



Energy Conservation Program for
Consumer Products and Commercial
and Industrial Equipment

NEMA Distribution
Transformers
CCE Overview and Update
May 24, 2011

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Certification

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Basic Model and kVA Grouping Explanation

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How to Submit Questions

A Manufacturer

- Is the domestic manufacturer or an importer.
- May produce equipment at multiple facilities in various locations with the same model characteristics.
- May group individual models into basic models or kVA groupings at the manufacturer's discretion.
- May elect to use a third-party (e.g., certified laboratory) for testing and certification purposes.
- Must determine certified ratings through testing or alternative efficiency determination methods.
- Is responsible for certification to the Department.

A manufacturer produces equipment at multiple facilities and imports all of the equipment through the same entity.

- The importer is the manufacturer. Units of a model from multiple locations can be grouped into same basic model and can be reported on one certification report as one basic model.

A manufacturer produces equipment at multiple facilities and utilizes different importers.

- Each importer is a manufacturer, and each importer has an *independent* responsibility to certify. Units from multiple locations can be grouped only to the extent that they are imported by one importer. The OEM may submit the certification as a third party representative on behalf of multiple importers.

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 have the same insulation type and have the same number of phases.
- Is made up of models that do not have any differentiating electrical, physical or functional features that affect energy consumption.
- 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.
- Must have one rated efficiency for all models within the basic model.

A kVA Grouping

- Is a group of basic models.
- Contains models with the same kilovolt ampere rating.
- Contains models with the same insulation type (i.e., low-voltage, dry-type; medium-voltage, dry-type; or liquid-immersed).
- Contains models with the same number of phases.
- Comprised of models that have different ratings.
- Must be certified based on the least-efficient and most-efficient individual models within the grouping. The least-efficient and most-efficient should be representative of represented efficiency (RE).
- Least-efficient and most-efficient individual models may have the same RE.

Test Units of a Basic Model Using the DOE Test Procedure or apply an Alternate Efficiency Determination Method (AEDM)

(Maximum Number of Units is at the Discretion of the Manufacturer)

Determine which Federal Conservation Standards Apply to the Product

431.196

Calculate the Product Specific Certification Statistics, 429.47

Federal conservation standard 431.196	Sample Mean (x)	Represented Efficiency (RE)
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Determine Minimum and Maximum Rating Values

Compare Represented Efficiency (RE) to Efficiency Standard Per Regulations

Generate Certified Rating Between Minimum and Maximum Values

Alternate Efficiency Determination Methods (AEDMs)

- Substantiation: Must be validated by testing at least five 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.

- Effective date for compliance with certification provisions is July 5, 2011, for any model not previously certified with DOE.
 - This includes those models entered into commerce on or after July 5th and those currently offered on the market that were not previously certified.
- Only electronic submission accepted. Submit online at <https://www.regulations.doe.gov/ccms> using 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 1st of June.
- No additional certification testing required for annual submission.
- During the year, recertify if the redesign of an existing model increases energy consumption or decreases energy efficiency resulting in re-rating.

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

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

Notice of Proposed Rulemaking on Alternative Methods of Determining Efficiency, Tentative Fall 2011

Issues under consideration:

- 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.

Submit a Question:	<ul style="list-style-type: none">DOE Guidance Website: http://www.eere.energy.gov/guidance/default.aspx?pid=2&spid=1Ashley Armstrong: Ashley.Armstrong@EE.Doe.Gov
Request a Test Procedure Waiver:	<ul style="list-style-type: none">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.Email: AS_Waiver_Requests@ee.doe.gov
File a Complaint:	Email: energyefficiencyenforcement@hq.doe.gov The Office of Enforcement will protect the identity of complainants to the maximum extent permitted by law.
DOE's Certification, Compliance, and Enforcement Website:	http://www.eere.energy.gov/buildings/appliance_standards/certification_enforcement.html
DOE's Online Certification System:	https://www.regulations.doe.gov/ccms/
Enforcement Information:	http://gc.doe.gov/energy_efficiency_enforcement.htm