuously identified on its rating plate and in all manufacturer's advertising and product literature as a "Decorative Product: Not For Use As A Heating Appliance" and
  - With respect to products manufactured after July 1, 2014, not equipped with a standing pilot light or other continuously-burning ignition source.

Proposed Amended Definition of Vented Hearth Heater

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- The proposed definition of "Vented Hearth Heater" reads as follows:

Vented Hearth Heater means a vented appliance which simulates a solid fuel fireplace and is designed to furnish warm air, with or without duct connections, to the space in which it is installed. The circulation of heated room air may be by gravity or mechanical means. A vented hearth heater may be freestanding, recessed, zero clearance, or a gas fireplace insert or stove. The following products are not subject to the energy conservation standards for vented hearth heaters:

1. Vented gas log sets that meet all of the following four criteria:
   a. Certified to ANSI Standard Z21.60;
   b. Sold without a thermostat and with a warranty provision expressly voiding all manufacturer warranties in the event the product is used with a thermostat;
   c. Expressly and conspicuously identified on its rating plate and in all manufacturer's advertising and product literature as a "Decorative Product: Not For Use As A Heating Appliance"; and
   d. With respect to products manufactured after July 1, 2014, not equipped with a standing pilot light or other continuously-burning ignition source; and
2. Vented gas hearth products that meet all of the following four criteria:
   a. Certified to ANSI Standard Z21.50 and not to ANSI Standard Z21.88;
   b. Sold without a thermostat and with a warranty provision expressly voiding all manufacturer warranties in the event the product is used with a thermostat;
   c. Expressly and conspicuously identified on its rating plate and in all manufacturer's advertising and product literature as a "Decorative Product: Not For Use As A Heating Appliance"; and
   d. With respect to products manufactured after July 1, 2014, not equipped with a standing pilot light or other continuously-burning ignition source.

Proposed Amended Definition of Vented Hearth Heater

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Issue #2: The proposed compliance date (*i.e.*, July 1, 2014) for vented gas hearth products and vented gas log sets to remove standing pilot lights or other continuously-burning ignition in order to qualify for the exclusion. DOE seeks information regarding what manufacturers will need to do to meet that date, or whether a different date would be preferable. If suggesting a different date, DOE is interested in specific rationales and accompanying data as to why a different timeline for eliminating standing pilots or other continuously-burning ignition sources from decorative gas hearth products and/or vented gas log sets may be warranted.

Issue #3: The proposed requirements for exclusion from the energy conservation standard as a decorative vented hearth product or vented gas log set.

National Energy Savings Analysis

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National Energy Savings Analysis

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- Energy Use Estimates
  - Average continuous standing pilot energy use:
    - 350 Btu/h for decorative vented hearth products (April 2010 Heating Products Final Rule)
    - 1,250 Btu/h for vented gas logs (models information)
  - Operating hours of continuous pilot lights:
    - 75% operate year round (8,760 hours/year)
    - 25% operate one-fourth of the year (2,190 hours/year)
  - Average unit energy consumption:
    - 2.67 million Btu per unit for decorative vented hearth products
    - 9.53 million Btu per unit for vented gas logs
- Shipments
  - Annual average shipment estimates:
    - 460,000 decorative vented hearth products (70% of vented hearth products from James Houck report to the Hearth, Patio, & Barbecue Association (HPBA) and HPBA historical shipments data)
    - 103,000 vented gas logs units (HPBA historical shipments data)
  - Fraction of shipments with standing pilot lights:
    - 38 percent of vented decorative hearth models (models information)
    - 20 percent of vented gas logs (1997 GTI study)
- Lifetime - 15 year on average (April 2010 Heating Products Final Rule)
- National Energy Savings (2013-2042)
  - 0.17 quads for decorative hearth products
  - 0.07 quads for vented gas log sets
  - 0.12 quads net additional NES accounting for April 2010 Heating Products Final Rule

Small Business Impacts

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- Residential direct heating equipment (including hearth product) manufacturing is classified under NAICS 333414, "Heating Equipment (except Warm Air Furnaces) Manufacturing."
  - The size threshold for a small business is 500 employees or fewer.
  - DOE identified 10 vented gas hearth DHE small business manufacturers in the April 2010 final rule. DOE identified 7 manufacturers of vented gas log sets, 3 of which also manufacture vented gas hearth products.
- DOE estimated manufacturer compliance costs of the amended definition based on analysis done in the April 2010 final rule.
  - DOE assumed the primary cost of compliance will be to recertify products to the applicable ANSI standards if they are modified to meet the exclusion. DOE estimated the compliance costs will be approximately $693,000.

Small Business Impacts

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Issue #4: The impacts of the proposed amended definition of "vented hearth heater" on small business manufacturers of decorative vented hearth products or vented gas log sets.

Closing Remarks

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Closing Remarks

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- Instructions for Submitting Written Comments:
- In all correspondence, please refer to the Direct Heating Equipment rulemaking by:
  - Direct Heating Equipment Rulemaking,
  - Docket Number EERE–2011–BT–STD–0047, and
  - Regulatory Identification Number (RIN) 1904-AC56
- **Email:** DHE-2011-STD-0047@ee.doe.gov

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- **Comment period closes September 20, 2011.**

Closing Remarks

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- Relevant URLs:
  - DOE Appliance Standards: http://www1.eere.energy.gov/buildings/appliance_standards
  - Residential Direct Heating Equipment webpage: http://www1.eere.energy.gov/buildings/appliance_standards/residential/direct_heating.html
  - Direct Heating Equipment NOPR Public Meeting webpage: http://www1.eere.energy.gov/buildings/appliance_standards/residential/residential_direct_heating_equipment_public_meeting_09_01_11.html