



U.S. Department of Energy  
Energy Efficiency and Renewable Energy

# Test Procedures for Electric Motors Notice of Proposed Rulemaking

## Public Meeting

Building Technologies Program  
Office of Energy Efficiency and Renewable Energy  
U.S. Department of Energy

**January 29, 2009**

[http://www1.eere.energy.gov/buildings/appliance\\_standards/commercial/small\\_electric\\_motors\\_nopr\\_tp\\_pub\\_mtg.html](http://www1.eere.energy.gov/buildings/appliance_standards/commercial/small_electric_motors_nopr_tp_pub_mtg.html)



## Public Meeting Agenda

1	Overview
2	Small Electric Motors Test Procedure
3	Electric Motors Test Procedure
4	Other Updates to the CFR
5	Closing Discussion and Remarks



## Welcome

- **Introductions**
- **Role of the Facilitator**
- **Ground Rules (norms)**
  - Listen as an ally
  - Use short, succinct statements/keep to the point
  - Hold sidebar conversations outside the room
  - One person speaks at a time (raise hand to be recognized; state your name for the record)
  - Set cell phones to silent/vibrate
- **Housekeeping Items**
- **Agenda Review**
- **Opening Remarks**



## Meeting Agenda

<b>9:00-9:20 am</b>	<b>Welcome and Introductions</b>
<b>9:20-9:30 am</b>	<b>Overview</b>
<b>9:30-10:30 am</b>	<b>Small Electric Motors Test Procedure</b>
<b>10:30-10:45 am</b>	<b>Break</b>
<b>10:45-12:00 pm</b>	<b>Electric Motors Test Procedure</b>
<b>12:00-1:00 pm</b>	<b>Lunch</b>
<b>1:00-1:15 pm</b>	<b>Other Issues</b>
<b>1:15 -1:45 pm</b>	<b>Closing Remarks</b>

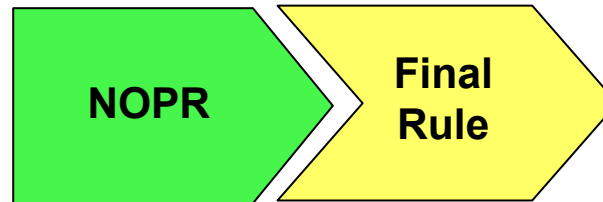


## Purpose of the Public Meeting

- **To present DOE's proposed test procedures for small electric motors and electric motors**
- **To clarify any questions about DOE's proposed approach**
- **To seek comment from participants on the proposed test procedure**
- **To describe the next steps for the rulemaking**



## Electric Motors Test Procedure Rulemaking



- **NOPR published: December 22, 2008**
- **NOPR Public Meeting: January 29, 2009 (today)**
- **Comments on NOPR due: March 9, 2009**
  - Transcript records oral comments from today's public meeting
  - Written comments
- **DOE reviews and considers all comments**
- **Final Rule publication**
  - Final Rule will be published on or before June 30, 2009 and before the small electric motors energy conservation standards NOPR



## Issues for Public Comment

### **Detailed in section IV.E of the NOPR:**

1. Test Procedure for Small Electric Motors
2. Alternative Test Procedure for Small Electric Motors
3. Alternative Efficiency Determination Method for Small Electric Motors
4. Definition of “Electric Motor”
5. Definition of “Fire Pump Motor”
6. Definition of “NEMA Design B, General Purpose Electric Motor”
7. Updates to Electric Motor Test Procedure



## Issues for Comment

**Issue Box** DOE welcomes comments, data, and information concerning this proposed test procedure on small electric motors and electric motors. Throughout this presentation, issues that correspond to issues raised in DOE's NOPR (Section IV.E) are provided in discussion boxes like this one for discussion in the workshop. While these are specific issues DOE identified for review, comments are welcome on any part of DOE's proposed rule.



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- 2 Small Electric Motors Test Procedure**
- 3 Electric Motors Test Procedure
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## Small Electric Motors

- **The Energy Policy Act of 1992 amended the Energy Policy and Conservation Act to direct DOE to prescribe energy conservation standards for those small electric motors for which the Secretary determines that standards “would be technologically feasible and economically justified, and would result in significant energy savings.” (42 U.S.C. 6317(b)(1)).**
- **DOE conducted analysis and published a positive determination on July 10, 2006. 71 FR 38799.**
- **DOE then initiated work on its test procedure and energy conservation standards rulemaking.**
  - **Test procedure NOPR published December 22, 2008, 73 FR 78220. Comment period open until March 9, 2009.**
  - **Energy Conservation Standards Framework Document published on August 10, 2007, 72 FR 44990 and preliminary analysis published December 30, 2008, 73 FR 79723.**
- **DOE is conducting a separate rulemaking to evaluate energy conservation standards for small electric motors, public meeting tomorrow. Comment period closes March 2, 2009.**



## Scope of Product Covered by Test Procedure

- **Statutory Definition of Small Electric Motor**  
“a NEMA [National Electrical Manufacturers Association] general-purpose alternating-current single-speed induction motor, built in a two-digit frame number series in accordance with NEMA Standards Publication MG1–1987.” (42 U.S.C. 6311(13)(G))
- **DOE’s interpretation of this definition is addressed in the energy conservation standards rulemaking**
- **DOE evaluates only those small electric motors that are not incorporated into products that are otherwise covered by other Federal regulatory standards (e.g., refrigerators or air conditioners)**



## Small Electric Motors Test Procedure General Overview

- **Three industry test procedures**
  - IEEE 114-2001: “IEEE Standard Test Procedure for Single-Phase Induction Motors”
  - IEEE 112-2004: “IEEE Standard Test Procedure for Polyphase Induction Motors and Generators”
  - CSA C747-94: “Energy Efficiency Test Methods for Single- and Three-Phase Small Motors.” (Reaffirmed 2005)
- **DOE is proposing test procedures for two general categories of small electric motor: single-phase and poly-phase**
  - Single-phase: IEEE Standard 114 or CSA Standard C747
  - Poly-phase: IEEE Standard 112 or CSA Standard C747
- **Manufacturers have a choice of testing with the IEEE Standard or the CSA Standard**
- **DOE proposes to create a new Subpart T in 10 CFR Part 431 for definitions, test procedures and potentially, standards.**



## Small Electric Motors Test Procedures

	<b>IEEE Standard 114-2001, <i>Test Procedure for Single-Phase Induction Motors</i></b>	<b>IEEE Standard 112-2004, <i>Test Procedure for Polyphase Induction Motors and Generators</i></b>	<b>CAN/CSA Standard C747-94, <i>Energy Efficiency Test Methods for Single- and Three- Phase Small Motors</i> (Reaffirmed 2005)</b>
<b>Applicable to Capacitor-start, Induction-run?</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>
<b>Applicable to Capacitor-start, capacitor-run?</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>
<b>Applicable to polyphase?</b>	<b>No</b>	<b>Yes</b>	<b>Yes</b>



## Small Electric Motors Test Procedures

- **DOE proposes to adopt the IEEE test methods because:**
  - Most current versions in use by industry and reflect the best approaches for measuring the efficiency of Small Electric Motors
  - Accurate and repeatable measurements
  - Consistent with test methods in CFR for Electric Motors
- **DOE proposes to allow CAN/CSA Standard C747-94 as an alternative test method to manufacturers because:**
  - Accurate and consistent measurements of energy efficiency
  - Consistent with objectives of North American Free Trade Agreement
  - Consistent with test methods in CFR for Electric Motors



## Issues for Comment

### **Issue #1 Test Procedure for Small Electric Motors**

DOE invites comment on its proposed test procedure for small electric motors, which is based on IEEE Standard 114–2001 and IEEE Standard 112–2004. See section III.A for details.

### **Issue #2 Alternative Test Procedure for Small Electric Motors**

DOE invites comment on its proposal whether to allow a manufacturer to use the CAN/CSA Standard C747–94 as an alternative to the IEEE Standards 112 and 114. DOE may reserve the option of promulgating CAN/CSA Standard C747–94 in the final rule of this test procedure, based on stakeholder comment. See section III.A for details.



## Definitions for Small Electric Motors

- **DOE proposes four definitions in new Subpart T**
  - “Alternative Efficiency Determination Method” (AEDM)
  - “Average Full Load Efficiency”
  - “Basic Model”
  - “Small Electric Motor”



## **Definitions for Small Electric Motors: Alternative Efficiency Determination Method (AEDM)**

- **The AEDM is a mathematical model enabling manufacturers to calculate total loss and average efficiency for a particular basic model without testing.**
- **The AEDM is an optional alternative to alleviate testing burden, but must be substantiated through actual testing of a number of basic models.**
- **DOE currently allows AEDM testing for 1-200 hp electric motors and distribution transformers.**
- **AEDM definition is identical to that under 10 CFR 431.12, except the term “small” was inserted in front of “electric motor”**
  - **“means, with respect to a small electric motor, a method of calculating the total power loss and average full load efficiency.”**



## **Definitions for Small Electric Motors: Average Full Load Efficiency**

- **Definition is identical to that under 10 CFR 431.12, except the term “small” was inserted in front of “electric motor”**
  - “means the arithmetic mean of the full load efficiencies of a population of small electric motors of duplicate design, where the full load efficiency of each motor in the population is the ratio (expressed as a percentage) of the motor’s useful power output to its total power input when the motor is operated at its full rated load, rated voltage, and rated frequency.”



## Definitions for Small Electric Motors: Basic Model

- **Definition is identical to that under 10 CFR 431.12, except the term “small” was inserted in front of “electric motor”**
  - “means, with respect to a small electric motor, all units of a given type of small electric motor (or class thereof) manufactured by a single manufacturer, and which have the same rating, have electrical characteristics that are essentially identical, and do not have any differing physical or functional characteristics which affect energy consumption or efficiency. For the purpose of this definition, “rating” means a combination of the small electric motor’s group (i.e., capacitor-start, capacitor-run; capacitor-start, induction-run; or polyphase), horsepower rating (or standard kilowatt equivalent), and number of poles with respect to which §431.346 prescribes nominal full load efficiency standards.”



## **Definitions for Small Electric Motors: Small Electric Motor**

- **Definition is derived from the statute (42 U.S.C. 6311(13)(G)), and therefore language is not modified by DOE:**
  - “means a NEMA general purpose alternating current single-speed induction motor, built in a two-digit frame number series in accordance with NEMA Standards Publication MG1–1987.”



## Alternative Efficiency Determination Method

- **DOE is concerned about regulatory testing burden**
  - Manufacturers produce large numbers of small electric motors basic models
  - Testing an electric motor typically requires 10-12 hours and can cost as much as \$2000/test
- **DOE proposes to adopt procedures to allow a manufacturer to certify compliance using an AEDM, instead of actual testing**
- **The AEDM is a predictive model developed from engineering data**
  - Substantiated by testing a minimum of five basic models, of which at least five units must be tested (i.e., 25 motors)
  - AEDM must predict total power loss within ten percent of the mean total power loss from actual testing (same requirement as 1-200 hp electric motors)
- **The AEDM can then be used to certify compliance (in lieu of testing)**



## Issue for Comment

### **Issue #3 Alternative Efficiency Determination Method for Small Electric Motors**

DOE invites comment on the proposed use of an AEDM for small electric motors, including the requirements for a manufacturer to substantiate its AEDM, the number of basic models and units to be tested, and the accuracy of the predictive capabilities of the AEDM relative to actual testing. See section III.A.3 for details.



## Manufacturer Self-Certification

- **EPCA requires that electric motor manufacturers “certify, through an independent testing or certification program nationally recognized in the United States, that [any electric motor subject to EPCA efficiency standards] meets the applicable standard.” (42 U.S.C. 6316 (c)).**
  - 10 CFR 431.17(a)(5) directs manufacturers to establish compliance either through a certification program that is nationally recognized, or an accredited laboratory that meets the requirements of 10 CFR 431.18.
- **Because small electric motors are covered under section 346 of EPCA (42 U.S.C. 6317), the same certification requirements that apply to electric motors do not apply, although DOE may propose such requirements for small electric motors in the future.**



## Public Meeting Agenda

- 1 Overview
- 2 Small Electric Motors Test Procedure
- 3 Electric Motors Test Procedure**
- 4 Other Updates to the CFR
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## Electric Motors Test Procedure Outline

- **DOE proposes to modify and add definitions pertaining to electric motors**
  - Some proposed changes are derived from EISA 2007 (e.g., Fire Pump Motor – covered, not defined)
- **DOE proposes to update citations to industry standards throughout the test procedure**
  - NEMA Standards Publication MG-1, “Motors and Generators”
  - IEEE Standard 112, “Test Procedure for Polyphase Induction Motors and Generators”
  - CAN/CSA Standard C390, “Energy Efficiency Test Methods for Three-Phase Induction Motors”
- **DOE clarifies that this updated test procedure is applicable to electric motors that were newly covered by EISA 2007, such as 201-500 hp motors**



## Definitions for Electric Motors

- **Terms with references updated or corrected:**
  - “Accreditation”
  - “General Purpose Electric Motor (Subtype I)”
  - “General Purpose Motor”
  - “Nominal Full Load Efficiency”
- **Terms with proposed definitions and/or substantive revisions**
  - “Basic Model”
  - “Electric Motors”
  - “Fire Pump Motor”
  - “NEMA Design B General Purpose Electric Motor”



## Proposed Definition Reference Update: Accreditation

- Proposes to update citations in definition from IEEE Standard 112-1996 to 112-2004 and from CSA C390-93 to C390-98(R2005)
- **Definition:** “means recognition by an accreditation body that a laboratory is competent to test the efficiency of electric motors according to the scope and procedures given in Test Method B of Institute of Electrical and Electronics Engineers (IEEE) Standard 112–2004, Test Procedure for Polyphase Induction Motors and Generators, and Test Method (1) of Canadian Standards Association (CAN/CSA) Standard C390– 98(R2005), Energy Efficiency Test Methods for Three-Phase Induction Motors. (Incorporated by reference, see § 431.15)”



## Proposed Definition Reference Update: General Purpose Electric Motor (Subtype I)

- Update NEMA citation from MG1-1993 to MG1-2006. No impact from this update, as the cited paragraphs are the same.
- **Definition:** “means any motor which is designed in standard ratings with either: (1) Standard operating characteristics and standard mechanical construction for use under usual service conditions, such as those specified in NEMA Standards Publication MG1-2006 Rev. 1, paragraph 14.2, “Usual Service Conditions,” (Incorporated by reference, see §431.15) and without restriction to a particular application or type of application; or (2) Standard operating characteristics or standard mechanical construction for use under unusual service conditions, such as those specified in NEMA Standards Publication MG1-2006 Rev. 1, paragraph 14.3 “Unusual Service Conditions,” (Incorporated by reference, see §431.15) or for a particular type of application, and which can be used in most general purpose applications.”



## Proposed Definition Reference Update General Purpose Motor

- Update NEMA citation from MG1-1993 to MG1-2006. No impact from this update, as the cited paragraphs are the same.
- **Definition:** “means any motor which is designed in standard ratings with either: (1) Standard operating characteristics and standard mechanical construction for use under usual service conditions, such as those specified in NEMA Standards Publication MG1–2006, paragraph 14.2, “Usual Service Conditions,” (incorporated by reference, see § 431.15) and without restriction to a particular application or type of application; or (2) Standard operating characteristics or standard mechanical construction for use under unusual service conditions, such as those specified in NEMA Standards Publication MG1–2006, paragraph 14.3, “Unusual Service Conditions,” (incorporated by reference, see § 431.15) or for a particular type of application, and which can be used in most general purpose applications.”



## Proposed Definition Reference Update Nominal Full Load Efficiency

- **Update NEMA citation from MG1-1993 to MG1-2006. No impact from this update, because the substantive content (i.e., efficiency values) are not affected.**
- **Definition: “With respect to an electric motor, a representative value of efficiency selected from the “Nominal Efficiency” column of Table 12-10, NEMA Standards Publication MG1-2006 Rev. 1, (Incorporated by reference, see §431.15), that is not greater than the average full load efficiency of a population of motors of the same design.”**



## Proposed Definition Revision Basic Model

- **EISA 2007 made new combinations of horsepower, poles and construction subject to DOE coverage**
- **Current definition states “means one of the 113 combinations of...”**
- **DOE proposes to replace language under 10 CFR 431.12 with “means a combination of...” because there are more than 113 combinations covered**
- **Definition: “means, with respect to an electric motor, all units of a given type of electric motor (or class thereof) manufactured by a single manufacturer, and which have the same rating, have electrical characteristics that are essentially identical, and do not have any differing physical or functional characteristics which affect energy consumption or efficiency. For the purpose of this definition, “rating” means a combination of an electric motor’s horsepower (or standard kilowatt equivalent), number of poles, and open or enclosed construction, with respect to which § 431.25 prescribes nominal full load efficiency standards.”**



## Proposed New Definition Electric Motor

- **EISA 2007 deleted the term Electric Motor, which appears frequently in the CFR**
- **DOE recognizes that EISA 2007 established additional categories of electric motors, such that there are now four types**
- **DOE proposes to define the term “electric motor” as encompassing all four of these covered motor types**
  - Clarify what the test procedure applies to
  - Will not alter the scope of coverage from EISA 2007
- **Definition: “means any of the following four types of motors: A general purpose electric motor (subtype I), a fire pump motor, a general purpose electric motor (subtype II), or a NEMA Design B general purpose electric motor.”**



## Issue for Comment

### **Issue #4 Definition of “Electric Motor”**

DOE invites comments on its proposed definition of “electric motor,” which brings together the four types of electric motors now covered under EPCA: “general purpose electric motors (subtype I);” “fire pump motors;” “general purpose electric motors (subtype II);” and “NEMA Design B, general purpose electric motors.” DOE’s proposed definition is intended to clarify that all four types of electric motor are covered and could be subject to the updated test procedure proposed in today’s notice. See section III.B.2 for details.



## Proposed New Definition Fire Pump Motor

- **EISA 2007 established energy conservation standards for these motors, but did not define them.**
- **DOE unable to locate a common / approved industry definition**
- **DOE bases its proposal on the scope contained in UL Standard 1004A-2001, “Fire Pump Motors.”**
- **DOE proposes two minor revisions, adding a reference year to the NFPA standard and correcting the title of that standard.**
- **Definition: “means a Design B polyphase motor, as defined in NEMA MG1–2006, rated 500 horsepower (373 kW) or less, 600 volts or less, and that is intended for use in accordance with the National Fire Protection Association (NFPA) Standard 20–2007, ‘Standard for the Installation of Stationary Pumps for Fire Protection.’ ”**



## Issue for Comment

### **Issue #5 Definition of “Fire Pump Motor”**

DOE invites comment on its proposed definition of a fire pump motor, which is based on the UL–1004A scope of applicability statement, with a few modifications. One of these changes is to define a fire pump motor as having an upper limit of 200 hp. See section III.B.2 for details.



## Proposed New Definition NEMA Design B, General Purpose Electric Motor

- **EISA 2007 established energy conservation standards for these motors, but did not define them.**
- **DOE bases its proposal on the NEMA MG1-2006 definition, with two minor changes:**
  - Removing the reference to 50 Hz because DOE only covers 60 Hz
  - Limiting the maximum slip to motors with fewer than 10 poles, since DOE only covers motors with 2 through 8 poles.
  - Correcting the cross-referenced paragraph to locked-rotor current, from 12.35.3 to 12.35.1.
- **Definition: “means a squirrel-cage motor designed to withstand full-voltage starting, developing locked-rotor, breakdown, and pull-up torques adequate for general application as specified in sections 12.38, 12.39 and 12.40, respectively, of NEMA Standards Publication MG1-2006, drawing locked-rotor current not to exceed the values shown in MG1-12.35.1 for 60 hertz motors, and having a slip at rated load of less than 5 percent for motors with fewer than 10 poles.”**



## Issue for Comment

### **Issue #6 Definition of “NEMA Design B, General Purpose Electric Motor”**

DOE invites comment on its proposed definition of “NEMA Design B, general purpose electric motor,” which makes minor modifications to the NEMA Standards Publication MG1–2006 definition—namely, eliminating the 50 Hertz provision and not specifying the percentage slip at rated load for motors with 10 or more poles. See section III.B.2 for details.



## Materials Incorporated by Reference

- **DOE proposes to revise 10 CFR 431.15, “Materials incorporated by reference,” for electric motors, by deleting cited material that is no longer needed or has otherwise been updated and inserting references to current industry standards**
  - Detail provided in section III.C of the NOPR; best reviewed with copies of old and new industry standards and the CFR.
  - These revisions were primarily non-substantive changes from MG1-1993 to MG1-2006; but also CSA and IEEE.
  - Deleted IEC standard references that were no longer needed due to the statutory revisions contained in EISA 2007
- **All proposed changes carefully compared the language and requirements in the current and updated standards documents**



## Materials Incorporated by Reference

- **NEMA MG1-2006 with Revision 1**
  - Section II, paragraph 12.58.1 (extends upper limit of covered hp range to 500 hp)
  - Section II, paragraph 12.58.2 (labeling requirements)
  - Section II, Table 12-10 (renumbered table already incorporated)
  - Section II, paragraphs 14.2 and 14.3 (renumbered paragraphs already incorporated)
- **Updated IEEE Standard from 112-1996 to IEEE 112-2004**
- **Updated CAN/CSA Standard from 1993 to C390-98(R2005)**
- **Deletion of International Electrotechnical Commission Standards 60034-1(1996), 60050-411(1996), 60072-1(1991), and 60034-12(1991) as a result of EISA removing the term “electric motor”**



## Obtaining Copies of Referenced Documents

- **DOE proposes to update contact information for organizations from which the public may purchase the standards incorporated by reference.**
  - National Electrical Manufacturers Association
  - Institute of Electrical and Electronics Engineers
  - Canadian Standards Association



## Laboratory Accreditation and Labeling

- **DOE proposes to update references to standards documents provided for “information and guidance” as these form the basis for the nationally recognized laboratory accreditation program.**
  - NVLAP Program handbooks
  - ISO/IEC Guides
- **In 10 CFR 431.18(a), DOE proposes to update the requirements for laboratory accreditation to reference the current versions of NIST Handbooks (150:2006 and 150-10:2007). See section III.E. of NOPR, at 73 FR 78227 and 78228.**
- **In 10 CFR 431.31(a)(2) on labeling, DOE proposes to update the citations to use the current version of NEMA MG1-2006. These updates will maintain consistency between DOE and current industry practice.**



## Policy Statement on Covered Motors

- **Appendix A to Subpart B of 10 CFR Part 431 contains a “Policy Statement for Electric Motors Covered Under the Energy Policy and Conservation Act.”**
- **The statement provides guidance as to which motors are covered and which are not.**
- **DOE is proposing to delete the Policy Statement because:**
  - EISA 2007 broadened the scope of coverage for electric motors (e.g., horsepower ratings greater than 200)
  - EISA 2007 deleted the term “electric motor” from the statute and instead now covers four types of motors



## Updates to the Electric Motor Test Procedure

- **DOE proposes updating the following documents:**
  - NEMA MG1-1993 becomes NEMA MG1-2006 with Revision 1
  - IEEE Standard 112-1996 Test Method B becomes IEEE Standard 112-2004 Test Method B
  - CAN/CSA Standard C390-93 Test Method (1) becomes CAN/CSA Standard C390-98(R2005) Test Method (1)
- **DOE conducted a careful paragraph-by-paragraph review of the referenced sections and has concluded that the updates will not have a substantive impact on the measured efficiency value**
- **Detail on the comparison and changes can be found in section III.G of the NOPR**



## Updates to the Electric Motor Test Procedure

- **Key Aspects of the NEMA Standard MG1 update**
  - The upper horsepower limit of covered motors is extended from 400 to 500 hp (paragraph 12.58.1), consistent with EISA 2007 coverage
  - Consistent with the IEEE and CSA test procedures
- **Key Aspects of the CAN/CSA C390 update**
  - Conducted side-by-side, paragraph-by-paragraph comparison
  - Only minor editorial rephrasing of sentences and slight changes in wording changes
  - No substantive changes or impact on test procedure



## Updates to the Electric Motor Test Procedure

- **Regarding the IEEE Standard 112 update**
  - Moves the discussion of specified temperatures and the methods of determining temperature
  - Adds discussion of no-load test, discussion of termination of test, discussion concerning the temperature for resistance correction, a correction of the definition of “ $k_2$ ”, and a discussion of the value of corrected slip
  - Proposes the deletion of several correction paragraphs that were incorporated by IEEE into the updated version (2004) of IEEE Standard 112. These include Appendix B to subpart B of part 431 paragraphs 2(ii-iv), (vi), (vii), and (ix)
  - Updates cross-references in correction paragraphs Appendix B to subpart B of part 431 paragraphs 2(i), (v), and (vii)



## Issue for Comment

### **Issue #7 Updates to Electric Motor Test Procedure**

DOE invites comment on its proposed updates to the industry citations contained in the proposed test procedure for electric motors (i.e., updating the procedure to NEMA Standard MG1–2006, IEEE Standard 112–2004, and CAN/CSA Standard C390–98(R2005). See sections III.C through III.G for details.



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## Correcting Minor Issues

- **DOE identified the need to address minor issues in the following Terms contained in Subpart A – General Provisions**
  - “Act”
  - “Covered Equipment”
  - “EPCA”



## Definitions for Subpart A – General Provisions

- **For the term “Act,” update the U.S.C. citation to include 6317:**
  - “... the Energy Policy and Conservation Act of 1975, as amended, 42 U.S.C. 6291-6317.”
- **For “Covered Equipment”, add a cross-reference to small electric motors, since these are now covered:**
  - “... any electric motor, as defined in §431.12...or small electric motor, as defined in §431.342.”
- **For “EPCA” update the U.S.C. citation to include 6317:**
  - “... the Energy Policy and Conservation Act, as amended, 42 U.S.C 6291-6317.”



## Determination of Efficiency

- **Propose to update the introductory paragraph of 10 CFR 431.17 to eliminate the risk of confusion:**
  - Change EPCA reference from Part C to Part A-1
  - Expand the U.S.C. citation from 6311-6316 to 6311-6317.
  - Correct a cross-reference from 431.192 to 431.383, where the referenced paragraph was moved in 2005.
- **The paragraph now reads:**
  - “When a party determines the energy efficiency of an electric motor in order to comply with an obligation imposed on it by or pursuant to Part A-1 of Title III of EPCA, 42 U.S.C. 6311–6317, this section applies. This section does not apply to enforcement testing conducted pursuant to § 431.383.”



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## DOE Seeks Comments on its Proposal

**In all correspondence, include all of the following:**

- Test Procedure for Small Electric Motors and Electric Motors
- Docket Number [EERE-2008-BT-TP-0008](#)
- Regulatory Identification Number (RIN) [1904-AB71](#)

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**Comment period closes: [March 9, 2009](#)**