



U.S. Department of  
**ENERGY**

# Energy Conservation Standards Activities

Submitted Pursuant to:

Section 141 of the Energy Policy Act of 2005 & Section 305  
of the Energy Independence and Security Act of 2007

United States Department of Energy

Washington, DC 20585

## List of Acronyms

AHRI – Air-Conditioning, Heating and Refrigeration Institute  
ANOPR – Advance Notice of Proposed Rulemaking  
ANSI – American National Standards Institute  
ASHRAE – American Society of Heating, Refrigerating and Air-Conditioning Engineers  
BR – Bulge Reflector (lamps)  
CEA – Consumer Electronics Association  
DOE – U.S. Department of Energy  
EISA 2007– Energy Independence and Security Act of 2007  
EPACT 2005 – Energy Policy Act of 2005  
EPCA – Energy Policy and Conservation Act  
ER – Elliptical Reflector (lamps)  
FY – Fiscal Year  
GSFL – General Service Fluorescent Lamp  
GSIL – General Service Incandescent Lamp  
HID – High-Intensity Discharge (lamps)  
IEC – International Electrotechnical Commission  
IRL – Incandescent Reflector Lamp  
LED – Light-Emitting Diode  
NODA – Notice of Data Availability  
NOPD – Notice of Proposed Determination  
NOPM – Notice of Public Meeting  
NOPR – Notice of Proposed Rulemaking  
OLED – Organic Light-Emitting Diode  
Q – Quarter  
SNOPR – Supplemental Notice of Proposed Rulemaking  
TP – Test Procedure  
U.S.C. – United States Code



# ENERGY CONSERVATION STANDARDS ACTIVITIES

## AUGUST 2010

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# I. Introduction

This report responds to requirements in section 141 of the Energy Policy Act of 2005 (EPACT 2005), Pub. L. 109-58, and section 305 of the Energy Independence and Security Act of 2007 (EISA 2007), Pub. L. 110-140, to provide semi-annual updates of the U.S. Department of Energy's (DOE) progress with respect to the implementation of energy conservation standards and test procedures.

Section 141 of EPACT 2005 requires both an initial report and semi-annual implementation reports, until such time as DOE has promulgated all of the overdue standards. This document represents the ninth such semi-annual implementation report.

Section 305 of EISA 2007 expands DOE's existing reporting requirements to include progress reports on all rulemaking activities required by EISA 2007. Because the topics and reporting intervals in section 141 of EPACT 2005 and section 305 of EISA 2007 are substantially similar, DOE began consolidating the reports starting with the first EISA 2007 implementation report in February 2008. This report constitutes the sixth semi-annual EISA 2007 implementation report.

During the six-month period covered by this report (February 1, 2010 to July 31, 2010), DOE completed a total of 20 rulemaking actions, including 3 final rules. These include:

- Three final rules including:
  - Standards for small electric motors,
  - Standards for residential heating products,
  - Test procedures for metal halide lamp ballasts;
- Four notices of proposed rulemaking (NOPR) including:
  - Test procedures for fluorescent lamp ballasts,
  - Test procedures for battery chargers and external power supplies,
  - Test procedures for refrigerators,
  - Test procedures for central air conditioners;
- Two supplemental notices of proposed rulemaking (SNOPR) including:
  - Test procedures for residential furnaces and boilers,
  - Test procedures for room air conditioners and clothes dryers;
- Four preliminary analyses of standards including:
  - Standards for room air conditioners and clothes dryers,
  - Standards for fluorescent lamp ballasts,
  - Standards for central air conditioners,
  - Standards for walk-in coolers and freezers;
- Four framework documents for standards rulemakings for:

- Residential furnaces,
- Elliptical reflector and bulge reflector lamps,
- Commercial refrigeration equipment,
- Furnace fans;
- One proposed standards determination for high-intensity discharge (HID) lamps;
- Two final standards determinations for:
  - Non-Class A external power supplies,
  - High-intensity discharge lamps.

These rulemaking actions represent a significant portion of the approximately 90 rulemaking actions completed since 2006 when the first implementation report was provided. This report details the past, current, and future rulemaking actions of the DOE with respect to the implementation of energy conservation standards and test procedures.

## II. Backlog and EPACK 2005

DOE began providing semi-annual reports to Congress regarding progress of the Appliance Standards Program with an initial report on January 31, 2006. In the initial report, DOE documented the history of the Appliance Standards Program, which is the program responsible for the development of test procedures and energy conservation standards for residential appliances and commercial equipment subject to regulation. The initial report provided a description of the rulemaking process and detailed the statutory requirements applicable to the Appliance Standards Program. The initial report also explained the historical reasons for DOE's past failure to meet identified statutory deadlines, and described current and planned productivity enhancements that DOE began to implement in order to expedite the standards rulemaking process. Finally, the initial report set an aggressive rulemaking schedule, designed to permit DOE to both address the backlog of rulemakings and to meet deadlines associated with the new requirements of EPACK 2005.

### **State of New York, et al. v. Bodman; and NRDC, Inc. et al. v. Bodman**

This report also provides information regarding DOE's compliance with obligations under a consolidated consent decree. DOE notes that the separate court proceedings (*State of New York, et al. v. Bodman* and *NRDC, Inc. et al. v. Bodman*) mentioned in the August 2006 report resulted in a consolidated consent decree between the plaintiffs and DOE (filed November 6, 2006). The consent decree largely adopts the schedule DOE published in its January 31, 2006, initial report to Congress under section 141 of EPACK 2005. However, the consent decree's rulemaking schedule adds the following two additional items:

1. The consent decree requires DOE to publish a small electric motors test procedure by June 30, 2009, and requires an energy conservation standard final rule for the same product by February 28, 2010. These two actions were not included in the initial report to Congress because DOE was conducting the determination analysis for small electric motors at the time the initial report was written (*i.e.*, DOE had not yet determined whether a rulemaking and test procedure were necessary). Both of these actions are now complete.
2. The consent decree puts into place a binding schedule for DOE action in response to future amendments of Standard 90.1 by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE). Specifically, within six months of an ASHRAE amendment, DOE must publish an analysis of the energy savings potential of amended energy conservation standards. DOE must either adopt ASHRAE's amendment within 18 months of ASHRAE's adoption or establish a more stringent standard within 30 months.

### III. Energy Independence and Security Act of 2007

On December 19, 2007, the President signed into law the Energy Independence and Security Act of 2007, Pub. L. 110-140. This statute, in part, amends the Energy Policy and Conservation Act of 1975 (EPCA), Pub. L. 94-163 (42 United States Code (U.S.C.) 6291 *et seq.*), and increases the number of rulemakings DOE must issue beyond the obligations set forth in EPCA 2005 and the backlogged products mentioned in previous implementation reports. The enactment of EISA 2007 has substantially elevated the level of activity within the Appliance Standards Program. The statute requires DOE to develop new test procedures and energy conservation standards, as discussed below. In addition, EISA 2007 prescribes new energy conservation standards and test procedures for certain products, which DOE must also implement.

- New test procedures and energy conservation standards. EISA 2007 introduces new standby power requirements for residential products. All test procedures for covered residential products are required to be amended to include test procedures for standby mode and off mode energy consumption (section 310 of EISA 2007). EISA 2007 specifies deadlines for the incorporation of standby mode and off mode energy consumption into the test procedures of certain enumerated products, including battery chargers, external power supplies, clothes dryers, room air conditioners, fluorescent lamp ballasts, residential clothes washers, residential furnaces, residential boilers, residential water heaters, direct heating equipment, pool heaters, dishwashers, ranges and ovens, microwave ovens, and residential dehumidifiers. All energy conservation standards for covered products adopted after July 1, 2010, must also incorporate standby mode and off mode energy consumption. Several rulemakings to amend the aforementioned test procedures are underway. For each product, DOE is working with interested parties to apply the statutory definitions in EISA 2007 (*e.g.*, the definitions for “standby mode” and “off mode”) to the product. In doing so, DOE remains cognizant of industry norms, definitions set by other standards-making bodies, and the technical characteristics of the products. Moreover, the statute directs DOE to undertake other standards rulemakings for battery chargers, external power supplies, furnace fans, dishwashers, and general service incandescent lamps (GSIL), residential clothes washers, walk-in coolers and freezers, and metal halide lamp fixtures.
- Prescribed energy conservation standards and test procedures. For some rulemakings in which products were bundled, EISA 2007 altered the rulemaking scope by setting standards for some

products. Examples of this include the lamps rulemaking and the home appliances, Group 1, rulemaking. In these cases, DOE was able to move forward but was required to modify the scope of the rulemaking in light of the EISA 2007 enactments.

Furthermore, some of the new standards required by EISA 2007 have deadlines that necessitate immediate action to ensure meeting a final deadline. For instance, a final rule determining whether to amend standards for residential refrigerators is due December 31, 2010 (section 311 of EISA 2007). Because of the short amount of time remaining and the highly detailed analyses required, DOE will need to add this complex rulemaking to other high-priority activities.

Also, pursuant to a statutory change in EISA 2007, all energy conservation standards and test procedures established by DOE will now be subject to regular periodic review. Not later than six years after issuance of a final rule establishing or amending a standard, DOE must either publish a notice of proposed rulemaking to amend the standard or a notice of determination that an amended standard is not warranted (42 U.S.C. 6295(m)(1) and 6313(a)(6)(C)(i)). DOE must review all test procedures at least once every seven years (42 U.S.C. 6293(b)(1)(A) and 6314(a)(1)).

DOE is also attempting to integrate into its existing schedule new standards rulemaking mandates for three products (residential clothes washers, walk-in coolers and freezers, and metal halide lamp fixtures) that are all due to be completed by the end of 2011.

## IV. Multi-Year Schedule and Implementation Update

This section provides a schedule of upcoming DOE rulemakings, along with a detailed description of activities and progress to date. In summary, while all energy conservation standards obligations have been met, additional increases in productivity will be required in 2010 to allow DOE to also meet all its obligations.

In the first semi-annual implementation report (submitted in August 2006), DOE described the execution of the productivity enhancements (“bundling” and “valley-filling”<sup>1</sup>) that were discussed in the initial report. DOE also provided an update on its improved document review and clearance process, identifying the newly established intra-agency Crosscutting Review Team as the cornerstone of this process. As a result of the productivity enhancements and improved document review and clearance process, DOE was able to report in its first semi-annual implementation report that it was meeting all obligations as scheduled in the initial report to Congress. DOE reached a similar conclusion in subsequent implementation reports (submitted in February 2007, August 2007, February 2008, and August 2008) that it had met all commitments to date.

With the addition of the EISA 2007 requirements since the initial report to Congress in 2006, the workload of the Appliance Standards Program substantially increased in 2009 without an attendant addition of productivity enhancements at the beginning of the year. During 2009, while DOE met all of its obligations with respect to energy conservation standards, DOE missed several energy efficiency test procedure deadlines codified in EISA 2007. As a result, DOE has further streamlined standard and test procedure reviews and approvals, and is building additional program capacity. Additional detail is provided below.

DOE remains committed to complying with applicable deadlines. In this report, DOE provides an update of its progress toward meeting the schedule set forth in the January 2006 report to Congress, as well as the schedule agreed to in the consent decree in the case of *State of New York, et al. v. Bodman* (discussed above). DOE notes that to date it has met all the deadlines contained in the initial January 2006 rulemaking schedule and all the deadlines set forth in the consent decree. Given the aggressive schedule for the rulemaking requirements established in EISA 2007, DOE is working on a greater number of contemporaneous rulemaking proceedings than had been contemplated at the time the consent decree order schedule was submitted to the Court. As a result, in order to address its

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<sup>1</sup> “Bundling” refers to the combination of two or more products within a single rulemaking. “Valley-filling” is a management technique in which an analytical team can divert its resources from one rulemaking to another while waiting for documents to be reviewed.

expanded rulemaking obligations, DOE has designed further enhancements to program productivity and capacity beyond what was foreseen in the initial report to Congress. In the second half of 2009, DOE implemented a streamlined internal process to accelerate regulatory approvals in the program. In addition, DOE is hiring additional staff and building organizational capacity to address the increased rulemaking workload.

### **Update on Backlogged Standards**

When DOE developed the original multi-year schedule in the January 31, 2006, report to Congress, it identified 20 products with backlogged standards.<sup>2</sup> Of these products, seven had two rounds of backlogged standards, bringing the total number of backlogged standards to 27. In addition, DOE had two backlogged determinations (small electric motors and high-intensity discharge (HID) lamps). As discussed above, DOE completed the determination for small electric motors in July 2006, and based upon this positive determination, the consent decree added small electric motors to the list of backlogged standards DOE must issue. In addition, DOE recently completed a positive determination for HID lamps. This brings the number of backlogged products to 22, and the number of backlogged standards to 29.

Since the initial report, DOE has issued efficiency standard final rules for 14 of the 22 backlogged products (residential furnaces; residential boilers; mobile home furnaces; small furnaces; distribution transformers (medium voltage dry-type and liquid immersed); packaged terminal air-conditioners and heat pumps; ranges and ovens; microwave ovens; general service fluorescent lamps; incandescent reflector lamps; small electric motors; residential water heaters; direct heating equipment; and pool heaters). In addition, EISA 2007 prescribed standards for another three backlogged products (electric motors (1-200 hp); general service incandescent lamps; and dishwashers); DOE codified these standards in its regulations at Parts 430 and 431. Thus, standards have been completed for 17 of the 22 backlogged products as shown in Table 1. The remaining five products are the subject of ongoing DOE rulemakings.

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<sup>2</sup> The original backlog consists of 20 products, counting residential boilers separately from residential furnaces, and microwaves separately from ranges and ovens.

**Table 1. Status of Backlogged Rulemakings**

<b>Backlogged Product</b>	<b>Status of Backlogged Rule</b>
1. Residential furnaces	DOE issued final rule
2. Residential boilers	DOE issued final rule
3. Mobile home furnaces	DOE issued final rule
4. Small furnaces	DOE issued final rule
5. Residential water heaters [Cycle 2 of 2]	DOE issued final rule
6. Direct heating equipment [Cycle 1 of 2]	DOE issued final rule
7. Pool heaters [Cycle 1 of 2]	DOE issued final rule
8. Distribution transformers (MV dry-type and liquid-immersed)	DOE issued final rule
9. Electric motors (1-200 hp) [Cycle 1 of 2]	Standards prescribed by EISA 2007
10. Incandescent reflector lamps [Cycle 1 of 2]	DOE issued final rule
11. Fluorescent lamps [Cycle 1 of 2]	DOE issued final rule
12. General service incandescent lamps [Cycle 1 of 2]	Standards prescribed by EISA 2007
13. Fluorescent lamp ballasts	Ongoing rulemaking
14. Residential dishwashers	Standards prescribed by EISA 2007
15. Ranges and ovens [Gas-powered Cycle 1 of 2] [Electric-powered Cycle 2 of 2]	DOE issued final rule
16. Microwave ovens	DOE issued final rule
17. Residential clothes dryers	Ongoing rulemaking
18. Room air conditioners	Ongoing rulemaking
19. Packaged terminal air conditioners and heat pumps	DOE issued final rule
20. Residential central air conditioners and heat pumps	Ongoing rulemaking
21. Small Electric Motors	DOE issued final rule
22. HID Lamps	Ongoing rulemaking

## Multi-Year Schedule

Table 2 presents DOE's revised multi-year schedule. It is based on the schedule to which DOE committed in its initial report to Congress, modified to also include an energy conservation standard rulemaking and a test procedure rulemaking for small electric motors (added pursuant to the November 2006 consent decree discussed above) as well as the requirements of EISA 2007 and progress to date. Completed rulemakings and rulemakings involving products for which EISA 2007 prescribed standards were removed from the schedule.

The current schedule addresses the ongoing or upcoming cycle<sup>3</sup> of standards that DOE must develop to comply with EPCA 2005 and EISA 2007. In addition, DOE is beginning the first of the periodic reviews of test procedures (at least once every seven years) and energy conservation standards (not later than six years after issuance of a final rule amending standards) as required under sections 302 and 305 of EISA 2007, respectively. These rulemakings are listed as part of the schedule presented in this report.

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<sup>3</sup> For some products, EPCA, as amended by EPCA 2005 and EISA 2007, requires DOE to develop multiple standards over time.

**Table 2. Multi-Year Schedule**

The test procedure rulemakings listed below include revisions to all facets of the test procedure unless otherwise specified as a revision to the active mode or standby and off modes only.

<b>Appliance Standards</b>			
<b>Product Categories</b>	<b>Driver</b>	<b>Approx. Rule Initiation Date</b>	<b>Final Action Date</b>
<b>Heating Products Rulemakings</b>			
Furnaces and Boilers (Standby Mode and Off Mode) Test Procedure	EISA 2007	Fiscal Year (FY) 2009, Quarter (Q) 1	Dec. 2010*
Residential Water Heaters, Direct Heating Equipment, and Pool Heaters (Standby Mode and Off Mode) Test Procedure	EISA 2007	FY 2009, Q1	Dec. 2010*
Residential Furnaces Standard <sup>†</sup>	Voluntary Remand	FY 2010, Q1	June 2011*
Furnace Fans Test Procedure	Test Procedure (TP) for new covered product	FY 2010, Q2	Dec. 2012
Furnace Fans Standard	EISA 2007	FY 2010, Q2	Dec. 2013
<b>Transformers and Motors Rulemakings</b>			
Electric Motors Test Procedure	7-Year Review	FY 2009, Q1	Dec 2010*
Distribution Transformers Test Procedure	7-Year Review	FY 2010, Q2	Feb. 2012
Distribution Transformers Standard	Settlement Agreement	FY 2010, Q1	Oct. 2011/ Oct. 2012 <sup>‡</sup>

\* Final action dates followed by an asterisk represent a change from the last semi-annual implementation report. For further detail, consult the Progress Reports of Appliance Product Teams (By Product) in the Implementation Update section of the report to Congress.

<sup>†</sup> Mobile home furnaces and small furnaces were previously described as separate covered products. The November 2007 final rule grouped the standards for these products under the single umbrella term “residential furnaces.” 72 FR 65136 (Nov. 19, 2007).

<sup>‡</sup> DOE will conduct a review of the standards for distribution transformers and publish by October 1, 2011, either: (1) a determination that standards do not need to be amended, or (2) a NOPR proposing amended standards. If DOE determines amended standards are warranted, DOE will publish the final rule no later than October 1, 2012.

Electric Motors Standard	EISA 2007	FY 2010, Q2	Dec. 2012
<b>Lighting Rulemakings</b>			
Fluorescent Lamp Ballasts Standard	Backlog	FY 2008, Q1	June 2011
Fluorescent Lamp Ballasts Test Procedure	7-Year Review	FY 2010, Q1	June 2011
ER, BR, and Small-Diameter Incandescent Reflector Lamps Standard	EPACT 1992	FY 2010, Q1	Dec. 2011
Metal Halide Lamp Fixtures Standard	EISA 2007	FY 2009, Q2	Jan. 2012
High-Intensity Discharge Lamps Test Procedure	Backlog	FY 2010, Q3	Dec. 2012
High-Intensity Discharge Lamps Standard	Backlog	FY 2010, Q3	Jun. 2014
General Service Fluorescent Lamps and Incandescent Reflector Lamps Standard	EPACT 1992	FY 2011, Q2	June 2014
General Service Incandescent Lamps, Compact Fluorescent Lamps, General Service Light-Emitting Diode (LED), and General Service Organic Light-Emitting Diode (OLED) Standard	EISA 2007	FY 2014, Q2	Jan. 2017
<b>Home Appliances Rulemakings</b>			
Clothes Dryers and Room Air Conditioners Test Procedure	EISA 2007	FY 2008, Q2	Oct. 2010
Residential Refrigerators Standard	EISA 2007	FY 2008, Q2	Dec. 2010
Residential Refrigerators Test Procedure	7-Year Review	FY 2008, Q3	Dec. 2010*
Microwave Ovens Standard	6-Year Review	FY 2009, Q3	Mar. 2011
Microwave Ovens Test Procedure	EISA 2007	FY 2008, Q2	Mar. 2011
Dishwashers, Kitchen Ranges and Ovens, and Dehumidifiers (Standby Mode and Off Mode) Test Procedure	EISA 2007	FY 2009, Q3	Mar. 2011
Clothes Dryers and Room Air Conditioners Standard	Backlog	FY 2008, Q1	June 2011
Residential Clothes Washers Test Procedure	EISA 2007	FY 2009, Q1	Sept. 2011
Residential Clothes Washers Standard	EISA 2007	FY 2009, Q1	Dec. 2011
Commercial Clothes Washers Standard	EPACT 2005	FY 2011, Q2	Jan. 2015
Dishwashers Standard	EISA 2007	FY 2011, Q2	Jan. 2015
Kitchen Ranges and Ovens Standard	EISA 2007	FY 2014, Q1	Mar. 2017
<b>Space Cooling Rulemakings</b>			

Residential Central Air Conditioners and Heat Pumps Standard	Backlog	FY 2008, Q2	June 2011
Residential Central Air Conditioners and Heat Pumps Test Procedure	7-Year Review	FY 2009, Q3	June 2011
Packaged Terminal Air Conditioners and Heat Pumps Standard	6-Year Review	FY 2013, Q2	Sept. 2016
<b>Commercial Refrigeration Rulemakings</b>			
Walk-In Coolers and Freezers Test Procedure	EISA 2007	FY 2009, Q1	Dec. 2010*
Walk-In Coolers and Freezers Standard	EISA 2007	FY 2009, Q1	Jan. 2012
Commercial Refrigeration Equipment Test Procedure	7-Year Review	FY 2010, Q3	Jan. 2013
Commercial Refrigeration Equipment Standard	EPACT 2005	FY 2010, Q2	Jan. 2013
Commercial Automatic Ice Makers Standard	EPACT 2005	FY 2011, Q3	Jan. 2015
<b>Battery Chargers, External Power Supplies, and Televisions Rulemakings</b>			
Battery Chargers and External Power Supplies Standard	EISA 2007	FY 2008, Q2	July 2011
Battery Chargers and External Power Supplies Test Procedure	7-Year Review	FY 2009, Q1	July 2011
Televisions Test Procedures	TP for new covered product	FY 2011, Q2	Jan. 2013
Televisions Standard	EPCA	FY 2010, Q2	June 2013

## V. Implementation Update

Since the last implementation report, DOE has continued to explore process efficiency improvements afforded it by EISA 2007. Section 307 of EISA 2007 removed the requirement for DOE to publish an advance notice of proposed rulemaking (ANOPR) for rulemakings on energy conservation standards for residential products. Because it has been DOE's experience that comments from interested parties at the early stages of the rulemaking are vital to producing a sound standard, DOE is holding public meetings during what would typically have been the ANOPR stage. In lieu of the ANOPR, DOE has begun to issue preliminary technical support documents on its website ([http://www1.eere.energy.gov/buildings/appliance\\_standards](http://www1.eere.energy.gov/buildings/appliance_standards)). The meetings allow DOE to discuss the analysis presented in the preliminary technical support document with interested parties and to receive comment thereon.

Since publication of the February 2010 semi-annual implementation report, DOE has, among others, published two energy conservation standard final rules for four products and one test procedure final rule for one product. More specifically, DOE published energy conservation standard final rules for small electric motors, residential water heaters, direct heating equipment, and pool heaters. A test procedure final rule was also published for metal halide lamp ballasts. DOE also published positive final determinations for high-intensity discharge lamps and non-Class A external power supplies, which set in motion test procedure and standards rulemakings for those products. Publications since the last implementation report are listed in greater detail below.

### Published Rulemaking Documents Since the Last Implementation Report

Since publication of the February 2010 semi-annual implementation report, DOE has completed the following rulemaking notices as set forth below in chronological order by date of publication.

Product	Type	Event	Issuance Date	Publish Date	Citation
Clothes Dryers and Room Air Conditioners	Standard	Notice of public meeting and document availability	2/12/2010	2/23/2010	75 FR 7987

<b>Product</b>	<b>Type</b>	<b>Event</b>	<b>Issuance Date</b>	<b>Publish Date</b>	<b>Citation</b>
Metal Halide Lamp Ballast	Test Procedure	Final rule	2/19/2010	3/9/2010	75 FR 10950
Small Electric Motors	Standard	Final rule	2/22/2010	3/9/2010	75 FR 10874
Furnaces and Mobile Home Furnaces	Standard	Notice of public meeting and document availability	2/22/2010	3/15/2010	75 FR 12144
Fluorescent lamp ballasts	Test Procedure	NOPR	2/12/2010	3/24/2010	75 FR 14288
Fluorescent lamp ballasts	Standard	Notice of public meeting and document availability	2/22/2010	3/24/2010	75 FR 14319
Central Air Conditioners and Central Air Conditioning Heat Pumps	Standard	Notice of public meeting and document availability	2/22/2010	3/25/2010	75 FR 14368
Battery Chargers and External Power Supplies	Test Procedure	NOPR	1/29/2010	4/2/2010	75 FR 16958
Walk-in coolers and walk-in freezers	Standard	Notice of public meeting and document availability	3/29/2010	4/5/2010	75 FR 17080
Residential Furnaces and Boilers	Test Procedure	SNOPR	3/29/2010	4/5/2010	75 FR 17075

<b>Product</b>	<b>Type</b>	<b>Event</b>	<b>Issuance Date</b>	<b>Publish Date</b>	<b>Citation</b>
Residential Water Heaters, Direct Heating Equipment, and Pool Heaters	Standard	Final rule	3/22/2010	4/16/2010	75 FR 20112
High-intensity discharge lamps	Determination	Notice of proposed determination	4/22/2010	4/27/2010	75 FR 22031
Incandescent reflector lamps (ER/BR)	Standard	Framework	4/23/2010	5/3/2010	75 FR 23191
Commercial refrigerators, freezers, and refrigerator-freezers	Standard	Framework	4/30/2010	5/6/2010	75 FR 24824
External Power Supplies, non-Class A	Determination	Final determination	5/7/2010	5/14/2010	75 FR 27170
Refrigerators, Freezers and Refrigerator-Freezers	Test Procedure	NOPR	4/1/2010	5/27/2010	75 FR 29824
Central Air Conditioners and Central Air Conditioning Heat Pumps	Test Procedure	NOPR	2/12/2010	6/2/2010	75 FR 31224
Furnace fans	Standard	Framework	5/27/2010	6/3/2010	75 FR 31323
Clothes Dryers and	Test	SNOPR	6/11/2010	6/29/2010	75 FR

Product	Type	Event	Issuance Date	Publish Date	Citation
Room Air Conditioners	Procedure				37594
High-intensity discharge lamps	Determination	Final determination	6/16/2010	7/1/2010	75 FR 37975

Since the August 2008 implementation report, DOE has noted several missed statutory (non-backlog) deadlines as follow:

- EISA 2007 set a deadline of December 31, 2008 for the battery chargers and external power supplies test procedure final rule (related to standby mode and off mode energy consumption). DOE subsequently issued the test procedure final rule on March 11, 2009, and it was published in the *Federal Register* on March 27, 2009 (74 Fed. Reg. 13318).
- EISA 2007 set a deadline of March 31, 2009, for the test procedure final rule for standby mode and off mode energy consumption for fluorescent lamp ballasts. DOE subsequently issued the test procedure final rule on September 17, 2009, which was published in the *Federal Register* on October 22, 2009 (74 Fed. Reg. 54445).
- EISA 2007 set a deadline of March 31, 2009 for the test procedure final rule for the standby mode and off mode energy consumption for clothes dryers and room air conditioners. For these products, DOE is statutorily directed to consider the most current version of an international consensus standard for standby mode and off mode test procedures, a standard which is currently under revision. Public comments on the NOPR supported consideration of the amended international standard because of questions regarding the adequacy of the current definitions for key terms. DOE subsequently issued a combined test procedure SNOPR for these products that addresses active mode, standby mode, and off mode on June 11, 2010. This notice was published in the *Federal Register* on June 29, 2010 (75 Fed. Reg. 37594). DOE is currently preparing the final rule.
- EISA 2007 set a deadline of June 30, 2009, for the test procedure final rule for the standby mode and off mode energy consumption for residential clothes washers. DOE is

currently preparing a combined test procedure NOPR for these products that would address active mode, standby mode, and off mode, which will consider revisions currently proposed in international consensus standby mode and off mode test procedures.

- EISA 2007 required DOE to publish a test procedure final rule for residential furnaces and boilers (standby mode and off mode) by September 30, 2009. DOE issued a NOPR for the furnaces and boilers standby mode and off mode test procedure on July 9, 2009, which was published in the *Federal Register* on July 27, 2009 (74 Fed. Reg. 36959). DOE subsequently issued an SNOPR for this rulemaking on March 29, 2010, which was published in the *Federal Register* on April 5, 2010 (75 Fed. Reg. 17075). DOE is currently preparing a final rule for this test procedure.
- EISA 2007 required DOE to publish a test procedure final rule for walk-in coolers and freezers by January 1, 2010. DOE issued a test procedure NOPR on December 14, 2009, which was published in the *Federal Register* on January 4, 2010 (75 Fed. Reg. 186). DOE held a public meeting on March 24, 2010 to obtain public comment on its proposal. The meeting was originally planned for February 11, 2010 but was rescheduled due to inclement weather that forced a Federal Government shutdown. DOE is currently preparing an SNOPR for this test procedure.
- EISA 2007 required DOE to issue a determination whether to issue energy conservation standards for non-Class A external power supplies, by December 19, 2009. DOE issued a notice of proposed determination (NOPD) on October 23, 2009, which was published in the *Federal Register* on November 3, 2009 (74 Fed. Reg. 56928). DOE subsequently issued a final determination on May 7, 2010, which was published in the *Federal Register* on May 14, 2010 (75 Fed. Reg. 27170).

Since the last implementation report in February 2010, DOE has missed one deadline for test procedures. The status of this rulemaking is as follows:

- EISA 2007 required DOE to publish a test procedure final rule for the standby mode and off mode energy consumption of residential heating products (residential water heaters, direct heating equipment, and pool heaters) by March 31, 2010. DOE is currently finalizing the NOPR for this test procedure.

All of these actions are described in greater detail in the Progress Report section of this report. For those rulemakings yet to be completed, DOE is working towards completion of the final

rules as expeditiously as possible and will prioritize them in the context of DOE's other rulemaking obligations.

## Progress Reports of Appliance Product Teams (By Product)

### Heating Team

**Heating Products.** DOE was directed by the consent decree to establish energy conservation standards for heating products (residential water heaters, direct heating equipment, and pool heaters) by March 31, 2010. DOE published the notice of availability of the framework document in the *Federal Register* on November 24, 2006 (71 Fed. Reg. 67825). A public meeting to discuss the framework document was held on January 16, 2007 at DOE headquarters in Washington, DC. DOE published a notice of public meeting and availability of the preliminary technical support document in the *Federal Register* on January 13, 2009 (74 Fed. Reg. 1643) and held a public meeting to discuss the analyses on February 9, 2009. On November 23, 2009, DOE issued the heating products NOPR, which was published on December 11, 2009 in the *Federal Register* (74 Fed. Reg. 65852). The public meeting to discuss the proposal and supporting analyses was held on January 7, 2010, at DOE headquarters in Washington, DC. DOE issued the final rule for energy conservation standards for heating products on March 22, 2010, thereby meeting the deadline set forth in the consent decree. The final rule was published in the *Federal Register* on April 16, 2010 (75 Fed. Reg. 20112). This rulemaking is now complete.

EISA 2007 also required DOE to develop a standby mode and off mode test procedure for heating products by March 31, 2010. DOE was unable to complete the test procedure final rule for measurement of standby mode and off mode energy consumption by the date specified in EISA 2007. DOE is finalizing the heating products test procedure NOPR and anticipates issuance in August 2010.

**Furnaces and Boilers.** EISA 2007 requires that DOE prescribe an amended test procedure for residential furnaces and boilers not later than September 2009. This test procedure will address standby mode and off mode energy consumption for these products. DOE issued a NOPR on July 9, 2009, which was published in the *Federal Register* on July 27, 2009 (74 Fed. Reg. 36959). A public meeting to discuss the NOPR was held on August 18, 2009 at DOE headquarters in Washington, DC. DOE subsequently issued an SNOPR for this rulemaking on March 29, 2010, which was published in the *Federal Register* on April 5, 2010 (75 Fed. Reg. 17075). DOE is currently finalizing the final rule.

It is further noted that DOE previously published an energy conservation standard final rule for residential furnaces and boilers in the *Federal Register* on November 19, 2007 (72 Fed. Reg. 65136). As discussed in the February 2008 implementation report, this rulemaking was bound

by a consent decree deadline, and DOE had requested additional time to analyze the effect of alternative standards on natural gas prices for the final rule. The Court denied DOE's motion to modify the consent decree and required DOE to issue the rule. Petitioners then challenged this final rule on several grounds. DOE filed a motion for voluntary remand to allow the agency to consider: (1) the application of regional standards in addition to national standards for furnaces and boilers, as authorized by EISA 2007 (enacted December 19, 2007); and (2) the effect of alternative standards on natural gas prices. This motion for voluntary remand was granted on April 21, 2009.

As a result, DOE initiated a rulemaking to consider amended energy conservation standards for residential furnaces.<sup>7</sup> The rulemaking will not consider amended standards for residential boilers because EISA 2007 prescribed standards for residential boilers (42 U.S.C. 6295(f)(3)) that superseded the levels in the November 2007 final rule. DOE anticipates completion of the final rule by June 2011. Originally scheduled for completion in May 2011, the schedule has been revised to align with the June 30, 2011 consent decree deadline for the amended energy conservation standards for residential central air conditioners and heat pumps. The schedule change will better enable DOE to compare efficiency levels to the levels recommended by stakeholders in a consensus agreement on furnaces and central air conditioners that was submitted to DOE on January 15, 2010. The stakeholder consensus agreement can be downloaded at:

[http://www1.eere.energy.gov/buildings/appliance\\_standards/residential/pdfs/furnaces\\_framework\\_jointstakeholdercomments.pdf](http://www1.eere.energy.gov/buildings/appliance_standards/residential/pdfs/furnaces_framework_jointstakeholdercomments.pdf)

DOE issued an announcement of the availability of the energy conservation standard rulemaking action plan on February 22, 2010, which was published in the *Federal Register* on March 15, 2010 (75 Fed. Reg. 12144). A public meeting to discuss the data and methodology was held on March 31, 2010 at DOE headquarters in Washington, DC. DOE is currently working on the NOPR for residential furnaces.

**Furnace Fans.** EISA 2007 requires DOE to issue an energy conservation standard for furnace fans by December 31, 2013. DOE issued an announcement of the availability of the energy conservation standard framework document for furnace fans on May 27, 2010, which was published in the *Federal Register* on June 3, 2010 (75 Fed. Reg. 31323). A public meeting to

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<sup>7</sup> Mobile home furnaces and small furnaces were previously described as separate covered products. The November 2007 final rule grouped the standards for these products under the single umbrella term "residential furnaces." 72 FR 65136 (Nov. 19, 2007).

discuss the data and methodology was held on June 18, 2010 at DOE headquarters in Washington, DC. DOE is currently working on the NOPR for the furnace fans standard.

DOE is also currently developing a test procedure for furnace fans. DOE is working on the NOPR for the furnace fans test procedure and plans to complete the test procedure by December 2012.

#### Transformers and Motors Team

**Small Electric Motors.** DOE was directed by the consent decree to establish energy conservation standards for small electric motors by February 28, 2010. DOE published an announcement of the availability of the energy conservation standard framework document in the *Federal Register* on August 10, 2007 (72 Fed. Reg. 44990). A public meeting to discuss the framework document was held on September 13, 2007 at DOE headquarters in Washington, DC. DOE issued a notice of public meeting (NOPM) on December 19, 2008 which was published in the *Federal Register* on December 30, 2008 (73 Fed. Reg. 79723). DOE discussed preliminary analytical results from the work performed to date at a public meeting on January 30, 2009 at DOE headquarters in Washington, DC. DOE then issued a NOPR on October 27, 2009 which was published in the *Federal Register* on November 24, 2009 (74 Fed. Reg. 61410). A public meeting to discuss the NOPR was held on December 17, 2009 at DOE headquarters in Washington, DC. DOE issued the final rule for energy conservation standards for small electric motors on February 22, 2010, thereby meeting the deadline set forth in the consent decree. The final rule was published in the *Federal Register* on March 9, 2010 (75 Fed. Reg. 10874). This rulemaking is now complete.

In addition to the energy conservation standard activities, DOE also developed a test procedure for small electric motors. The test procedure NOPR was issued on December 11, 2008 and was published in the *Federal Register* on December 22, 2008 (73 Fed. Reg. 78220). DOE discussed issues related to the test procedure rulemaking at a public meeting on January 29, 2009 at DOE headquarters in Washington, DC. DOE issued the test procedure final rule on June 29, 2009, which was published in the *Federal Register* on July 7, 2009 (74 Fed. Reg. 32059).

**Electric Motors (1-500 hp).** EPCA requires that DOE publish a final rule no later than 24 months after the effective date of the previous final rule to determine whether to amend the motors standards currently in effect (42 U.S.C. 6313(b)(4)(B)). EISA 2007 prescribed standards for electric motors that become effective three years after the date of EISA 2007's enactment (*i.e.*, December 19, 2010). All the prescribed standards were codified in a final rule technical amendment that was issued on March 11, 2009 and published in the *Federal Register* on March

23, 2009 (74 Fed. Reg. 12058). (For a more complete history of this rulemaking, see the August 2009 implementation report.) Thus, DOE is moving forward with a rulemaking to consider amending the standards for all the motor types included in 42 U.S.C. 6313, with a scheduled completion date of December 19, 2012. DOE is preparing the framework document for this rulemaking.

EISA 2007 also requires that all test procedures be reviewed at least once every seven years, and as such, DOE is developing an amended test procedure for electric motors. DOE initially bundled the test procedure for electric motors (1-500 hp) with the test procedure for small electric motors. The test procedure NOPR was issued on December 11, 2008 and was published in the *Federal Register* on December 22, 2008 (73 Fed. Reg. 78220). In light of comments received at the public meeting and submitted to DOE during the comment period, DOE is reevaluating its course for the 1-500 hp electric motor test procedure final rule. Because the small electric motors test procedure was bound by an upcoming consent decree deadline, DOE split the test procedure rulemaking for 1-500 hp electric motors from the small electric motors test procedure and proceeded to a final rule on the small motors aspect of the rulemaking, which, as discussed above, was issued on June 29, 2009, and was published in the *Federal Register* on July 7, 2009 (74 Fed. Reg. 32059). DOE is currently reviewing a draft test procedure SNOPR for 1-500 hp motors that would address the issues raised by interested parties on the NOPR.

**Distribution Transformers.** On September 28, 2007, DOE issued a final rule adopting energy efficiency standards for electric distribution transformers, which was published in the *Federal Register* on October 12, 2007 (72 Fed. Reg. 58190). Petitioners challenged the final rule on several grounds. On July 10, 2009, DOE and the petitioners settled these challenges, agreeing that DOE shall conduct a review of the standards for liquid-immersed and medium-voltage dry-type distribution transformers and publish in the *Federal Register*, no later than October 1, 2011, either: (1) a determination pursuant to EPCA, that standards for these products do not need to be amended, or (2) a notice of proposed rulemaking including any new proposed standards for these products. If DOE determines after the review that amendment of the standards is warranted, DOE will publish in the *Federal Register*, no later than October 1, 2012, a final rule including any amendments to the standards for liquid-immersed and medium-voltage dry-type distribution transformers. Pursuant to the settlement agreement, petitioners dismissed their claims.

DOE has initiated work on the distribution transformers rulemaking on an accelerated timeframe. DOE will publish a notice of public meeting to describe the planned analytical

methodology and preliminary results. This will be followed by a NOPR and final rule. DOE is currently preparing the notice of public meeting.

Because EISA 2007 requires DOE to review all test procedures at least once every seven years, DOE has also initiated a test procedure rulemaking for distribution transformers and is currently preparing the test procedure NOPR.

### Lighting Team

**High-Intensity Discharge Lamps.** DOE was directed by the consent decree to make a determination by June 30, 2010 whether energy conservation standards for HID lamps are technologically feasible and economically justified. DOE issued a notice of proposed determination on April 22, 2010, which was published in the *Federal Register* on April 27, 2010 (75 Fed. Reg. 22031). DOE issued the final determination for HID lamps on June 16, 2010, thereby meeting the deadline set forth in the consent decree. The final determination was published in the *Federal Register* on July 1, 2010 (75 Fed. Reg. 37975). Because DOE made a positive determination that energy conservation standards for HID lamps are warranted, DOE is now initiating a test procedure rulemaking to be completed by December 2012. DOE is also initiating a standards rulemaking for HID lamps to be completed by June 2014.

**Lamps.** As discussed in the August 2009 implementation report, DOE issued an energy conservation standard final rule for general service fluorescent lamps (GSFL) and incandescent reflector lamps (IRL) on June 26, 2009, which was published in the *Federal Register* on July 14, 2009 (74 Fed. Reg. 34080). During the lamps rulemaking, DOE considered its options with respect to certain types of IRLs, namely certain Elliptical Reflector (ER) and Bulge Reflector (BR) lamps. These lamp types were not included in the June 2009 lamps rulemaking because of exemptions in EPCA. Because these exempted lamps are very common (approximately 40 percent of the IRL market), the lamp exemption was highly controversial in the lamps rulemaking. DOE did not wish to delay the lamps final rule (and the accompanying energy savings to the Nation) for the sole reason of considering this subset of ER, BR, and small-diameter lamps. Instead, DOE decided to proceed with setting energy conservation standards for the non-exempt lamps and to consider commencing a separate rulemaking for ER, BR, and small-diameter lamps.

DOE has determined that it has the authority to conduct a rulemaking on ER, BR, and small-diameter incandescent lamps and has begun work on an accelerated timeframe. DOE will strive to complete a final rule for these products in 2011. DOE issued a notice of public meeting and discussion of the framework document, which outlines the analytical approach to this

rulemaking, on April 23, 2010, which was published in the *Federal Register* on May 3, 2010 (75 Fed. Reg. 23191). A public meeting to discuss the framework document was held on May 26, 2010 at DOE headquarters in Washington, DC. DOE is currently preparing a NOPR for this rulemaking.

For the lamps test procedure, DOE issued the final rule on June 26, 2009 and published the final rule in the *Federal Register* on July 6, 2009 (74 Fed. Reg. 31892). DOE does not anticipate any changes to the test procedure in light of the ER, BR, and small-diameter lamps rulemaking.

**Five Exempted Lamp Types.** DOE published a notice of data availability (NODA) announcing the completion of DOE's model of future lamp sales for five exempted lamp types as required by section 321 of EISA 2007 (42 U.S.C. 6295(l)(4)). The notice of data availability was issued on December 18, 2008 and was published in the *Federal Register* on December 24, 2008 (73 Fed. Reg. 79072). The notice announced the availability of historical shipment data for each lamp type and a model forecasting future unit sales. Beginning in calendar year 2010, DOE will track actual United States unit sales data for each of the five lamp types and compare it to this model. When the annual sales rate for any of the five lamp types exceeds the modeled levels by at least 100 percent, DOE will initiate an accelerated rulemaking to establish an energy conservation standard for that lamp type.

**Fluorescent Lamp Ballasts.** The final rule for fluorescent lamp ballasts energy conservation standards is on schedule for issuance not later than June 2011. DOE completed the framework document and published a NODA in the *Federal Register* on January 22, 2008 (73 Fed. Reg. 3653). DOE held a framework public meeting at its Washington, DC headquarters on February 6, 2008. DOE issued a notice of public meeting and availability of the preliminary technical support document on February 22, 2010, which was published in the *Federal Register* on March 24, 2010 (75 Fed. Reg. 14319). A public meeting was held jointly with the active mode test procedure NOPR (discussed below) on April 26, 2010. DOE is currently reviewing the NOPR for this rulemaking.

In addition to the energy conservation standard, DOE is developing two test procedures for fluorescent lamp ballasts. EPCA, as amended by section 310 of EISA 2007, directed DOE to develop a test procedure for fluorescent lamp ballasts that accounts for standby mode and off mode energy consumption by March 31, 2009 (42 U.S.C. 6295(gg)(2)(A) and (B)(ii)). DOE is also developing an active mode test procedure for fluorescent lamp ballasts in support of the energy conservation standard.

DOE issued the standby mode and off mode test procedure NOPR for fluorescent lamp ballasts on January 8, 2009. The notice was published in the *Federal Register* on January 21, 2009 (74 Fed. Reg. 3450). DOE discussed issues related to the fluorescent lamp ballast test procedure NOPR at a public meeting on February 2, 2009 at DOE headquarters in Washington, DC. Because the NOPR comment period ended on April 6, 2009, and DOE could not issue a final rule until after consideration of comments received during the comment period, the final rule was not issued before the date specified in EISA 2007. DOE issued the test procedure final rule on September 17, 2009 which was published in the *Federal Register* on October 22, 2009 (74 Fed. Reg. 54445). This rulemaking is now complete.

For the active mode test procedure, DOE issued a NOPR on February 12, 2010, which was published in the *Federal Register* on March 24, 2010 (75 Fed. Reg. 14288). A public meeting to discuss the proposed test procedure and issues related to the ongoing energy conservation standards rulemaking was held at DOE headquarters in Washington, DC on April 26, 2010. Based on comments received in response to the test procedure NOPR, DOE is currently preparing an SNOPR for this rulemaking.

**Metal Halide Lamp Ballasts.** Section 324 of EISA 2007 set efficiency standards for metal halide lamp fixtures that became effective January 1, 2009 (42 U.S.C. 6295(hh)(1)(C)). The statute further amended EPCA by requiring that test procedures for metal halide lamp ballasts be based on American National Standards Institute (ANSI) Standard C82.6-2005 (42 U.S.C. 6293(b)(18)). DOE issued a NOPR to establish a test procedure for metal halide lamp ballasts (including consideration of standby mode and off mode energy consumption) on December 4, 2008, after which it was posted on the DOE website. DOE issued a NOPM on December 11, 2008, which was published in the *Federal Register* on December 17, 2008 (73 Fed. Reg. 76569) and held the public meeting at DOE headquarters in Washington, DC on December 19, 2008 to discuss preliminary results from the test procedure rulemaking. Following review by the new Administration, the test procedure NOPR was re-issued on June 29, 2009 and was published in the *Federal Register* on July 10, 2009 (74 Fed. Reg. 33171). DOE issued a test procedure final rule for metal halide lamp ballasts on February 19, 2010, which was published in the *Federal Register* on March 9, 2010 (75 Fed. Reg. 10950). This rulemaking is now complete.

**Metal Halide Lamp Fixtures.** Section 324 of EISA 2007 (42 U.S.C. 6295(hh)(2)) requires DOE to amend energy conservation standards for metal halide lamp fixtures by January 1, 2012. DOE issued a notice of public meeting and availability of the framework document on December 23, 2009 which was published in the *Federal Register* on December 30, 2009 (74 Fed. Reg. 69036). A public meeting to discuss the framework document was held on January 26, 2010 at DOE

headquarters in Washington, DC. DOE is now conducting preliminary analyses for this rulemaking.

#### Home Appliance Team

**Home Appliances, Group 1.** The final rule regarding energy conservation standards for three home appliances (ranges and ovens, microwave ovens, and commercial clothes washers) was scheduled to be published no later than March 2009. Originally, this rule also included dishwashers and dehumidifiers. All of these products were included in the ANOPR that was published in the *Federal Register* on November 15, 2007 (72 Fed. Reg. 64432). This rulemaking was subsequently affected by EISA 2007, which prescribed standards for both dehumidifiers and dishwashers. The prescribed standards for dehumidifiers and dishwashers were codified in a separate final rule technical amendment that was issued on March 11, 2009 and published in the *Federal Register* on March 23, 2009 (74 Fed. Reg. 12058). The home appliances energy conservation standards rulemaking continued with the remaining products, and on September 29, 2008, DOE issued a NOPR for gas and electric ranges and ovens, microwave ovens, and commercial clothes washers, which was published in the *Federal Register* on October 17, 2008 (73 Fed. Reg. 62034).

Related to the standards rulemaking above, DOE simultaneously began developing a test procedure for residential microwave ovens to address standby mode and off mode energy consumption. EISA 2007 requires that a revised test procedure for microwave ovens that includes standby mode and off mode energy consumption shall be completed no later than March 2011. DOE desired to include standby mode and off mode energy consumption in this revision of the test procedure ahead of the EISA 2007 deadline so that it could be completed in tandem with an energy conservation standard for microwave ovens that would also account for standby mode and off mode energy consumption. DOE published the NOPR for the microwave oven test procedure regarding standby mode and off mode energy consumption in the *Federal Register* on October 17, 2008 (73 Fed. Reg. 62134). Public meetings were held at DOE headquarters in Washington, DC to discuss the proposed energy conservation standard on November 13, 2008 and the proposed test procedure on November 14, 2008.

Comments received at the public meeting and submitted in response to the energy conservation standard NOPR suggested that de-bundling certain aspects of this rulemaking would be beneficial, as explained below. For commercial clothes washers, commenters alleged certain data problems affecting DOE's rulemaking analyses. DOE's preliminary assessment suggested that these concerns were valid, thereby necessitating additional, supplemental rulemaking analyses. For microwave ovens, commenters urged DOE to consider an upcoming version of the industry consensus test procedure for measuring microwave oven standby mode

and off mode energy consumption developed by the International Electrotechnical Commission (IEC 62301, “Household electrical appliances – Measurement of Standby Power” (First Edition 2005-2006)). Commenters indicated that this later version contains significant modifications and improvements as compared to the current draft, which many commenters believed to be inadequate. DOE agreed that it would be preferable to consider the international standard.

In light of the above, DOE de-bundled the commercial clothes washers energy conservation standard and deferred consideration of microwave oven energy conservation standards for standby mode and off mode until the revised industry standard becomes available for consideration. DOE ultimately moved forward with a final rule addressing energy conservation standards for kitchen ranges and ovens and microwaves in active mode only. DOE issued the final rule for energy conservation standards for kitchen ranges and ovens and microwave ovens on March 31, 2009, thereby meeting the deadline set forth in the consent decree. The final rule was published in the *Federal Register* on April 8, 2009 (74 Fed. Reg. 16040).

For commercial clothes washers, DOE worked toward publication of a final rule for energy conservation standards by January 1, 2010, the statutory deadline set by EPCA 2005. DOE issued an SNOPR on October 27, 2009 which was published in the *Federal Register* on November 9, 2009 (74 Fed. Reg. 57738). A public meeting was held on November 16, 2009 to discuss the SNOPR at DOE headquarters in Washington, DC. DOE issued a final rule on December 18, 2009 which was published in the *Federal Register* on January 8, 2010 (75 Fed. Reg. 1122). This rulemaking is now complete.

For the microwave ovens test procedure, DOE will work toward publication of a final rule by March 31, 2011, the statutory deadline set by EISA 2007. Although information on the IEC website initially led DOE to believe that an updated version of IEC 62301 would be complete by July 31, 2009, upon further inquiry, DOE learned that IEC does not expect finalization until the middle of 2010. Therefore, in order to preserve the schedule for the microwave ovens test procedure, DOE may move forward with the version of the test procedure proposed in the October 17, 2008 NOPR. In conjunction with the test procedure, DOE is simultaneously conducting a review of the energy conservation standards for microwave ovens in standby mode and off mode. As with the test procedure, the rulemaking for energy conservation standards is scheduled to be completed no later than March 31, 2011. DOE is preparing an SNOPR for the microwave ovens test procedure and also an SNOPR for the microwave oven energy conservation standard.

In addition, DOE is initiating a test procedure rulemaking regarding standby mode and off mode for dishwashers, dehumidifiers, and ranges and ovens (electric and gas). The final rule is scheduled for completion by March 31, 2011, the statutory deadline set by EISA 2007. DOE is preparing a NOPR for these products.

**Home Appliances, Group 2.** The energy conservation standards rulemaking for clothes dryers and room air conditioners is underway and scheduled to be completed in June 2011, the deadline set forth in the consent decree. DOE published a notice of availability for the framework document in the *Federal Register* on October 9, 2007 (72 Fed. Reg. 57254). DOE held the framework document public meeting in Washington, DC, on October 24, 2007. DOE issued a notice of public meeting and availability of the preliminary technical support document on February 12, 2010, which was published in the *Federal Register* on February 23, 2010 (75 Fed. Reg. 7987). DOE held a public meeting to discuss its preliminary analyses at its Washington, DC headquarters on March 16, 2010. DOE is currently working on a NOPR for this rulemaking.

Pursuant to section 310 of EISA 2007, revisions to the test procedures for clothes dryers and room air conditioners to account for standby mode and off mode energy consumption were required by March 31, 2009. DOE issued the NOPR to amend these test procedures on December 1, 2008, which was published in the *Federal Register* on December 9, 2008 (73 Fed. Reg. 74639). DOE held a public meeting to discuss the issues raised in the test procedures NOPR at DOE headquarters in Washington, DC, on December 17, 2008.

As discussed above in the Home Appliances, Group 1 section, DOE anticipated that the IEC would finalize a revision to an international test procedure standard (IEC 62301) that would have included procedures for measuring standby mode and off mode energy consumption in clothes dryers and room air conditioners. DOE received public comments on the test procedure NOPR encouraging DOE to consider this newest version of IEC 62301 which was scheduled to be finalized by IEC no later than July 31, 2009. DOE determined it necessary to delay publication of its test procedure final rule to consider this version of IEC 62301, and as a result, DOE did not meet the deadline of March 31, 2009. DOE has since learned that IEC does not expect to publish a revised version of IEC 62301 until the middle of 2010. Therefore, to complete the test procedure in a timely manner and ensure that it can be used for the upcoming energy conservation standard, DOE plans to move forward with the version of the test procedure proposed in the December 9, 2008 NOPR.

In addition to the standby mode and off mode test procedure, DOE is reviewing its active mode test procedure for clothes dryers and room air conditioners to support the energy conservation standard rulemaking. Due to the delays completing the standby mode and off mode test procedure discussed above, DOE revised the standby mode and off mode test procedure rulemaking schedule to follow a similar timeline as the active mode test procedure. In order to improve program efficiency, DOE will combine the test procedure rulemakings for active mode, standby mode, and off mode. DOE issued a combined test procedure SNOPR on June 11, 2010,

which was published in the *Federal Register* on June 29, 2010 (75 Fed. Reg. 37594). DOE is currently working on a test procedure final rule that addresses active mode, standby mode, and off mode of clothes dryers and room air conditioners.

**Residential Clothes Washers.** DOE is undertaking two rulemakings to address the requirements pertaining to residential clothes washers in EISA 2007. Specifically, EISA 2007 requires both an energy conservation standard rulemaking (scheduled for completion in December 2011), as well as a test procedure rulemaking to address standby mode and off mode energy consumption (originally scheduled for completion in June 2009).

For the energy conservation standard, DOE issued a notice of public meeting and availability of the framework document on August 21, 2009, which was published in the *Federal Register* on August 28, 2009 (74 Fed. Reg. 44306). A public meeting to discuss the framework document was held on September 21, 2009 at DOE headquarters in Washington, DC. At this time, DOE is finalizing the preliminary analyses for this rulemaking.

For the test procedure, DOE anticipated an international test procedure standard (IEC 62301) revision that would have included procedures for measuring standby mode and off mode energy consumption in residential clothes washers. DOE determined it necessary to consider the updated, international consensus test procedure, which was expected to be finalized by July 31, 2009. DOE has since learned that IEC does not expect to publish a revised version of IEC 62301 until the middle of 2010. In order to complete the test procedure in a timely manner, DOE is moving forward with work on the residential clothes washer standby mode and off mode test procedure NOPR. Due to delays in the IEC 62301 revision, the schedule for completing the standby mode and off mode test procedures has followed a similar timeline as the active mode test procedure for residential clothes washers. In order to improve program efficiency, DOE decided to combine the test procedure rulemakings for active mode, standby mode, and off mode. DOE is currently finalizing the combined test procedure NOPR.

**Residential Refrigerators.** As required by section 311 of EISA 2007, DOE is scheduled to issue energy conservation standards for residential refrigerators by December 31, 2010. DOE initiated this rulemaking by publishing a notice of availability of the framework document. The framework document was issued on September 12, 2008 and published in the *Federal Register* on September 18, 2008 (73 Fed. Reg. 54089). A public meeting to discuss the rulemaking was held at DOE headquarters in Washington, DC, on September 29, 2008. DOE issued the notice of public meeting and availability of the preliminary technical support document on November 9, 2009 which was published in the *Federal Register* on November 16, 2009 (74 Fed. Reg.

58915). A public meeting to discuss the preliminary analyses was held on December 10, 2009 at DOE headquarters in Washington, DC. DOE is finalizing the NOPR for this energy conservation standard.

DOE also initiated a rulemaking to amend the test procedures for residential refrigerators. This test procedure was initiated in support of the residential refrigerators energy conservation standard required by EISA 2007, and it will also address standby mode and off mode energy consumption. The revised test procedure will allow DOE to account for standby mode and off mode energy use in the energy conservation standard, as required by section 310 of EISA 2007. DOE issued a test procedure NOPR on April 1, 2010, which was published in the *Federal Register* on May 27, 2010 (75 Fed. Reg. 29824). DOE held a public meeting at its headquarters in Washington, DC to discuss the proposed test procedure on June 22, 2010. DOE is currently preparing the final rule for this test procedure rulemaking.

#### Space Cooling Team

**Residential Central Air Conditioners and Heat Pumps.** The final rule regarding energy conservation standards for residential central air conditioners and heat pumps is scheduled for issuance no later than June 2011, the deadline set forth in the consent decree. DOE published a notice of availability of the framework document in the *Federal Register* on June 6, 2008 (73 Fed. Reg. 32243) and held the framework document public meeting at DOE headquarters in Washington, DC on June 12, 2008. DOE issued a notice of public meeting and availability of the preliminary technical support document on February 22, 2010, which was published in the *Federal Register* on March 25, 2010 (75 Fed. Reg. 14368). DOE held a public meeting to discuss its preliminary analyses at its Washington, DC headquarters on May 5, 2010. DOE is currently preparing a NOPR for this rulemaking.

DOE also initiated a test procedure rulemaking for residential central air conditioners and heat pumps in support of the energy conservation standard. Accordingly, DOE is scheduled to issue a test procedure final rule by June 2011. The test procedure will address standby mode and off mode energy consumption in order to meet the requirements of section 310 of EISA 2007. DOE issued a test procedure NOPR on February 12, 2010, which was published in the *Federal Register* on June 2, 2010 (75 FR 31224). A public meeting at DOE headquarters in Washington, DC to discuss the proposal was held on June 11, 2010. DOE is currently reviewing the test procedure final rule for these products.

#### Commercial Refrigeration Team

**Beverage Vending Machines.** The final rule regarding energy conservation standards for beverage vending machines was scheduled to be issued by August 2009. DOE published a notice of availability of the framework document for these products in the *Federal Register* on June 28, 2006 (71 Fed. Reg. 36715). A public meeting on the framework document was held at DOE headquarters in Washington, DC on July 11, 2006. The ANOPR for beverage vending machine standards was issued on June 9, 2008 and published in the *Federal Register* on June 16, 2008 (73 Fed. Reg. 34094). A public meeting to discuss the ANOPR was held at DOE headquarters in Washington, DC on June 26, 2008. DOE issued a NOPR on May 22, 2009 which was published in the *Federal Register* on May 29, 2009 (74 Fed. Reg. 26020). DOE held a public meeting to discuss the NOPR on June 17, 2009 at DOE headquarters in Washington, DC. DOE issued a final rule on August 5, 2009, which was published in the *Federal Register* on August 31, 2009 (74 Fed. Reg. 44914). This rulemaking is now complete.

**Walk-In Coolers and Freezers.** EISA 2007 requires DOE to develop an energy conservation standard for walk-in coolers and freezers (42 U.S.C. 6313(f)(4)) which is scheduled for completion no later than January 2012. The notice of availability of the framework document was issued on December 24, 2008 and published in the *Federal Register* on January 6, 2009 (74 Fed. Reg. 411). DOE held the framework document public meeting at DOE headquarters in Washington, DC, on February 4, 2009. DOE issued a notice of public meeting and availability of the preliminary technical support document on March 29, 2010, which was published in the *Federal Register* on April 5, 2010 (75 Fed. Reg. 17080). DOE held a public meeting to discuss these analyses at its headquarters in Washington, DC on May 14, 2010. DOE is currently preparing the NOPR for this rulemaking.

EISA 2007 also requires DOE to establish a test procedure for walk-in coolers and freezers by January 2010. At the February 4, 2009 framework document public meeting, the Air-Conditioning, Heating, and Refrigeration Institute (AHRI) stated that they expected publication of their own refrigeration test procedure in April 2009. DOE waited for publication of this industry test procedure with the intention of incorporating aspects of it in the DOE test procedure. However, AHRI did not complete its refrigeration test procedure until September 25, 2009. The AHRI delay impacted the planned publication of the test procedure final rule such that DOE's promulgation of its test procedure did not meet the EISA 2007 required date. DOE issued the test procedure NOPR on December 14, 2009 which was published in the *Federal Register* on January 4, 2010 (75 Fed. Reg. 186). Due to inclement weather, the test procedure public meeting at DOE headquarters in Washington, DC, which was originally scheduled for February 11, 2010 was instead held on March 24, 2010. Based on comments received, DOE is currently preparing an SNOPR for this rulemaking. DOE plans to complete the test procedure

final rule as expeditiously as possible and will prioritize it in the context of its other rulemaking obligations.

**Commercial Refrigeration Equipment.** EPCACT 2005 requires DOE to consider amending the existing energy conservation standards for commercial refrigeration equipment by January 1, 2013 (42 U.S.C 6313(c)(5)(A)). This rulemaking will consider amending standards directly prescribed by EPCACT 2005 (for self-contained commercial refrigerators and freezers with doors) and standards included in the commercial refrigeration equipment final rule issued on December 31, 2008 (for self-contained equipment without doors, remote-condensing systems, and ice cream freezers). 74 Fed. Reg. 1092. DOE issued a notice of public meeting and availability of the framework document on April 30, 2010, which was published in the *Federal Register* on May 6, 2010 (75 Fed. Reg. 24824). A public meeting to discuss the rulemaking approach was held at DOE headquarters in Washington, DC on May 18, 2010. DOE is currently conducting preliminary analyses for this rulemaking.

Additionally, DOE has initiated a test procedure rulemaking for commercial refrigeration equipment in support of the energy conservation standard.

**Automatic Ice Makers.** EPCACT 2005 established energy conservation standards for commercial automatic ice makers and requires DOE to consider revised standards by January 1, 2015 (42 U.S.C 6313(d)(3)(A)). This rulemaking will be initiated in 2011.

#### Battery Chargers, External Power Supplies, and Televisions Team

**Battery Chargers and External Power Supplies.** As discussed in previous implementation reports, EISA 2007 removed battery chargers from the determination analysis that was already underway (leaving only external power supplies) and reduced the schedule for completing the determination to two years after the date of enactment (*i.e.*, by December 19, 2009). DOE issued a notice of proposed determination for non-Class A external power supplies on October 23, 2009, which was published in the *Federal Register* on November 3, 2009 (74 Fed. Reg. 56928). DOE issued a final positive determination on May 7, 2010, which was published in the *Federal Register* on May 14, 2010 (75 Fed. Reg. 27170). This rulemaking is now complete.

Also pursuant to EISA 2007, DOE is bundling the two requirements to amend standards for Class A external power supplies (42 U.S.C. 6295(u)(3)(D)) and to prescribe energy conservation standards for battery chargers (42 U.S.C. 6295(u)(1)(E)(i)(II)) into a single rulemaking scheduled

for completion by July 1, 2011. DOE issued a notice of availability of the framework document for this rulemaking on May 26, 2009, which was published in the *Federal Register* on June 4, 2009 (74 Fed. Reg. 26816). A public meeting to discuss the framework document was held on July 16, 2009 at DOE headquarters in Washington, DC. DOE is currently finalizing the preliminary analyses for this energy conservation standards rulemaking. Upon making a positive determination that energy conservation standards are also warranted for non-Class A external power supplies, this product is now bundled with this rulemaking.

In addition, DOE is currently working on the NOPR for an active mode test procedure for battery chargers and external power supplies. DOE already completed a standby mode and off mode test procedure for battery chargers and external power supplies which was issued on March 11, 2009, and was published in the *Federal Register* on March 27, 2009 (74 Fed. Reg. 13318). The active mode test procedure was initiated in support of the energy conservation standards rulemaking for battery chargers and external power supplies. DOE issued a test procedure NOPR for these products on January 29, 2010, which was published in the *Federal Register* on April 2, 2010 (75 Fed. Reg. 16958). A public meeting to discuss this proposal was held at DOE headquarters in Washington, DC on May 7, 2010. DOE is currently preparing a final rule for active mode test procedures.

**Televisions.** Although there are currently no Federal energy conservation standards for television sets, they are a covered product under EPCA (42 U.S.C. 6292(a)(12)). Furthermore, EPCA specifically grants DOE the authority to conduct a rulemaking to consider promulgating energy conservation standards for television sets (42 USC 6295 (l)(3)). DOE has initiated a rulemaking to consider establishing television set energy conservation standards. DOE is currently working on the framework document for this rulemaking.

DOE had established test procedures for television sets in a previous final rule (42 Fed. Reg. 46151 (Sept. 14, 1977), redesignated and amended at 44 Fed. Reg. 37938 (June 29, 1979)). This test procedure was appropriate for measuring the energy efficiency of only analog television sets. In the Digital Television Transition and Public Safety Act of 2005 (47 U.S.C. 309), as amended by the DTV Delay Act of 2009 (47 U.S.C. 609), Congress directed the Federal Communications Commission to terminate all licenses for full-power television stations in the analog television service, and to require the cessation of broadcasting by full-power stations in the analog television service, by June 13, 2009. Since the June 2009 deadline set by Congress for the transition to digital television has passed, the existing test procedure and sampling plan were obsolete.

In response to separate petitions for rulemaking from the California Energy Commission and the Consumer Electronics Association (CEA), and as a result of the transition to digital television discussed above, DOE repealed the existing television test procedure and the regulatory provision specifying requirements for the number of units to be tested pursuant to the test procedure (*i.e.*, the sampling plan). DOE maintained the relevant regulatory definitions because they continue to be appropriate notwithstanding the transition to digital television, and because television sets are listed as a covered product in EPCA. DOE issued the final rule repealing the television set test procedure on October 2, 2009. It was published in the *Federal Register* on October 20, 2009 (74 Fed. Reg. 53640). DOE will begin a rulemaking process in 2011 to establish a new Federal test procedure for televisions in conjunction with the energy conservation standards rulemaking described above. In establishing a new test procedure, DOE will give serious consideration to the suggestion made by CEA that DOE adopt IEC 62087–2008(E), Methods of measurement for the power consumption of audio, video and related equipment.