

# BUILDING TECHNOLOGIES PROGRAM

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



Energy Conservation Program for  
Consumer Products and Commercial  
and Industrial Equipment

AHRI Annual Meeting  
CCE Overview and Update  
April 13, 2011

- 1** **Certification**
- 2** **Basic Model Explanation**
- 3** **Certified Ratings**
- 4** **AEDM/ARM Requirements**
- 5** **Enforcement Overview**
- 6** **DOE's New Initiatives**
- 7** **How to Submit Questions**

## A Basic Model

- *May* contain multiple models/model numbers.
- Is manufactured by a single manufacturer, although it may be distributed under different brand names.
- Is made up of models that contain the same primary energy source (i.e., electric, gas).
- Is made up of models that have essentially identical electrical, physical and functional characteristics that affect energy consumption and/or efficiency.
- May not contain models from multiple product classes.
- Can be made up of only one model. There is no requirement for multiple models within a basic model.

# How To Get Certified Ratings

**Test At Least Two Units of a Basic Model Using the DOE Test Procedure  
(Maximum Number of Units is at the Discretion of the Manufacturer)**

**Determine which Federal Conservation Standards Apply to the Product**

Consumer products: 430.32

Commercial equipment: 431

**Calculate the Product Specific Certification Statistics, 429.14 to 429.54**

Consumer 430.32,  
Commercial 431

Sample Mean (x)

Upper Confidence Limit  
(UCL)

Lower Confidence Limit  
(LCL)

**Determine Minimum and Maximum Rating Values**

Compare Mean and UCL or LCL to Consumption or Efficiency Standard Per Regulations

**Generate Certified Rating Between Minimum and Maximum Values**

## **Alternate Efficiency Determination Methods (AEDMs) Commercial HVAC and WH Equipment**

- Substantiation: Must be validated by testing a specified number of units and comparing test results against values derived from the proposed AEDM.
- Verification: Must be verified against a different subset of basic models.
- Manufacturer must be able to provide DOE with information necessary to verify AEDM performance upon request.
- 429.70.

## **Alternative Rating Methods (ARM) Split System Central Air Conditioners and Heat Pumps**

- Substantiation: Must be validated with test data from four different indoor units and at least two different outdoor units that meet additional specifications.
- Verification: Must be reviewed and approved by DOE before use by the manufacturer.
- 429.70.

- Effective date for compliance with certification provisions is July 5, 2011, for any model not previously certified with DOE.
- Only electronic submission accepted. Submit online at <https://www.regulations.doe.gov/ccms>.
- Use product-specific, Excel templates provided by DOE.
- Submit certification report before distribution in commerce for all new models.
- Annual submittal of carry-over products on or before the 1<sup>st</sup> of the month specified in the annual certification table (429.12(d)).
- No additional certification testing required for annual submission.
- Recertify if the redesign of an existing model increases energy consumption or decreases energy efficiency resulting in re-rating.

# Enforcement Overview

<b>DOE Office of the General Counsel, Office of Enforcement</b>	Enforces the energy conservation, water conservation, and design standards.
<b>Certification</b>	<ul style="list-style-type: none"><li>• Seeking civil penalties for failure to certify and improper certification.</li><li>• Certification must be based on testing in accordance with the applicable test procedure and sampling plan or a valid AEDM/ARM.</li></ul>
<b>Standards</b>	<ul style="list-style-type: none"><li>• Seeking civil penalties for distribution of products that do not meet Federal standards.</li><li>• Testing products suspected of failing to meet Federal standards.</li></ul>

<b>Civil Penalty</b>	<ul style="list-style-type: none"><li>• Failure to meet applicable efficiency standards and certification violations.</li><li>• Penalties for violations of standards calculated per unit offered for distribution in commerce.</li><li>• Penalties for certification violations calculated per day for each basic model improperly certified or not certified.</li><li>• DOE has issued guidance on the imposition of civil penalties.</li></ul>
<b>Subpoena</b>	DOE issues a subpoena in order to obtain test data and to obtain information regarding distribution of regulated products.
<b>Noncompliance Determination</b>	DOE makes a determination of noncompliance based on certification information, on test data provided by a manufacturer, or on test data obtained through DOE testing.
<b>Injunction</b>	DOE may seek a court order to ensure compliance with any regulatory requirement.

**Request for  
Information on  
Alternative Methods  
of Determining  
Efficiency Issued  
April 8, 2011**

**DOE seeks comment and data:**

- Current procedures used by industry to rate low-volume, custom built commercial equipment;
- Current applications of DOE's AEDM/ARM procedures;
- Products to which AEDM/ARM should apply;
- Data to demonstrate ability of AEDM/ARM to estimate energy efficiency/consumption; and
- Procedures governing substantiation and verification of AEDMs and ARMs.

**Notice of Proposed Rulemaking on the Compliance Date for Certification Provisions Applicable to Certain Types of Commercial Equipment Issued April 12, 2011**

**DOE seeks comment and data:**

- Proposed a tentative 18-month compliance date extension for the certification provisions for commercial refrigeration equipment; commercial heating, ventilating, air-conditioning (HVAC) equipment; commercial water-heating equipment; walk-in coolers; walk-in freezers; and automatic commercial ice-making equipment;
- Considering extending the compliance date for other commercial equipment based on comments and data; and
- Considering longer/shorter date extension based on comments and data.

<b>Submit a Question:</b>	<ul style="list-style-type: none"><li>• DOE Test Procedure Website: <a href="http://www1.eere.energy.gov/guidance/default.aspx?pid=2&amp;spid=1">http://www1.eere.energy.gov/guidance/default.aspx?pid=2&amp;spid=1</a></li><li>• Ashley Armstrong: Ashley.Armstrong@EE.Doe.Gov</li></ul>
<b>Request a Test Procedure Waiver:</b>	<ul style="list-style-type: none"><li>• DOE's regulations allow manufacturers to apply for a waiver when a manufacturer determines that a given basic model contains one or more design features that prevent testing in accordance with DOE's test procedure.</li><li>• Email: AS_Waiver_Requests@ee.doe.gov</li></ul>
<b>File a Complaint:</b>	Email: <a href="mailto:energyefficiencyenforcement@hq.doe.gov">energyefficiencyenforcement@hq.doe.gov</a> .  The Office of Enforcement will protect the identity of complainants to the maximum extent permitted by law.
<b>DOE's Certification, Compliance, and Enforcement Website:</b>	<a href="http://www1.eere.energy.gov/buildings/appliance_standards/certification_enforcement.html">http://www1.eere.energy.gov/buildings/appliance_standards/certification_enforcement.html</a>
<b>DOE's Online Certification System:</b>	<a href="https://www.regulations.doe.gov/ccms/">https://www.regulations.doe.gov/ccms/</a>
<b>Enforcement Information:</b>	<a href="http://gc.doe.gov/energy_efficiency_enforcement.htm">http://gc.doe.gov/energy_efficiency_enforcement.htm</a>