Proposed Rules

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This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF ENERGY

10 CFR Part 431

[Docket No. EERE–2008–BT–TP–0017]

RIN 1904–AB87

Energy Conservation Program for Certain Commercial and Industrial Equipment: Test Procedures for Metal Halide Lamp Ballasts

AGENCY: Office of Energy Efficiency and Renewable Energy, Department of Energy.

ACTION: Notice of proposed rulemaking.

SUMMARY: The U.S. Department of Energy (DOE) proposes to establish metal halide lamp ballast test procedures that manufacturers would use to demonstrate compliance with the metal halide ballast energy conservation standards mandated by the statute. In accordance with the Energy Policy and Conservation Act, as amended (EPCA), these test procedures are based on American National Standards Institute (ANSI) Standard C82.6–2005, ''Ballasts for High-Intensity Discharge Lamps—Method of Measurement.'' Also in accordance with EPCA, DOE proposes a test method for measuring standby mode power consumption and discusses the fact that off mode power consumption does not apply to metal halide lamp ballasts.

DATES: DOE held a public meeting on Friday, December 19, 2008, in Washington, DC. DOE began accepting comments, data, and information regarding this notice of proposed rulemaking (NOPR) at the public meeting and will continue to accept such submissions until no later than September 23, 2009. For details, see section IV, ''Public Participation,'' of this NOPR.

ADDRESSES: The public meeting was held at the U.S. Department of Energy, Forrestal Building, Room 8E–089, 1000 Independence Avenue, SW., Washington, DC 20585–0121.

Any comment submitted must identify the NOPR on Test Procedures for Metal Halide Lamp Ballasts and provide the docket number EERE–2008–BT–TP–0017 and/or Regulation Identifier Number (RIN) 1904–AB87. Comments may be submitted using any of the following methods:

- *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comment.
- *E-mail: Metal_Halide_Ballasts.Rulemaking@hq.doe.gov.* Include the docket number EERE–2008–BT–TP–0017 and/or RIN 1904–AB87 in the subject line of the message.
- *Postal Mail:* Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Program, Mailstop EE–2J, 1000 Independence Avenue, SW., Washington, DC 20585–0121. Please submit one signed paper original.
- *Hand Delivery/Courier:* Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Program, 6th Floor, 950 L'Enfant Plaza, SW., Washington, DC 20024. Telephone: (202) 586–2945. Please submit one signed paper original.

For detailed instructions on submitting comment and additional information on the rulemaking process, see section IV, ''Public Participation,'' of this document.

Docket: For access to the docket to read background documents or comments received, visit the U.S. Department of Energy, Resource Room of the Building Technologies Program, 6th Floor, 950 L'Enfant Plaza, SW., Washington, DC 20024, (202) 586–2945, between 9 a.m. and 4 p.m., Monday through Friday, except Federal holidays. Please contact Ms. Brenda Edwards at the above phone number for additional information regarding visiting the Resource Room.

FOR FURTHER INFORMATION CONTACT: Ms. Linda Graves, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Program, Mailstop EE–2J, 1000 Independence Avenue, SW., Washington, DC 20585–0121. *Telephone:* (202) 586–1851. *E-mail: Linda.Graves@ee.doe.gov.* Or you may contact Mr. Eric Stas, U.S. Department of Energy, Office of the General Counsel, GC–72, 1000 Independence Avenue, SW., Washington, DC 20585–0121. *Telephone:* (202) 586–9507. *E-mail: Eric.Stas@hq.doe.gov.*

For additional information on how to submit or review public comments, contact Ms. Brenda Edwards, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Program, Mailstop EE–2J, 1000 Independence Avenue, SW., Washington, DC 20585–0121. *Telephone:* (202) 586–2945. *E-mail:Brenda.Edwards@ee.doe.gov.*

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I. Background and Authority

Title III of the Energy Policy and Conservation Act (42 U.S.C. 6291 *et seq.*; EPCA or the Act) sets forth a variety of provisions designed to improve energy efficiency. Part A [1] of Title III (42 U.S.C. 6291–6309) establishes the ''Energy Conservation Program for Consumer Products Other than Automobiles,'' which covers certain products, including ''metal halide lamp fixtures.'' (42 U.S.C. 6292(a)(19)) Since the metal halide lamp fixture energy conservation standards in EPCA establish a minimum efficiency for the ballasts that are incorporated into those fixtures, this test procedure addresses measurement of metal halide ballast efficiency. (42 U.S.C. 6295(hh)(1)(A))

Under the Act, the overall program consists essentially of testing, labeling, and Federal energy conservation standards. The testing requirements consist of DOE test procedures, adopted pursuant to EPCA, that manufacturers of covered equipment must use as the basis for establishing and certifying to DOE that their equipment complies with applicable energy conservation standards promulgated under EPCA and for representing the efficiency of this equipment. Similarly, DOE must use these test procedures to determine whether the equipment complies with EPCA standards.

Under 42 U.S.C. 6293, EPCA sets forth generally applicable criteria and procedures for DOE's adoption and amendment of such test procedures. EPCA provides that ''[a]ny test procedures prescribed or amended under this section shall be reasonably designed to produce test results which measure energy efficiency, energy use, * * * or estimated annual operating cost of a covered product during a representative average use cycle or period of use, as determined by the Secretary [of Energy], and shall not be unduly burdensome to conduct.'' (42 U.S.C. 6293(b)(3))

For metal halide lamp ballasts, section 324(c) of the Energy Independence and Security Act of 2007 (EISA 2007), Public Law 110–140, amended EPCA, and, in relevant part, required DOE to establish test procedures for metal halide ballasts—a newly covered equipment type under the statute—as follows: ''(18) Metal halide lamp ballasts.—Test procedures for metal halide lamp ballasts shall be based on ANSI Standard C82.6–2005, entitled 'Ballasts for High-Intensity Discharge Lamps—Method of Measurement'.'' (42 U.S.C. 6293(b)(18))

Section 324(e) of EISA 2007 further amended EPCA to prescribe mandatory minimum efficiency levels for pulse-start metal halide ballasts, magnetic probe-start ballasts, and nonpulse-start electronic ballasts that operate lamps rated greater than or equal to 150 watts (W) but less than or equal to 500 W. (42 U.S.C. 6295(hh)(1)(A)) Excluded from these energy conservation standards are regulated lag ballasts,[2] electronic ballasts that operate at 480 volts, or ballasts in fixtures that are: (1) Rated only for 150 W lamps; (2) rated for use in wet locations, as specified by the National Electrical Code 2002, section 410.4(A); and (3) contain a ballast that is rated to operate at ambient air temperatures above 50 °C, as specified by UL 1029–2001. (42 U.S.C. 6295(hh)(1)(B)) These statutory standards apply to metal halide lamp fixtures manufactured on or after January 1, 2009. (42 U.S.C. 6295(hh)(1)(C))

DOE again notes that because of the codification of the metal halide ballast provisions at 42 U.S.C. 6295, a rulemaking for metal halide ballast energy conservation standards is subject to the requirements of the consumer products provisions of Part A of Title III. However, because metal halide ballasts are generally considered to be commercial equipment and consistent with DOE's previous action to incorporate requirements of the Energy Policy Act of 2005 (EPACT 2005) for commercial equipment into 10 CFR Part 431 (''Energy Efficiency Program for Certain Commercial and Industrial Equipment''), DOE intends to place the new requirements for metal halide ballasts in 10 CFR part 431 for ease of reference. DOE notes that the location of the provisions within the CFR does not affect either the substance or applicable procedure for metal halide ballasts; as such, DOE is placing them in the appropriate CFR part based on the nature or type of those products. Based upon their placement into 10 CFR 431, metal halide ballasts will be referred to as ''equipment'' throughout this notice.

DOE notes that pursuant to section 310 of EISA 2007, the Department's test procedure for all covered products must account for standby and off mode energy consumption, including the procedure for metal halide ballasts. (42 U.S.C. 6295(gg)(2)) Furthermore, section 310 of EISA 2007 provides that any final rule establishing or revising energy conservation standards that is adopted on or after July 1, 2010, must incorporate standby mode and off mode energy use. (42 U.S.C. 6295(gg)(3)(A)) A DOE test procedure to measure standby mode and off mode energy use must be in place to allow manufacturers to measure and certify to energy conservation standards that address these modes and is included in this proposed test procedure.

II. Summary of the Proposal

As noted above, EPCA, as amended by EISA 2007, states that test procedures for metal halide lamp ballasts shall be based on ANSI Standard C82.6–2005, ''Ballasts for High Intensity Discharge Lamps—Method of Measurement.'' [3] (42 U.S.C. 6293(b)(18)) DOE reviewed ANSI Standard C82.6–2005 and found it suitable for the purposes of metal halide ballasts, because it contained all of the required major elements to adequately test and measure the efficiency of this equipment, as discussed in section III.C of this document. Accordingly, DOE has drawn on relevant portions of ANSI Standard C82.6–2005 in developing its proposed test procedures for metal halide ballasts. Specifically, today's NOPR references the ballast power loss measurement method (section 6.10) of ANSI Standard C82.6–2005 as the means of determining the efficiency of metal halide lamp ballasts, and it references other applicable sections of ANSI Standard C82.6–2005 for test conditions and setup. This NOPR also proposes test procedures for measuring standby mode power consumption, based on relevant portions of ANSI Standard C82.6–2005. Finally, this NOPR proposes sampling and efficiency calculations to be used in the required testing.

The proposed test procedures apply to metal halide ballasts that operate lamps rated greater than or equal to 150 W but less than or equal to 500 W. DOE discusses its proposal in detail in the following sections. DOE invites public comment, particularly on the key issues outlined in section IV.E.

DOE reviewed the definitions of ''standby mode'' and ''off mode'' contained in EPCA in the context of metal halide ballasts. (42 U.S.C. 6295(gg)(1)) DOE found that while it was possible for metal halide ballasts to

[1] This part was originally titled Part B; however, it was redesignated Part A, after Part B of Title III was repealed by Public Law 109–58.

[2] A ''regulated lag ballast'' is the industry term for a lag ballast with a third coil for improved lamp power regulation.

[3] ANSI standards discussed in this document are available for purchase at: *http://webstore.ansi.org/*.

operate in standby mode, the off mode condition does not apply to metal halide ballasts because it addresses a mode of energy use in which metal halide ballasts do not operate. For this reason, today's notice proposes a test method for metal halide ballasts that measures power consumed in standby mode (*see* section III.D) and provides an opportunity for the public to comment on DOE's rationale for why off mode does not apply to such equipment (*see* section III.B).

As amended, EPCA provides that amendments to the test procedures to include standby mode and off mode energy consumption shall not be used to determine compliance with previously established standards. (42 U.S.C. 6295(gg)(2)(C)) Thus, the proposed inclusion of a standby mode test procedure in today's notice will not affect a manufacturer's ability to demonstrate compliance with the energy conservation standards for metal halide lamp fixtures that take effect January 1, 2009. Indeed, the standby mode test procedure need not be performed to determine compliance with the statutory energy conservation standards for metal halide lamp fixtures because the statutory standards do not account for standby mode power consumption. The Department's test procedures for measuring standby mode would become effective, in terms of adoption into the Code of Federal Regulations, 30 days after the date of publication in the **Federal Register** of the final rule in this test procedures rulemaking. Manufacturers would be required to use the test procedures' standby mode provisions to demonstrate compliance with any future energy conservation standards on the effective date of a final rule establishing amended standards for metal halide lamp ballasts that addresses standby mode power consumption. The introductory sentence in proposed section 431.324(c) would be removed in a notice of final rulemaking to amend the existing standards for metal halide lamp ballasts.

III. Discussion

DOE reviewed ANSI Standard C82.6–2005 to determine whether any additional elements would be needed to provide a complete test procedure. DOE concluded that all elements required for conducting a measurement of the efficiency of metal halide ballasts are currently present in ANSI Standard C82.6–2005, including lamp orientation, power supply characteristics, operational test temperatures, instrumentation requirements, setup connections, and lamp stabilization. DOE proposes to incorporate these applicable requirements and methods into the DOE test procedure. DOE notes that it is proposing a statistically meaningful method for determining sample size as part of the metal halide ballast test procedure, consistent with the sampling methods used for DOE test procedures for products and equipment subject to energy conservation standards.

A. ANSI Standards Development Process

DOE reviewed the process that the American National Standards Institute (ANSI) follows in support of the development of ANSI accredited standards and finds that it embodies all the elements of a thorough public review and consensus process. This thorough process is conducted by applicable industry groups so that all materially affected and interested parties are informed and may participate. Due process is the key to ensuring that ANSI standards are developed in an environment that is equitable, accessible, and responsive to the input and concerns of various stakeholders. It also serves and protects the public interest, since standards developed and accredited by ANSI must meet the Institute's requirements for openness, balance, consensus, and other due process safeguards. The basic elements of the American National Standards Institute process include:

- Consensus on a proposed standard by a group or ''consensus body'' that includes representatives from materially affected and interested parties;
- Broad-based public review and comment on draft standards;
- Consideration of and response to comments submitted by voting members of the relevant consensus body and by public review;
- Incorporation of approved changes into a draft standard; and
- Right to appeal by any participant that believes that due process principles were not sufficiently respected during the standards development in accordance with the ANSI-accredited procedures of the standards developer.

The ANSI process serves all standardization efforts in the United States by providing and promoting a process that withstands scrutiny while protecting the rights and interests of every participant. DOE believes this process ensures that ANSI standards and the provisions within them are adequately vetted within the industry and represent consensus among all materially affected and interested parties. Therefore, DOE proposes the adoption of appropriate and relevant sections of the ANSI Standard C82.6–2005 as part of the test procedures for metal halide lamp ballasts, with only minimal additional analysis.

B. Definitions

DOE reviewed the relevant portions of EISA 2007 and 10 CFR part 431 for applicable existing definitions for use in developing and applying the metal halide ballast test procedure. EISA 2007 amends EPCA, in part, by adding definitions of key terms that are applicable to the metal halide ballast test procedure, including ''ballast,'' ''ballast efficiency,'' ''electronic ballast,'' ''metal halide ballast,'' ''metal halide lamp,'' ''metal halide lamp fixture,'' ''probe-start metal halide ballast,'' and ''pulse-start metal halide ballast.'' (42 U.S.C. 6291) These terms are defined as follows:

''Ballast'' means a device used with an electric discharge lamp to obtain necessary circuit conditions (voltage, current, and waveform) for starting and operating. (42 U.S.C. 6291(58))

''Ballast efficiency'' means, in the case of a high-intensity discharge fixture, the efficiency of a lamp and ballast combination, expressed as a percentage, and calculated in accordance with the following formula: Efficiency = P_{out}/P_{in}, where P_{out} equals the measured operating lamp wattage, P_{in} equals the measured operating input wattage, and the lamp, and the capacitor, when the capacitor is provided, shall constitute a nominal system in accordance with the ANSI Standard C78.43–2004. For ballasts with a frequency of 60 Hz, P_{in} and P_{out} shall be measured after lamps have been stabilized according to section 4.4 of ANSI Standard C82.6–2005 using a wattmeter with accuracy specified in section 4.5 of ANSI Standard C82.6–2005. For ballasts with a frequency greater than 60 Hz, P_{in} and P_{out} shall have a basic accuracy of ±0.5 percent at the higher of—(1) 3 times the output operating frequency of the ballast; or (2) 2 kHz for ballasts with a frequency greater than 60 Hz. (42 U.S.C. 6291(59))

''Electronic ballast'' means a device that uses semiconductors as the primary means to control lamp starting and operation. (42 U.S.C. 6291(60)) DOE understands that this definition appropriately includes equipment commonly referred to as ''nonpulse-start electronic ballasts.''

''Metal halide ballast'' means a ballast used to start and operate metal halide lamps. (42 U.S.C. 6291(62))

''Metal halide lamp'' means a high-intensity discharge lamp in which the major portion of the light is produced by radiation of metal halides and their products of dissociation, possibly in

combination with metallic vapors. (42 U.S.C. 6291(63))

''Metal halide lamp fixture'' means a light fixture for general lighting application designed to operate with a metal halide lamp and a ballast for a metal halide lamp. (42 U.S.C. 6291(64))

''Probe-start metal halide ballast'' means a ballast that (1) starts a probe-start metal halide lamp that contains a third starting electrode (probe) in the arc tube, and (2) does not generally contain an igniter, but instead starts lamps with high ballast open circuit voltage. (42 U.S.C. 6291(65))

''Pulse-start metal halide ballast'' means an electronic or electromagnetic ballast that starts a pulse-start metal halide lamp with high voltage pulses. (42 U.S.C. 6291(66))

Although the new statutory definitions pertaining to ballasts were relatively comprehensive, DOE believes that additional definitions are necessary for purposes of the metal halide ballast test procedure. Therefore, in this NOPR, DOE is proposing to amend 10 CFR 431.322, ''Definitions concerning metal halide lamp ballasts and fixtures,'' by adding a definition for ''basic model'' as it relates to metal halide ballasts. As explained below, DOE also proposes to insert definitions for ''active mode,'' ''standby mode,'' ''off mode,'' ''AC control signal,'' ''DC control signal,'' ''PLC control signal,'' and ''wireless control signal.'' EPCA lists definitions for three modes of energy consumption that are applicable to a broad set of consumer products and commercial equipment, including metal halide ballasts. (42 U.S.C. 6295(gg)(1)(A)) The EPCA definitions of ''active mode,'' ''standby mode,'' and ''off mode'' are discussed in this section, and their applicability to metal halide ballasts is addressed.

The ''basic model'' definition for metal halide ballasts is based on the ''basic model'' definition for fluorescent ballasts. DOE proposes to define the term ''basic model,'' with respect to metal halide ballasts, as all units of a given type of metal halide ballast (or class thereof) that: (1) Are rated to operate a given lamp type and wattage; (2) have essentially identical electrical characteristics; and (3) have no differing electrical, physical, or functional characteristics that affect energy consumption.

''Active mode'' is defined under EPCA as ''the condition in which an energy-using product—(I) is connected to a main power source; (II) has been activated; and (III) provides 1 or more main functions.'' (42 U.S.C. 6295(gg)(1)(A)(i)) DOE interprets this mode as being applicable to all metal halide ballasts, where the main function of the metal halide lamp ballast is to operate one or more metal halide lamps (*i.e.,* starting the lamp and regulating the current, voltage, or power of the lamp). DOE understands that there are many different types of ballasts that could be considered ''metal halide ballasts,'' but the main function common to all of them is that they are designed to operate metal halide lamps. DOE does not discriminate between non-dimmable [4] and dimmable [5] ballasts when considering active mode; rather, DOE interprets active mode as being applicable to any amount of rated system light output (*i.e.,* greater than zero percent of the rated system light output). Again, this is because a ballast's main function is the operation of a metal halide lamp.

''Standby mode'' is defined under EPCA as ''the condition in which an energy-using product—(I) is connected to a main power source; and (II) offers 1 or more of the following user-oriented or protective functions: (aa) To facilitate the activation or deactivation of other functions (including active mode) by remote switch (including remote control), internal sensor, or timer. (bb) Continuous functions, including information or status displays (including clocks) or sensor-based functions.'' (42 U.S.C. 6295(gg)(1)(A)(iii)) As discussed below, two key aspects of this definition relate to metal halide ballasts: (1) Connected to a main power source; and (2) offering the activation or deactivation of other functions by remote switch.

The definition of ''standby mode'' in part requires that ballasts be connected to their main power source. (42 U.S.C. 6295(gg)(1)(A)(iii)(I)) This ''connected'' requirement effectively precludes the majority of ballasts from having standby mode energy consumption, because most ballasts are operated with on-off switches, circuit breakers, or other relays that disconnect the ballast from the main power source. Although further consideration of such ballasts is unnecessary because their operational design falls outside the statutory definition of ''standby mode,'' DOE would characterize their operation in such situations as follows: Once the ballast is disconnected from the main power source, the ballast ceases to operate the lamp (*i.e.,* the system light output falls to zero), and the ballast consumes no energy. The vast majority of metal halide ballasts do not consume power when they are switched off. Based upon the statutory definition of ''standby mode,'' ballasts controlled by disconnecting the ballast from the main power source do not operate in standby mode.

The ''standby mode'' definition further states that it applies to energy-using products that facilitate the activation or deactivation of other functions by remote switch, internal sensor, or timer. (42 U.S.C. 6295(gg)(1)(A)(iii)(II)(aa)) DOE interprets this condition as applying to ballasts that are designed to operate in, or function as, a lighting control system where auxiliary control devices send signals. An example of this type of ballast would be one that incorporates a digital addressable lighting interface (DALI) capability. These ballasts (whether dimming or not) incorporate an electronic circuit that enables the ballast to communicate with, and receive orders from, the DALI system. These instructions could tell the ballast to go into active mode or to adjust the light output to zero percent output. In this latter condition, the ballast is no longer providing current to the metal halide lamp (*i.e.,* no longer in active mode). Thus, at zero light output, the ballast is standing by, connected to a main power source while it awaits instructions from the lighting control system to initiate an arc so the metal halide lamp can produce light again. Another example would be a metal halide ballast that incorporates a lighting control circuit that is connected to a photosensor. This ballast and sensor function as a miniature lighting controls system, whereby the sensor provides input to the ballast control circuit, which determines whether the lamp should be operational or not. When the lamp is not operational (*i.e.,* when the photosensor indicates that it is bright outside), the ballast will consume power to enable the photosensor circuit to continuously monitor the ambient conditions. When the circuit determines that it has gotten dark and it is time to start the lamp, it will instruct the ballast to initiate an arc in the lamp.

DOE invites comment on its proposed approach to treat metal halide ballasts that operate in, or function as, a lighting control system that receives signals from auxiliary control devices as being capable of operating in standby mode.

''Off mode'' is defined by EPCA as ''the condition in which an energy-using product—(I) is connected to a main power source; and (II) is not providing any standby or active mode function.'' (42 U.S.C. 6295(gg)(1)(A)(ii)) DOE considered this definition in the context

[4] Non-dimmable ballasts would operate the lamp or lamps in active mode at 100 percent of the rated system light output.

[5] Dimmable ballasts may vary the system light output from 100 percent to some lower level of light output, either in steps or continuously.

of metal halide ballasts and believes that off mode does not apply to any metal halide ballast, dimmable or non-dimmable, because off mode describes a condition that commercially available ballasts do not attain.

The definition of ''off mode'' requires that ballasts be connected to a main power source and not provide any standby or active mode function. (42 U.S.C. 6295(gg)(1)(A)(ii)) DOE does not believe it is possible for ballasts to meet these criteria. As described above, active mode encompasses conditions in which the ballast operates a lamp or lamps to produce greater than zero percent of the rated system light output. Standby mode applies to the situation in which the ballast is connected to a main power source and is not operating a lamp or lamps (*i.e.,* the lamps have zero percent light output). Therefore, when connected to a main power source, the functions provided in standby mode and active mode already encompass every possible level of ballast operation, from zero to greater than zero percent of system rated light output. There is no condition in which the ballast is connected to the main power source and it is not already accounted for in either active mode or standby mode. For this reason, ballasts fail to meet the second requirement of the EPCA definition of off mode, that it is not providing any standby or active mode function. (42 U.S.C. 6295(gg)(1)(A)(ii)(II))

Furthermore, the power consumption measurement of the ballast in standby mode already captures the device in its lowest power-consuming condition. This means that in standby mode, the ballast is connected to a main power source, but is not providing any output to the lamps (*i.e.,* zero percent light output). Disconnecting the ballast from the main power source by a switch, for example, would bring the ballast to a lower state of energy use (*i.e.,* zero percent power consumption), and would fail to meet the first criterion of the off mode definition, that the ballast be connected to a main power source. (42 U.S.C. 6295(gg)(1)(A)(ii)(I))

For some products, DOE is interpreting off mode as a condition in which the user may choose to operate a manual switch mounted on the device to enable off mode, which would represent the lowest energy state. However, this condition does not apply to metal halide ballasts, and DOE is not aware of any ballasts manufactured with a manual switch mounted on the housing. Instead, these ballasts are usually inaccessible to end-users, and do not incorporate manual switches or other features that users may operate to affect the mode of the ballast. Thus, the lowest energy state of a metal halide lamp ballast is that which is measured in standby mode, which by definition cannot also constitute off mode.

For all of the reasons discussed above, DOE is unable to identify a situation in which a ballast would be in off mode. Therefore, DOE tentatively concluded in today's notice that off mode is inapplicable to metal halide lamp ballasts. Should circumstances change in the future, DOE may revisit this interpretation and propose a test method to measure off mode for metal halide ballasts. DOE invites comment on its tentative decision not to incorporate a test method for measuring off mode energy consumption for metal halide ballasts at this time.

DOE is proposing in today's notice to define the term ''AC control signal.'' DOE finds that some lighting control systems operate by communicating with (*i.e.,* providing a control signal to) the ballasts over a separate wiring system using AC voltage. DOE was unable to locate a definition for ''AC control signal'' in International Electrotechnical Commission (IEC) Standard 62301 or ANSI Standard C82.6–2006. Therefore, DOE prepared a definition for an ''AC control signal'' to enhance the clarity and understanding of its proposed test procedure. The proposed definition for ''AC control signal'' is as follows: ''an alternating current (AC) signal that is supplied to the ballast using additional wiring for the purpose of controlling the ballast and putting the ballast in standby mode.'' In today's test procedure, DOE proposes to measure the power consumed by the ballast through the control signal wiring system.

DOE is proposing in today's notice to define the term ''DC control signal.'' DOE finds that some lighting control systems operate by communicating with (*i.e.,* providing a control signal to) the ballasts over a separate wiring system using DC voltage. DOE was unable to locate a definition for ''DC control signal'' in IEC Standard 62301 or ANSI Standard C82.6–2006. Therefore, DOE prepared a definition for a ''DC control signal'' to enhance the clarity and understanding of its proposed test procedure. The proposed definition of ''DC control signal'' states that it is ''a direct current (DC) signal that is supplied to the ballast using additional wiring for the purpose of controlling the ballast and putting the ballast in standby mode.'' In today's test procedure, DOE proposes to measure the power consumed by the ballast through the control signal wiring system.

DOE is proposing in today's notice to define the term ''power line carrier (PLC) control signal.'' DOE finds that some lighting control systems operate by communicating with (*i.e.,* providing a control signal to) the ballasts over the existing power lines that provide the main power connection to the ballast. DOE was unable to locate a definition for ''PLC control signal'' in IEC Standard 62301 or ANSI Standard C82.6–2006. Therefore, DOE prepared a definition for a ''PLC control signal'' to enhance the clarity and understanding of its proposed test procedure. The proposed definition of a ''PLC control signal'' states that it is ''a power line carrier (PLC) signal that is supplied to the ballast using the input ballast wiring for the purpose of controlling the ballast and putting the ballast in standby mode.'' In today's test procedure, DOE proposes to measure the power consumed by the ballast through the PLC control signal.

DOE is proposing in today's notice to define the term ''wireless control signal.'' DOE finds that some lighting control systems operate by communicating with (*i.e.,* providing a control signal to) the ballasts over a wireless system, much like a wireless computer network. DOE was unable to locate a definition for a ''wireless control signal'' in IEC Standard 62301 or ANSI Standard C82.6–2006. Therefore, DOE prepared a definition for a ''wireless control signal'' to enhance the clarity and understanding of its proposed test procedure. The proposed definition of ''wireless control signal'' states that it is ''a wireless signal that is radiated to and received by the ballast for the purpose of controlling the ballast and putting the ballast in standby mode.'' In today's test procedure, DOE is not proposing to measure the power consumed by the ballast through the wireless control signal, because the quantity of power contained in the signal is extremely small (on the order of milliwatts), would be difficult to measure, and is unlikely to appreciably impact ballast power consumption.

DOE determined in its review of the proposed metal halide ballast test procedures that other terms used in the procedure are standard industry terminology and, thus, do not need to be explicitly defined in the ballast test procedure. DOE finds these terms to be unambiguous and easy to apply consistently in metal halide ballast testing. DOE invites comment on the appropriateness of adopting the aforementioned definitions for ''basic model,'' ''active mode,'' ''standby mode,'' ''off mode,'' ''AC control signal,'' ''DC control signal,'' ''PLC

control signal'' and ''wireless control signal.''

C. Test Method for Measuring Energy Efficiency of Metal Halide Ballasts

1. Test Setup and Conditions

a. Lamp Orientation

DOE proposes that lamp orientation for testing be as specified in section 4.3 of ANSI Standard C82.6–2005, which requires vertical, base-up orientation, unless the manufacturer specifies another orientation for that ballast and associated lamp combination. DOE is proposing this approach for two reasons. First, DOE understands that vertical, base-up lamp orientation is the most common in the industry, and, because of the natural stability of the vertical operating position, DOE believes that this approach would produce the most repeatable and accurate testing results. By way of explanation, the halide material in a metal halide lamp is not fully vaporized during lamp operation, which creates a cold spot in the arc tube that affects the photometric and electrical characteristics of the lamp and ballast operation. The cold spot is typically found at the lowest point in the tube, which is the most consistent in a vertical burning orientation. In contrast, horizontal orientation creates a less stable arc condition. ANSI Standard C82.6–2005 references specific requirements in section 3.6 of ANSI Standard C78.389–2004, ''Lamp Position,'' for stabilization when the lamp manufacturer specifies horizontal orientation. In these cases, ANSI Standard C78.389–2004 requires that metal halide lamps with tipped arc tubes be oriented horizontally with the tip in the up position. If the lamp has a tipless arc tube, the lamp must be kept horizontally level and in the same position throughout all measurements to ensure repeatability and consistency in measurements. Given the concerns with repeatability and consistency associated with testing a metal halide lamp in a horizontal orientation and the lack of any relevant benefit from testing in such orientation, DOE is proposing to test in a vertical, base-up orientation. DOE invites comment on the appropriateness of adopting the requirements in section 4.3 of ANSI Standard C82.6–2005 for lamp orientation.

b. Power Supply, Ambient Test Temperatures, and Instrumentation

DOE proposes power supply characteristics, ambient test temperatures, and instrumentation requirements as specified in section 4.0 of ANSI Standard C82.6–2005. DOE recognizes that specification of objective test setup characteristics is an important consideration in terms of producing reliable, repeatable, and consistent test results. These aspects of DOE's proposal are addressed in further detail below.

Section 4.1 of ANSI Standard C82.6–2005 requires that the root mean square (RMS) summation of harmonic components in the power supply be no more than 3 percent of the fundamental voltage and frequency components. Section 4.1 also requires that: (1) The impedance of the power source be no more than 3 percent of the specified ballast impedance, and (2) power supply devices used in the test circuits have a power rating at least five times the wattage of the lamp intended to operate on the ballast under test. DOE believes that these requirements provide reasonable stringency in terms of power quality because they are consistent with other comprehensive industry standards that regulate harmonic content and power supply impedance (*e.g.*, ANSI Standard C78.389–2004). Furthermore, DOE believes that these requirements would be readily achievable and that they would be likely to ensure repeatable and consistent measurements. DOE invites comment on the appropriateness of adopting section 4.1 of ANSI C82.6–2005 for power supply requirements.

Section 4.2 in ANSI Standard C82.6–2005 requires maintenance of an ambient temperature of 25 °C ±5 °C to reduce potential ballast operating variances caused by excessive temperature. DOE proposes to require that testing be performed in a draft-free environment, which is considered a standard laboratory environmental condition and would further ensure consistency in test conditions. Although ambient temperature is not considered critical to metal halide lamp operation and light output, it can affect lamp and ballast system electrical performance. Therefore, temperatures must be controlled for ballast efficiency testing to ensure repeatability and consistency in test results. DOE believes that applying the ambient temperature requirements, as set forth in the industry standard, in a draft-free environment would result in appropriate testing conditions. DOE invites comment on the appropriateness of adopting section 4.2 of ANSI C82.6–2005 for ambient temperature requirements.

Similarly, the instrumentation requirements and their connections to the lamp and ballast systems are specified to ensure repeatability and consistency in test measurements. The instrumentation requirements prescribed in sections 4.5.1 and 4.5.3 of ANSI Standard C82.6–2005 were developed to ensure that the measured values accurately reflect ballast operation. The ANSI requirements for digital voltmeters, ammeters, and wattmeters include a resolution of three and one-half digits and minimum basic instrumentation accuracy of 0.50 percent (*i.e.*, one-half of 1 percent) of the reading from actual with true RMS capability. For analog instruments, the ANSI standard specifies that analog ammeters and voltmeters must have accuracies of ±0.50 percent up to 800 Hertz, and that analog wattmeters must have accuracies of ±0.75 percent up to 1,000 Hertz for power factors of 50 percent to 100 percent and ±0.50 percent up to 125 Hertz for ballasts with power factors between 0 and 20 percent. On this issue, DOE is concerned that the range of possible power factors covered by ANSI Standard C82.6–2005 does not provide measuring instrument accuracies for any ballasts that may be designed with power factors between 20 percent and 50 percent. Therefore, DOE is proposing to require all analog wattmeters used on ballasts with power factors less than 50 percent to same accuracy as those for ballasts with power factors less than 20 percent (*i.e.*, ±0.50 percent up to 125 Hertz). Finally, section 4.5.1 instructs that only one analog instrument may be connected to the test circuit at one time to reduce impedance effects on the testing. DOE believes that all these instrumentation requirements, as set forth in ANSI Standard C86.5–2005, would facilitate repeatable and consistent testing and measurement. DOE invites comment on the appropriateness of adopting sections 4.5.1 and 4.5.3 of ANSI C82.6–2005 for equipment and connection requirements.

In summary, the power supply characteristics, ambient test temperatures, and instrumentation and test circuit connection requirements that DOE is proposing in this NOPR are derived from ANSI Standard C82.6–2005 and are consistent with those commonly found and described in other lamp and ballast testing standards used by the lighting industry, such as ANSI Standard C78.389–2004. Accordingly, DOE tentatively concluded that these test setup conditions are appropriate for effective testing. DOE requests comment on whether these or other test setup conditions may be more appropriate for this metal halide ballast test procedure.

c. Lamp Stabilization

As an initial matter, DOE proposes that the process for lamp stabilization before ballast efficiency testing would

follow section 4.4 of ANSI Standard C82.6–2005, which requires a 100-hour seasoning period. DOE believes that a 100-hour seasoning period is commonly used by manufacturers of high-intensity discharge lamp technologies to ensure that the initial, more-rapid depreciation in output caused by impurities has been surpassed.[6] DOE has no knowledge of an alternative seasoning time period that is more appropriate for this technology. DOE invites comment on the existence and appropriateness of any alternatives to this method of lamp seasoning.

DOE evaluated the requirements of the basic stabilization method prescribed in section 4.4.2 of ANSI Standard C82.6–2005 to ensure that the method was capable of providing a sufficiently stable lamp and ballast system, as would ensure consistent measurements. Specifically, section 4.4.2 requires that the lamp and ballast system reach operating stability such that the electrical parameters cease to change. The time to achieve this point is typically at least 30 minutes, but it may take as much as 6 hours to achieve this state if a metal halide lamp is moved while hot or its orientation is changed. This methodology incorporates a standby ballast to help stabilize the lamp without heating the test ballast. (Heating the test ballast could cause resistance changes that lead to unrepeatable test results.)

DOE also considered similar stabilization guidance found in ANSI Standard C78.389–2004 that applies more specific operating times, including a generic minimum of 6 hours for basic stabilization for all lamps. Section 3.7.2 of ANSI Standard C78.389–2004 also prescribes that the lamp ballast system is stable when the lamp's electrical characteristics vary by no more than 3 percent in three consecutive 10- to 15-minute intervals.

Because not all lamps will require a full 6-hour stabilization period, DOE proposes that the lamp and ballast system be considered stable for testing purposes when the lamp's electrical characteristics vary by no more than 3 percent in three consecutive 10- to 15-minute intervals measured after the minimum 30-minute warm-up period specified in section 4.4.2 of ANSI Standard C82.6–2005. A critical part of this methodology is the ability to switch from the standby ballast to the test ballast without allowing the lamp to extinguish. The use of a standby ballast for warming up the lamp is not DOE's preferred method, but in cases where switching without extinguishing the lamp is not possible, the alternative stabilization method described in section 4.4.3 of ANSI Standard 82.6–2005 should be used. This method allows for the lamp to operate on the test ballast for a 15-minute warm-up period and measurements to be taken within the following 2 minutes, but it also requires that lamp operating characteristics be determined separately on a reference ballast.

DOE invites comment on its proposed lamp stabilization methods from sections 4.4.2 and 4.4.3 of ANSI C82.6–2005 and any alternative options for accurate ballast testing.

2. Test Measurements

DOE proposes that test measurements of metal halide ballast operation be used in the calculation of ballast efficiency, as discussed in section III.C.3, ''Ballast Efficiency Calculation,'' of this document. This calculated ballast efficiency is an integral part of the metal halide ballast test procedures established under 42 U.S.C. 6293.

Under DOE's proposal, the test measurements for metal halide ballasts would require that ballast operation testing be conducted according to the same requirements as set forth in section 6.10, ''Ballast Power Loss,'' of ANSI Standard C82.6–2005. This section specifies measurements of output power to the lamp and input power to the ballast using a wattmeter. ANSI Standard C82.6–2005, section 6.10, specifies the proper instrument connections. The section also provides the needed guidance and methods for eliminating or compensating for the power consumption of a voltmeter (when connected) and the wattmeter potential coil. In summary, section 6.10 of ANSI Standard C82.6–2005 provides a measurement of power using a well-defined, common electrical industry standard test with dedicated equipment. DOE is not aware of any equivalent alternative method for these measurements. DOE invites comment and data on whether an alternative power measurement method should be considered.

3. Ballast Efficiency Calculation

DOE proposes that the ballast efficiency be calculated as the measured output power to the lamp divided by the measured input power to the ballast (P_{out}/P_{in}). DOE proposes that the P_{out} and P_{in} terms be determined according to the Ballast Power Loss method described in section III.C.2, ''Test Measurements,'' of this document. This measure of efficiency represents the metric used in the energy conservation standard prescribed by the statute. (42 U.S.C. 6295(hh)(1)) Therefore, DOE proposes that both output and input power be measured in accordance with section 6.10 of ANSI Standard C82.6–2005, which requires the use of a true RMS wattmeter. DOE invites comment on the proposed ballast efficiency calculation and any appropriate alternative options.

D. Test Method for Measuring Standby Power of Metal Halide Ballasts

1. Overview of Test Method

EPCA, in relevant part, directs DOE to establish test procedures to include standby mode, ''taking into consideration the most current versions of Standards 62301 and 62087 of the International Electrotechnical Commission.'' (42 U.S.C. 6295(gg)(2)(A)) IEC Standard 62087 applies to audio, video, and related equipment, but not to lighting equipment. Thus, DOE has determined that IEC Standard 62087 is not suitable to be applied to this rulemaking. Instead, DOE developed today's proposed rule consistent with procedures outlined in IEC Standard 62301. In addition, to develop a test method that would be familiar to metal halide ballast manufacturers, DOE also referenced language and methodologies presented in ANSI Standard C82.6–2005, ''Ballasts for High-Intensity Discharge Lamps—Methods of Measurement.''

In overview, today's proposed test procedure for measuring standby power consumption consists of the following steps: (1) A signal is sent to the ballast instructing it to reduce light output to zero percent; (2) The main input power to the ballast is measured; and (3) The power from the control signal path is measured in one of three ways, depending on how the signal from the control system is delivered to the ballast. Further details on this proposed methodology are presented below.

2. Test Method and Measurements

In the portion of the proposed metal halide ballast test procedure dealing with standby power measurement, the test procedure would direct the technician to send a signal to the ballast under test, instructing the ballast to have zero percent light output using the appropriate communication protocol or system for that unit. Next, the technician would measure the input power (in watts) to the ballast in accordance with ANSI Standard C82.6–2005. Finally, the technician would

[6] IESNA LM–54–99, ''Lamp Seasoning,'' is the Lighting Measurement (LM) document developed by the Illuminating Engineering Society of North America (IESNA) that the industry refers to for seasoning requirements for lamp and ballast photometric and electrical testing. Available at: *http://www.ies.org/shop/*.

measure the power from the ballast control signal path using a method for an AC control signal path, a DC control signal path, or a power line carrier control signal path, consistent with the type of path that the ballast employs.

The measurement of input power to the ballast from the main electricity supply during standby mode is based on the approach in ANSI Standard C82.6–2005, section 6. This measurement parallels the approach DOE is proposing for measuring the active mode power consumption for input power (watts) to the ballast in accordance with ANSI Standard C82.6–2005. Thus, the test measurements of ballast input power would be required to be conducted in accordance with the appropriate sections of the current industry test method.

As proposed at 10 CFR 431.324(c), the proposed test procedure would direct manufacturers to address measurement of the ballast's control signal power. As DOE understands it, there are four possible ways of delivering a control signal to a metal halide lamp ballast: (1) A dedicated AC control signal wire; (2) a dedicated DC control signal wire; (3) a PLC control signal over the main supply input wires; and (4) a wireless control signal. DOE is interested in measuring the power consumed by the lighting control signal, and, therefore, proposes three methods for measuring that power, depending on which type of system is being used. As explained above, DOE is not proposing to measure the power supplied to a ballast using the fourth approach (*i.e.*, the wireless control signal), because DOE estimates that the power supplied to a ballast using a wireless signal would be very small (well below 1.0 watt), would be difficult to measure, and would be unlikely to appreciably impact ballast power consumption. The three circuit diagrams in the proposed test procedure direct the technician to measure the control signal power using either a wattmeter (for the AC control signal wiring and the PLC control signal) or a voltmeter and ammeter (for the DC control signal). DOE is proposing to incorporate three circuit diagrams at 10 CFR 431.324(c) to clearly present the intended method of measurement for each type of control system communication protocol.

DOE invites stakeholder comments on the proposed method for measuring the power consumed by the control signal system while the ballast is in standby mode.

3. Combining Measurements and Burden

DOE's metal halide ballast test procedure would direct manufacturers of such equipment to take the two required measurements (*i.e.*, the main input power and the control signal power in standby mode), but it would not tell manufacturers how to combine these values or use them in equations pertaining to energy efficiency. Instead, DOE intends to study how best to use these measurements of standby mode power consumption in a separate rulemaking to review and possibly amend the energy conservation standards for metal halide lamp ballasts, which DOE is required to complete by January 1, 2012, pursuant to EISA 2007. Although beyond the scope of the present rulemaking, DOE invites comment on recommended approaches for combining these measurements into a single metric as part of a future energy conservation standards rulemaking.

DOE further notes that the proposed test procedure is designed to produce results that measure standby power consumption in an accurate and repeatable manner, and should not be unduly burdensome on manufacturers to conduct. DOE believes that these objectives would be met by the proposed test procedure, particularly given that it is based upon IEC Standard 62301 and follows testing approaches used in ANSI Standard C82.6–2005. DOE invites comment on the issue of test burden, including whether there are any alternatives that would generate results with the same level of accuracy and repeatability while reducing the burden.

E. Scope of Applicability of Standby Power Test Procedure

This rulemaking addresses ballasts that operate metal halide lamp fixtures. After studying the market of commercially-available metal halide ballasts and the statutory definition of ''standby mode,'' DOE is proposing to interpret this mode as only applying to certain ballasts under certain operating conditions. DOE believes standby mode only applies to ballasts that incorporate some kind of lighting control system interface, because these ballasts appear to be the only ones that satisfy the EPCA definition of ''standby mode'' (which DOE is codifying into its regulations). Specifically, DOE found that only metal halide ballasts with a lighting-control system interface can be ''connected to a main power source'' and ''facilitate the activation or deactivation of other functions (including active mode) by remote switch (including remote control), internal sensor, or timer.'' (42 U.S.C. 6295(gg)(1)(A)(iii)) DOE understands that many of these ballasts are designed with advanced circuitry that adds new features, including intelligent operation.[7] One example of these ballasts would be a DALI-enabled ballast. DALI-enabled ballasts have internal circuitry that is fundamentally part of the ballast design that remains active and consumes energy, even when the ballast is not operating any lamps.

If, on the other hand, these same ballasts were dimmed to a level less than full output, but greater than zero percent, they could not be in standby mode because they would still be providing a ballast's main function (*i.e.*, operating a lamp to produce light). (42 U.S.C. 6295(gg)(1)(A)(i)) Such ballast would be deemed to be in active mode even if the quantity of light produced was just one percent of the rated system output.

As explained above, not all metal halide ballasts would need to be tested for standby mode power, because many ballast designs would not meet the statutory definition for operation in standby mode. In fact, the vast majority of metal halide ballasts sold today are not capable of operating in standby mode, thereby rendering the standby provisions of the test procedure inapposite in terms of those units. Generally, these excluded ballasts are ones that are not active components of a lighting control system; instead, they are controlled simply by having the active power disconnected through use of a manual switch, occupancy sensor, or other system. For these ballasts, light output is reduced to zero percent by disconnecting the main power. However, the ballast would not be in standby mode, as defined by EPCA, because it is no longer connected to a main power source.

Thus, DOE believes that the metal halide ballasts subject to standby mode power measurements would be those that incorporate some electronic circuit enabling the ballast to communicate with and be part of a lighting control system. DOE invites comment as to the proposed scope of applicability of this metal halide ballast test procedure and whether there are other considerations that would lead to the potential coverage of additional or fewer ballast types under the standby mode

[7] ''Intelligent operation'' means a device which is able to receive information, evaluate that information, and take appropriate action based upon that information. For example, certain ballasts contain a circuit which, when it receives a signal, then takes action to dim light output to a certain level or to switch off the lamp (or other action).

measurement portion of the test procedure.

F. Effective Date of Standby Mode Test Method

As discussed in section II of this notice, EPCA requires DOE to consider standby mode and off mode for all energy conservation final rules issued after July 1, 2010. (42 U.S.C. 6295(gg)(3)(A)) In addition, EPCA states that not later than January 1, 2012, DOE shall publish a final rule to determine whether the standards established for metal halide lamp fixtures should be amended. (42 U.S.C. 6295(hh)(2)) Due to the fact that this rulemaking, to possibly amend the standards for metal halide lamp fixtures, would be issued after July 1, 2010, DOE must take into consideration standby and off mode energy consumption in that future energy conservation standards rulemaking.

DOE believes that in having these test procedure provisions included in the CFR, it will provide manufacturers additional time to become familiar with energy consumption of certain metal halide ballasts. In the coming years, as DOE conducts its energy conservation standards rulemaking reviewing the energy conservation standards for metal halide lamp ballasts, it will take into consideration energy consumption. During that rulemaking, stakeholders will already be familiar with the test procedure for measuring and calculating standby mode power consumption and will be able to better understand any ballast design implications that may impact the efficiency of metal halide lamp ballasts.

As discussed in section II above and as provided in the proposed amendments at 10 CFR 431.324(c), manufacturers of metal halide lamp ballasts would not need to perform standby measurements under this test procedure to certify compliance with the energy conservation standards for metal halide lamp fixtures that come into effect on January 1, 2009, because those statutory standards do not account for standby mode power consumption. In terms of publication in the Code of Federal Regulations, the effective date of this test procedure on metal halide lamp fixtures would be 30 days after the date of publication in the **Federal Register** of a final rule in this test procedures rulemaking. However, manufacturers would only be required to use the amended test procedure's standby mode provisions to demonstrate compliance with any future energy conservation standard on the effective date of a final rule establishing amended standards for metal halide lamp ballasts that addresses standby mode power consumption (at which time, DOE would remove the limitation in 10 CFR 431.324(c)).

G. Units To Be Tested

Accurate testing of metal halide ballasts require a statistically meaningful sample of test units to provide sufficient assurance that the true mean efficiency of a basic model meets or exceeds the applicable energy conservation standard. In efforts to meet this testing need and to reduce the testing burden on manufacturers, DOE considered four factors in developing sample size requirements: (1) Providing a highly statistically valid probability that a basic model that is tested meets applicable energy conservation standards; (2) providing a highly statistically valid probability that a manufacturer preliminarily found to be in noncompliance will actually be in noncompliance; (3) assuring compatibility with other sampling plans DOE has promulgated; and (4) minimizing manufacturers' testing time and costs.

Based on the consideration of these four factors and an analysis of sampling methods used for DOE test procedures for products and equipment subject to energy conservation standards, DOE considered three alternatives for the specification of test sample size for metal halide ballast equipment: (1) Test every unit to determine with 100 percent certainty that each one complies with the statute; (2) test a predetermined number of units to yield a high level of statistical confidence; and (3) test until a determination can be made that a basic model does, or does not, comply.

The first alternative is not practical for small equipment with high-volume production, such as lighting ballasts, because this would require extensive tests of each product, which would not be cost-effective. The second alternative would likely require more testing than needed to reach statistical confidence for this equipment because any predetermined number would necessarily be conservatively high. In the third alternative, the size of the total sample is not determined in advance. Instead, the criteria are set to ensure that the final set of samples tested will represent a statistically significant mean efficiency value at a prescribed confidence level. Under this approach, the manufacturer selects a sample at random from a production line (not fewer than four units) and, after each unit or group of units is tested, either accepts the sample, rejects the sample, or continues testing additional samples until a sample size is reached that meets the confidence interval requirements. This method often permits reaching a statistically valid decision on the basis of fewer tests than fixed number sampling.

After careful consideration of the available alternatives, DOE is proposing to adopt the sampling procedure described in detail below for metal halide ballast energy efficiency. The proposed procedure is consistent with the approach DOE has adopted for fluorescent lamp ballasts. The proposed procedure would require randomly selecting and testing a sample of production units (not fewer than four) of a representative basic model. A simple average of the values would be calculated, which would be the actual mean value of the sample. For each representative model, a sample of sufficient size, no less than four, would be selected at random and tested to ensure that the calculated value of energy efficiency is no less than: (1) The lower of the mean of the sample; or (2) the lower 99 percent confidence limit of the mean of the entire population of that basic model, divided by a coefficient applicable to the represented value. The coefficients are intended to reasonably reflect variations in material and in the manufacturing and testing processes. This statistical process applies an industry standard 99 percent confidence level that is commonly used for evaluation of large populations and is the confidence level applied to other DOE test procedures for products and equipment subject to energy conservation standards, such as compact fluorescent lamps and external power supplies.

DOE invites comment and data on the accuracy and burden of this sampling plan, as well as recommendations on any improvements or alternatives to this approach. DOE is particularly interested in comment on whether the proposed statistical sampling plan, which is based on the current sampling plan used by DOE for fluorescent lamp ballasts, is appropriate for testing metal halide lamp ballasts. DOE asks stakeholders to pay close attention to the proposed confidence interval requirements and coefficients proposed for the equipment and to provide comment on their applicability to metal halide ballasts.

H. Submission of Data

Submission of data certifying the testing in accordance with the required Federal testing procedure will be required for metal halide ballasts, once a Federal energy conservation standard becomes effective for this equipment. For metal halide ballasts, DOE proposes to apply the same basic certification and

data submission requirements currently in place for other similar products and equipment.

To comply with data submission requirements, DOE proposes that the manufacturer, or other entity performing the test on behalf of the manufacturer, would be required to provide certification in a report submitted before [*1 year after publication of the Final Rule*], which would include for each basic model the following information: (1) The equipment type; (2) manufacturer's name; (3) private labeler's name(s) (if applicable); and (4) manufacturer's model number(s). The report would be required to certify that the testing was completed in accordance with the applicable test requirements prescribed in 42 U.S.C. 6293(b) of EPCA, as amended. Any change to a basic model that changes energy consumption constitutes a new basic model. If such a change reduces consumption, the new model would be considered in compliance with the standard without any additional testing. However, if such a change increases consumption while meeting the standard, then all certification information applicable to testing of the new basic model would be required to be submitted. *See also* section V.C. of this notice regarding compliance with the Paperwork Reduction Act of 1995.

DOE invites comment on the completeness, applicability, and burden of this proposed data submission plan as well as recommendations on any improvements or alternatives to this approach.

I. Enforcement Provisions

Once a Federal energy conservation standard becomes effective for metal halide ballasts, the enforcement of the appropriate application of the testing procedure for this equipment would be subject to enforcement of the efficiency requirements and verification of the documented testing. DOE proposes to apply to metal halide ballasts the same basic requirements for enforcement currently in place for other lighting equipment. DOE will review the testing certification.

If DOE receives written information about the performance of metal halide ballasts indicating that one or more basic models may not be in compliance with the energy conservation standard, DOE may conduct independent testing of those basic models. The results of this testing would serve as the basis for any enforcement actions related to the application of these metal halide ballast test procedures.

DOE invites comment on the proposed enforcement provisions as well as recommendations on any improvements or alternatives to this approach.

IV. Public Participation

The entire record of this proposed rulemaking, including the transcript from the public meeting, is available for inspection at the U.S. Department of Energy, Resource Room of the Building Technologies Program, 6th Floor, 950 L'Enfant Plaza, SW., Washington, DC 20024, (202) 586–2945, between 9 a.m. and 4 p.m., Monday through Friday, except Federal holidays. The official transcript is also posted on the DOE Web site at: *http://www.eere.energy.gov/buildings/appliance_standards.* Anyone may purchase a copy of the transcript from the transcribing reporter.

A. Submission of Comments

DOE will accept comment, data, and information about the proposed rule no later than the date provided at the beginning of this notice. Any comment submitted must identify the NOPR on Test Procedures for Metal Halide Lamp Ballasts, provide the docket number EERE–2008–BT–TP–0017 and/or RIN 1904–AB87. Electronic comments, data, and information submitted to DOE's e-mail address for this rulemaking should be provided in WordPerfect, Microsoft Word, PDF, or text (ASCII) file format. Stakeholders should avoid the use of special characters or any form of encryption, and wherever possible, comments should carry the electronic signature of the author. Comments, data, and information submitted to DOE via mail or hand delivery/courier should include one signed paper original. No telefacsimiles will be accepted.

Comment should address specific issues within the proposed metal halide ballast test procedures and identify the language or technical point of concern. Technical analysis, data, or precedence information should be provided to support the position offered in the comment. Specific changes to the technical requirements or language should be presented, where appropriate.

Pursuant to 10 CFR 1004.11, anyone submitting information that he or she believes to be confidential and exempt by law from public disclosure should submit two copies: one copy of the document including all the information believed to be confidential, and one copy of the document without the information believed to be confidential. DOE will make its own determination as to the confidential status of the information and treat it accordingly.

Factors of interest to DOE when evaluating requests to treat submitted information as confidential include: (1) A description of the items; (2) whether and why such items are customarily treated as confidential within the industry; (3) whether the information is generally known by or available from other sources; (4) whether the information has previously been made available to others without obligation concerning its confidentiality; (5) whether the submitting person would suffer competitive injury from public disclosure; (6) when such information might lose its confidential character due to the passage of time; and (7) why disclosure of the information would be contrary to the public interest.

B. Issues on Which DOE Seeks Comment

As noted above, EISA 2007 requires that metal halide ballast efficiency testing be based on ANSI Standard C82.6–2005. This statutory directive allows DOE some latitude in adopting the most appropriate requirements for the proposed metal halide ballast test procedure. In such cases, DOE invites comment and data on the applicability of the metal halide ballast test procedure. Also, because the proposed metal halide ballast test procedures will become codified under 10 CFR Part 431, and will be covered under sampling, certification, and other established regulatory protocols, DOE seeks comment on these matters. Although comments are welcome on all aspects of this rulemaking, DOE is particularly interested in comment on the following issues:

1. Test Temperatures

DOE invites comment and data on the applicability of the proposed ambient test temperature requirements, based on section 4.2 in ANSI Standard C82.6–2005. In particular, DOE is interested in comment on whether a different set of ambient test conditions might be more appropriate for metal halide ballast testing. *See* section III.C.1 for a discussion of the proposed ambient temperature conditions.

2. Test Instrumentation and Requirements

DOE invites comment and data on the applicability of the proposed instrumentation requirements for power supplies, wattmeters, voltmeters, and ammeters required for testing, based on the requirements in section 4.0 of ANSI Standard C82.6–2005. *See* section III.C.1 for a discussion of the instrumentation requirements.

DOE especially invites comment on the issue of the applicability of the proposed measurement accuracy ±0.50 percent up to 125 Hertz for ballasts with power factors between 20 and 50

percent, because ANSI Standard C82.6–2005 does not provide an accuracy value for the proposed instrumentation for these power factors. *See* section III.C.1 for a discussion of the proposed instrumentation requirements.

3. Test Connections

DOE invites comment on the applicability of the proposed test circuit connection requirements, based on sections 4.5 and 6.10 of ANSI Standard C82.6–2005. *See* section III.C.1 for a discussion of the proposed test circuit connections.

4. Lamp Orientation

DOE invites comment on the appropriateness of the lamp orientation requirements as specified in section 4.3 of ANSI Standard C82.6–2005 that require vertical base up unless the manufacturer specifies another orientation for that ballast and associated lamp combination. DOE also seeks comment on whether a preferred lamp orientation approach exists within the industry for lamp ballast testing. *See* section III.C.1 for a discussion of the proposed lamp orientation requirements.

5. Lamp Seasoning and System Stabilization

DOE invites comment and data on the applicability of the proposed lamp seasoning and system stabilization requirements that follow the ANSI Standard C82.6–2005 requirement for a 100-hour seasoning period and the stabilization method in either section 4.4.2 or 4.4.3 of ANSI Standard C82.6–2005, with additional methods from ANSI Standard C78.389–2004. DOE is particularly interested in whether a preferred lamp seasoning or lamp stabilization approach exists within the industry. *See* section III.C.1 for a discussion of the proposed lamp seasoning and system stabilization conditions.

6. Test Measurements

DOE invites comment and data on the applicability of the proposed measurement of ballast power losses in accordance with section 6.10 of ANSI Standard C82.6–2005, which requires the use of a true RMS wattmeter with basic accuracy of 0.50 percent. DOE is particularly interested in whether a preferred ballast power-loss measurement approach exists within the industry for metal halide lamps. *See* section III.C.2 for a discussion of the proposed testing measurements.

7. Applicability of Off Mode

DOE invites comment on its approach for assessing metal halide ballast operation in active mode, standby mode, and off mode, as those terms are defined in EPCA. In particular, DOE invites comment on its tentative conclusion that off mode does not apply to metal halide lamp ballasts at this time, and, therefore, should not be included as part of this proposed test procedure. *See* section III.B for a discussion of off mode.

8. Applicability of Standby Measurements

DOE invites comment on its proposed approach to apply the standby mode provisions of this test procedure to all metal halide lamp ballasts that incorporate some form of electronic circuit that enables the ballast to communicate with and be part of a lighting control system. Although all metal halide ballasts would be subject to the test procedure generally, only these types would be subject to the test procedure's standby mode power consumption provisions. *See* section III.E for a discussion of the proposed scope of the test procedure's standby power provisions.

9. Definitions

DOE invites comment on the definitions for the following eight new terms that DOE is proposing to add to 10 CFR part 431: AC control signal, active mode, basic model, DC control signal, off mode, PLC control signal, standby mode, and wireless control signal. *See* section III.B for a discussion of the proposed definitions.

10. Circuit Diagrams

DOE invites comments on its proposed test method and measurements for metal halide ballasts, which provide the step-by-step procedure and circuit diagrams necessary for measuring the power (in watts) consumed by the main power input to the ballast, and the control signal wire (if any). *See* sections III.C and D for a discussion of the proposed circuit diagrams.

11. Units To Be Tested

DOE invites comment and data on the accuracy and applicability of the proposed sampling for metal halide ballasts. DOE seeks comment on whether an alternative sampling method exists that might be more appropriate for metal halide ballasts. *See* section III.G for a discussion of the proposed sampling size method.

12. Submission of Data

DOE invites comment on the potential impact of applying the submission of data requirements described in other DOE test procedures for products and equipment subject to energy conservation standards as it applies to metal halide ballasts. DOE seeks comment on whether an alternative set of submission requirements exists that might be more appropriate for metal halide ballasts. *See* section III.H for a discussion of the proposed submission of data requirements.

13. Enforcement Provisions

DOE invites comment on the potential impact of applying the enforcement provisions described in other DOE test procedures for products and equipment subject to energy conservation standards as they apply to metal halide ballasts. *See* section III.I for discussion of the proposed enforcement provisions.

V. Procedural Issues and Regulatory Review

A. Review Under Executive Order 12866

Today's proposed regulatory action is not a ''significant regulatory action'' under section 3(f) of Executive Order 12866, ''Regulatory Planning and Review.'' 58 FR 51735 (Oct. 4, 1993). Accordingly, this proposed regulatory action was not subject to review under the Executive Order by the Office of Information and Regulatory Affairs (OIRA) in the Office of Management and Budget (OMB).

B. Review Under the Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*, as amended by the Small Business Regulatory Enforcement Fairness Act of 1996), requires preparation of an initial regulatory flexibility analysis for any rule that by law must be proposed for public comment, unless the agency certifies that the proposed rule, if promulgated, will not have a significant economic impact on a substantial number of small entities. A regulatory flexibility analysis examines the impact of the rule on small entities and considers alternative ways of reducing negative impacts. Also, as required by Executive Order 13272, ''Proper Consideration of Small Entities in Agency Rulemaking,'' 67 FR 53461 (August 16, 2002), DOE published procedures and policies on February 19, 2003, to ensure that the potential impacts of its rules on small entities are properly considered during the DOE rulemaking process. 68 FR 7990. DOE made its procedures and policies available on the Office of the

General Counsel's Web site at *http://www.gc.doe.gov*.

Today's NOPR proposes test procedures that would be used to determine compliance with an energy conservation standard for certain metal halide lamp fixtures. DOE reviewed today's NOPR under the provisions of the Regulatory Flexibility Act and the policies and procedures published on February 19, 2003. DOE concludes and certifies that this rulemaking would not have a significant economic impact on a substantial number of small entities producing metal halide lamp fixtures covered in this rulemaking, for the reasons that follow.

The proposed test procedure incorporates by reference provisions from ANSI Standard C82.6–2005 for the measurement of ballast efficiency. ANSI Standard C82.6–2005 is the current and active industry testing standard for metal halide lamp ballasts. In referencing this industry test method, DOE anticipates that there would be no incremental increase in testing cost or burden for covered products. Manufacturers are familiar with the application of ANSI Standard C82.6–2005 and would have the equipment necessary to conduct the performance measurements. Furthermore, DOE understands that manufacturers of covered equipment are using this industry test method when they make any representation of their product's efficiency in the public domain.

Today's NOPR also proposes a methodology for the measurement of standby mode power consumption for certain metal halide lamp fixtures. DOE based its proposed method on techniques and approaches in ANSI Standard C82.6–2005 and IEC Standard 62301. DOE uses the same test equipment, accuracy requirements, and test conditions from ANSI Standard C82.6–2005. Although DOE is unaware of any metal halide lamp ballasts commercially available today that are capable of operating in standby mode, ballasts incorporating features that may encounter standby mode may enter the market as they have for fluorescent lamp ballasts. Due to the fact that DOE's proposed method is based on the industry standards and does not exceed any equipment or accuracy requirements contained therein, DOE does not believe the standby mode test procedure will add significant costs. Of the two measurements required in the standby mode test procedure, the P_{in} measurement is common to both the active mode and the standby mode test procedure. Measurement of the control signal is a minimal additional test, but one that technicians can conduct with measurement equipment readily available.

Accordingly, DOE does not find that the test procedures proposed today would result in any significant increase in testing or regulatory compliance costs. For this reason, DOE concludes and certifies that this rulemaking would not impose a significant impact on a substantial number of small businesses manufacturing metal halide lamp fixtures. Accordingly, DOE has not prepared a regulatory flexibility analysis for this rulemaking. DOE's certification and supporting statement of factual basis will be provided to the Chief Counsel for Advocacy of the Small Business Administration for review under 5 U.S.C. 605(b).

C. Review Under the Paperwork Reduction Act of 1995

The proposed rule would require each manufacturer of metal halide fixtures (*i.e.,* fixtures that incorporate metal halide ballasts), or entity performing tests on behalf of the manufacturer, to maintain records about how they determined the energy efficiency and standby power mode energy consumption measurement of their products (*see* proposed regulatory language at 10 CFR Part 431, Subpart T). The proposed rule also would require each manufacturer to make a one-time submission, stating in essence that it is complying with the applicable energy conservation standards and test procedures, in addition to certification reports that set forth the energy performance of each basic model that it manufactures. The certification reports are submitted one time for each basic model, either when the requirements go into effect or when the manufacturer begins distribution of a new basic model. The proposed collections of information are necessary for implementing and monitoring compliance with the efficiency standards and testing requirements for metal halide fixtures, as mandated by EPCA. Manufacturers would become subject to these reporting and certification requirements once both a final rule for the metal halide ballast test procedure and a final rule for the metal halide ballast energy conservation standard are effective.

While interested persons are invited to comment on the proposed certification and recordkeeping requirements for metal halide fixtures to be codified at 10 CFR Part 431 that are presented in today's NOPR, DOE also will separately publish in the **Federal Register** a notice pursuant to 44 U.S.C. 3506(c)(2) that invites public comment on this proposed collection of information. After considering any comments, DOE will submit the proposed collection of information to OMB for clearance pursuant to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). DOE will subsequently publish another **Federal Register** notice informing the public when the collection of information request has been submitted to OMB for review and clearance. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The effective date of the reporting and certification requirements, as set forth in this proposed rule, will be announced either in the test procedure final rule or in a separate **Federal Register** document.

DOE estimates the total annual reporting and recordkeeping burden imposed on manufacturers of metal halide fixtures by today's proposed rule would be 23,680 hours per year. DOE estimates that the number of covered manufacturing firms would be approximately 148, and the total annual record-keeping burden from compliance with the proposed rule would be 160 hours per company. Thus, 148 firms × 160 hours per firm = 23,680 hours per year.

In developing this burden estimate, DOE considered that each manufacturer is required to comply with the energy conservation standards for metal halide fixtures set by the statute for ballasts manufactured on or after the effective date of the relevant statutory provisions (*i.e.,* January 1, 2009). DOE understands that manufacturers already maintain the types of records the proposed rule would require them to keep. The Department believes the collection of information required by this proposed rule is the least burdensome method of meeting the statutory requirements and achieving the program objectives of the DOE compliance certification program for these products and equipment.

D. Review Under the National Environmental Policy Act

In this notice, DOE is proposing a metal halide ballast test procedure that it expects would be used to develop and implement future energy conservation standards for metal halide lamp ballasts. DOE has determined that this proposed rule falls into a class of actions that are categorically excluded from review under the National Environmental Policy Act of 1969 (Pub. L. 91–190, codified at 42 U.S.C. 4321 *et seq.*) and DOE's implementing regulations at 10 CFR part 1021. Specifically, this proposed rule would adopt existing

industry ballast test procedures, so it would not affect the amount, quality, or distribution of energy usage, and therefore, would not result in any environmental impacts. Thus, this rulemaking is covered by the Categorical Exclusion A6 under 10 CFR part 1021, subpart D.[8] Accordingly, neither an environmental assessment nor an environmental impact statement is required.

E. Review Under Executive Order 13132

Executive Order 13132, ''Federalism,'' 64 FR 43255 (August 10, 1999), imposes certain requirements on agencies formulating and implementing policies or regulations that preempt State law or that have Federalism implications. The Executive Order requires agencies to examine the constitutional and statutory authority supporting any action that would limit the policymaking discretion of the States, and to carefully assess the necessity for such actions. The Executive Order also requires agencies to have an accountable process to ensure meaningful and timely input by State and local officials in developing regulatory policies that have Federalism implications. On March 14, 2000, DOE published a statement of policy describing the intergovernmental consultation process that it will follow in developing such regulations. 65 FR 13735. DOE examined this proposed rule and determined that it would not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Accordingly, Executive Order 13132 requires no further action.

F. Review Under Executive Order 12988

With respect to the review of existing regulations and the promulgation of new regulations, section 3(a) of Executive Order 12988, ''Civil Justice Reform,'' 61 FR 4729 (Feb. 7, 1996), imposes on Federal agencies the duty to: (1) Eliminate drafting errors and ambiguity; (2) write regulations to minimize litigation; (3) provide a clear legal standard for affected conduct rather than a general standard; and (4) promote simplification and burden reduction. Section 3(b) of Executive Order 12988 specifically requires that Executive agencies make every reasonable effort to ensure that the regulation specifies the following: (1) The preemptive effect, if any; (2) any effect on existing Federal law or regulation; (3) a clear legal standard for affected conduct while promoting simplification and burden reduction; (4) the retroactive effect, if any; (5) definitions of key terms; and (6) other important issues affecting clarity and general draftsmanship under any guidelines issued by the Attorney General. Section 3(c) of Executive Order 12988 requires Executive agencies to review regulations in light of applicable standards in sections 3(a) and 3(b) to determine whether they are met or whether it is unreasonable to meet one or more of them. DOE completed the required review and determined that, to the extent permitted by law, this proposed rule meets the relevant standards of Executive Order 12988.

G. Review Under the Unfunded Mandates Reform Act of 1995

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA) (Pub. L. 104–4, codified at 2 U.S.C. 1501 *et seq.*) requires each Federal agency to assess the effects of Federal regulatory actions on State, local, and Tribal governments and the private sector. For regulatory actions likely to result in a rule that may cause expenditures by State, local, and Tribal governments, in the aggregate, or by the private sector of $100 million or more in any 1 year (adjusted annually for inflation), section 202 of UMRA requires a Federal agency to publish a written statement that estimates the resulting costs, benefits, and other effects on the national economy. (2 U.S.C. 1532(a) and (b)) UMRA requires a Federal agency to develop an effective process to permit timely input by elected officers of State, local, and Tribal governments on a proposed ''significant intergovernmental mandate.'' UMRA also requires an agency plan for giving notice and opportunity for timely input to small governments that may be potentially affected before establishing any requirement that might significantly or uniquely affect them. On March 18, 1997, DOE published a statement of policy on its process for intergovernmental consultation under UMRA. 62 FR 12820. (This policy is also available at *http://www.gc.doe.gov.*) Today's proposed rule contains neither an intergovernmental mandate nor a mandate that may result in the expenditure of $100 million or more in any year, so these requirements do not apply.

H. Review Under the Treasury and General Government Appropriations Act, 1999

Section 654 of the Treasury and General Government Appropriations Act, 1999 (Pub. L. 105–277) requires Federal agencies to issue a Family Policymaking Assessment for any rule that may affect family well-being. Today's NOPR to amend DOE test procedures would not have any impact on the autonomy or integrity of the family as an institution. Accordingly, DOE has concluded that it is not necessary to prepare a Family Policymaking Assessment.

I. Review Under Executive Order 12630

Pursuant to Executive Order 12630, ''Governmental Actions and Interference with Constitutionally Protected Property Rights,'' 53 FR 8859 (March 15, 1988), DOE determined that this proposed rule would not result in any takings that might require compensation under the Fifth Amendment to the U.S. Constitution.

J. Review Under the Treasury and General Government Appropriations Act, 2001

Section 515 of the Treasury and General Government Appropriations Act, 2001 (Pub. L. 106–554, codified at 44 U.S.C. 3516 note) provides for agencies to review most disseminations of information to the public under information quality guidelines established by each agency pursuant to general guidelines issued by OMB. OMB's guidelines were published at 67 FR 8452 (Feb. 22, 2002), and DOE's guidelines were published at 67 FR 62446 (Oct. 7, 2002). DOE has reviewed today's NOPR under the OMB and DOE guidelines and concluded that it is consistent with applicable policies in those guidelines.

K. Review Under Executive Order 13211

Executive Order 13211, ''Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use,'' 66 FR 28355 (May 22, 2001), requires Federal agencies to prepare and submit to OMB a Statement of Energy Effects for any proposed significant energy action. A ''significant energy action'' is defined as any action by an agency that promulgated a final rule or is expected to lead to promulgation of a final rule, and that: (1) Is a significant regulatory action under Executive Order 12866, or any successor order; and (2) is likely to have a significant adverse effect on the supply, distribution, or use of energy; or (3) is designated by the Administrator of OIRA as a significant energy action. For

[8] Categorical Exclusion A6 provides, ''Rulemakings that are strictly procedural, such as rulemaking (under 48 CFR part 9) establishing procedures for technical and pricing proposals and establishing contract clauses and contracting practices for the purchase of goods and services, and rulemaking (under 10 CFR part 600) establishing application and review procedures for, and administration, audit, and closeout of, grants and cooperative agreements.''

any proposed significant energy action, the agency must give a detailed statement of any adverse effects on energy supply, distribution, or use if the proposal is implemented, and of reasonable alternatives to the action and their expected benefits on energy supply, distribution, and use. Today's proposed rulemaking is not a significant regulatory action under E.O. 12866. Moreover, it would not have a significant adverse effect on the supply, distribution, or use of energy and has not been designated a significant energy action by the Administrator of OIRA. Therefore, DOE determined that this rule is not a significant energy action. Accordingly, DOE has not prepared a Statement of Energy Effects for this rulemaking.

L. Review Under Section 32 of the Federal Energy Administration Act of 1974

Under section 301 of the Department of Energy Organization Act (Pub. L. 95–91; 42 U.S.C. 7101, *et seq.*), DOE must comply with section 32 of the Federal Energy Administration Act of 1974 (Pub. L. 93–275), as amended by the Federal Energy Administration Authorization Act of 1977 (Pub. L. 95–70). (15 U.S.C. 788) Section 32 provides that, where a proposed rule authorizes or requires use of commercial standards, the NOPR must inform the public of the use and background of such standards. In addition, section 32(c) requires DOE to consult with the Attorney General and the Federal Trade Commission (FTC) about the impact of the commercial or industry standards on competition.

DOE evaluated these revised standards and is unable to conclude whether they fully comply with the requirements of section 32(b) of the Federal Energy Administration Act, (*i.e.,* that they were developed in a manner that fully provides for public participation, comment, and review). Before prescribing a final rule, DOE will consult with the Attorney General and the Chairman of the FTC about the impact of these test procedures on competition.

VI. Approval of the Office of the Secretary

The Secretary of Energy has approved publication of this proposed rule.

List of Subjects in 10 CFR Part 431

Administrative practice and procedure, Confidential business information, Energy conservation, Reporting and recordkeeping requirements.

Issued in Washington, DC, on June 29, 2009.

Steven G. Chalk,

Principal Deputy Assistant Secretary, Energy Efficiency and Renewable Energy.

For the reasons stated in the preamble, DOE proposes to amend part 431 of chapter II of title 10, of the Code of Federal Regulations, to read as set forth below.

PART 431—ENERGY EFFICIENCY PROGRAM FOR CERTAIN COMMERCIAL AND INDUSTRIAL EQUIPMENT

1. The authority citation for part 431 continues to read as follows:

Authority: 42 U.S.C. 6291–6317.

2. Section 431.322 is amended by adding, in alphabetical order, definitions for ''AC control signal,'' ''Active mode,'' ''Basic model,'' ''DC control signal,'' ''Off mode,'' ''PLC control signal,'' ''Standby mode,'' and ''Wireless control signal'' to read as follows:

§ 431.322 Definitions concerning metal halide lamp ballasts and fixtures.

AC control signal means an alternating current (AC) signal that is supplied to the ballast using additional wiring for the purpose of controlling the ballast and putting the ballast in standby mode.

Active mode means the condition in which an energy-using product:

(1) Is connected to a main power source;

(2) Has been activated; and

(3) Provides one or more main functions.

* * * * *

Basic model means, with respect to metal halide ballasts, all units of a given type of metal halide ballast (or class thereof) that:

(1) Are rated to operate a given lamp type and wattage;

(2) Have essentially identical electrical characteristics; and

(3) Have no differing electrical, physical, or functional characteristics that affect energy consumption.

DC control signal means a direct current (DC) signal that is supplied to the ballast using additional wiring for the purpose of controlling the ballast and putting the ballast in standby mode.

* * * * *

Off mode means the condition in which an energy-using product:

(1) Is connected to a main power source; and

(2) Is not providing any standby or active mode function.

PLC control signal means a power line carrier (PLC) signal that is supplied to the ballast using the input ballast wiring for the purpose of controlling the ballast and putting the ballast in standby mode.

* * * * *

Standby mode means the condition in which an energy-using product:

(1) Is connected to a main power source; and

(2) Offers one or more of the following user-oriented or protective functions:

(i) To facilitate the activation or deactivation of other functions (including active mode) by remote switch (including remote control), internal sensor, or timer;

(ii) Continuous functions, including information or status displays (including clocks) or sensor-based functions.

Wireless control signal means a wireless signal that is radiated to and received by the ballast for the purpose of controlling the ballast and putting the ballast in standby mode.

3. Section 431.324 is amended by revising the section heading and by revising paragraph (b) and adding paragraph (c) to read as follows:

§ 431.324 Uniform test method for the measurement of energy efficiency and standby mode energy consumption of metal halide ballasts.

* * * * *

(b) *Active Mode Energy Efficiency Testing and Calculations.* (1) *Test Conditions.* The power supply, ballast test conditions, lamp position, lamp stabilization and test instrumentation shall all conform to the requirements specified in section 4.0, ''General Conditions for Electrical Performance Tests,'' of the ANSI Standard C82.6–2005, ''Ballasts for High Intensity Discharge Lamps—Method of Measurement.'' Ambient temperatures for the testing period shall be maintained at 25°C ± 5°C in a draft-free environment. Basic lamp stabilization shall conform to the general requirements in section 4.4.2, and stabilization shall be reached when the lamp's electrical characteristics vary by no more than 3 percent in three consecutive 10- to 15-minute intervals measured after the minimum burning time of 30 minutes. In cases where switching without extinguishing the lamp is impossible, the alternative stabilization method described in section 4.4.3 shall be used.

(2) *Test Measurement.* The ballast input power and lamp output power during operating conditions shall be measured in accordance with the methods specified in section 6.0, ''Ballast Measurements (Multiple-Supply Type Ballasts)'' of the ANSI Standard C82.6–2005, ''Ballasts for High

Intensity Discharge Lamps—Method of Measurement.''

(3) *Efficiency Calculation.* The measured lamp output power shall be divided by the ballast input power to determine the percent efficiency of the ballast under test.

(c) *Standby Mode Energy Consumption Testing and Calculations.* The measurement of standby mode need not be performed to determine compliance with energy conservation standards for metal halide lamp fixtures established prior to [DATE OF PUBLICATION OF FINAL RULE IN THE **FEDERAL REGISTER**].

(1) *Test Conditions.* The power supply, ballast test conditions, and test instrumentation shall all conform to the requirements specified in section 4.0, ''General Conditions for Electrical Performance Tests,'' of the ANSI Standard C82.6–2005, ''Ballasts for High Intensity Discharge Lamps—Method of Measurement.'' Ambient temperatures for the testing period shall be maintained at 25 °C ± 5 °C in a draft-free environment. Send a signal to the ballast instructing it to have zero light output using the appropriate ballast communication protocol or system for the ballast being tested.

(2) *Measurement of Main Input Power.* Measure the input power (watts) to the ballast in accordance with the methods specified in section 6.0, ''Ballast Measurements (Multiple-Supply Type Ballasts)'' of the ANSI Standard C82.6–2005, ''Ballasts for High Intensity Discharge Lamps—Method of Measurement.''

(3) *Measurement of Control Signal Power.* Measure the power from the control signal path using one of the methods (as appropriate to the given unit) described below:

(i) *DC Control Signal.* Measure the DC control signal voltage, using a voltmeter (V), and current, using an ammeter (A) connected to the ballast in accordance with the circuit shown in Figure 1. The DC control signal power is calculated by multiplying the DC control signal voltage by the DC control signal current.

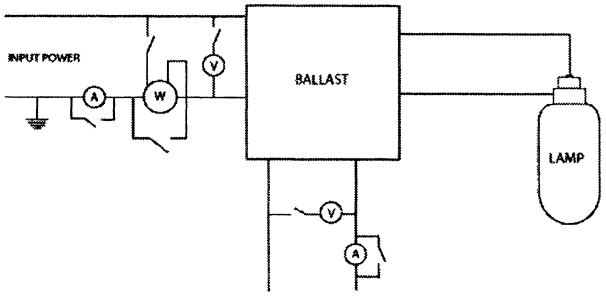

Figure 1: Circuit for Measuring DC Control Signal Power in Standby Mode

(ii) *AC Control Signal.* Measure the AC control signal power (watts), using a wattmeter (W), connected to the ballast in accordance with the circuit shown in Figure 2.

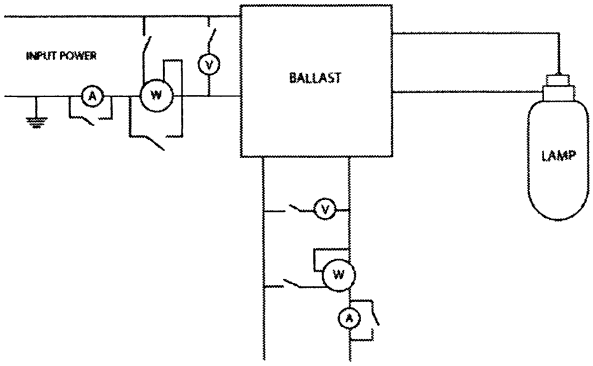

Figure 2: Circuit for Measuring AC Control Signal Power in Standby Mode

(iii) *Power Line Carrier (PLC) Control Signal.* Measure the PLC control signal power (watts), using a wattmeter (W) connected to the ballast in accordance with the circuit shown in Figure 3. The wattmeter must have a frequency response that is at least 10 times higher than the PLC being measured to measure the PLC signal correctly. The wattmeter must also be high-pass filtered to filter out power at 60 Hertz.

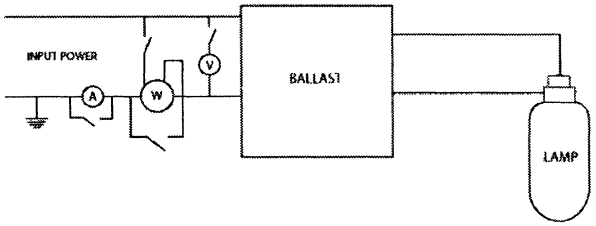

Figure 3: Circuit for Measuring PLC Control Signal Power in Standby Mode

4. Section 431.325 is added to subpart S to read as follows:

§ 431.325 Units to be tested.

For each basic model of metal halide ballast selected for testing, a sample of sufficient size, no less than four, shall be selected at random and tested to ensure that:

(a) Any represented value of estimated energy efficiency calculated as the measured output power to the lamp divided by the measured input power to the ballast (P_{out}/P_{in}), of a basic model is no less than the higher of:

(1) The mean of the sample; or

(2) The upper 99 percent confidence limit of the true mean divided by 1.01.

(b) Any represented value of the energy efficiency of a basic model is no greater than the lower of:

(1) The mean of the sample; or

(2) The lower 99 percent confidence limit of the true mean divided by 0.99.

4. A new Subpart T is added to Part 431 to read as follows:

Subpart T—Certification and Enforcement

Sec.

431.370 Purpose and scope.
431.371 Submission of data.
431.372 Sampling.
431.373 Enforcement.
Appendix A to Subpart T of Part 431—Compliance Statement for Certain Commercial Equipment
Appendix B to Subpart T of Part 431—Certification Report for Certain Commercial Equipment
Appendix C to Subpart T of Part 431—Enforcement for Performance Standards; Compliance Determination Procedure for Certain Commercial Equipment

Subpart T—Certification and Enforcement

§ 431.370 Purpose and scope.

This subpart sets forth the procedures to be followed for manufacturer compliance certifications of metal halide lamp fixtures and for DOE enforcement actions to determine whether a basic model of metal halide ballasts complies with the applicable energy conservation standard set forth in this part. Energy conservation standards include minimum levels of efficiency. This subpart does not apply to electric motors.

§ 431.371 Submission of data.

(a) *Certification.* (1) Except as provided in paragraph (a)(2) of this section, each manufacturer or private labeler, before distributing in commerce any basic model of covered equipment, covered by this subpart and subject to an energy conservation standard set forth in this part, shall certify by means of a compliance statement and a certification report that each basic model meets the applicable energy conservation standard. The compliance statement, signed by the company official submitting the statement, and the certification report(s) shall be sent by certified mail to: U.S. Department of Energy, Building Technologies Program, Mailstop EE–2J, 1000 Independence Avenue, SW., Washington, DC 20585–0121, or e-mailed to the Department at: *certification.report@ee.doe.gov*.

(2) Each manufacturer or private labeler of a basic model of metal halide ballast shall file a compliance statement and its first certification report with DOE on or before [DATE ONE YEAR AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE **FEDERAL REGISTER**].

(3) *Amendment of information.* If information in a compliance statement or certification report previously submitted to the Department under this section is found to be incorrect, each manufacturer or private labeler (or an authorized representative) must submit the corrected information to the Department at the address and in the manner described in this section.

(4) *Third-party representatives.* Notices designating a change of third-party representative must be sent to the Department at the address and in the manner described in this section.

(5) *Compliance statement.* Each manufacturer or private labeler need only submit its compliance statement once for each basic model. Such statement shall include all required information specified in the format set forth in Appendix A of this subpart and shall certify, with respect to each basic model currently produced by the manufacturer and new basic models it introduces in the future, that:

(i) Each basic model complies and will comply with the applicable energy conservation standard;

(ii) All representations as to efficiency in the manufacturer's certification report(s) are and will be based on testing;

(iii) All information reported in the certification report(s) is and will be true, accurate, and complete; and

(iv) The manufacturer or private labeler is aware of the penalties associated with violations of the Act, the regulations thereunder, and 18 U.S.C. 1001, which prohibits knowingly making false statements to the Federal Government.

(6) *Certification report.* Each manufacturer must submit to DOE a certification report for all its metal halide ballast basic models. The certification report (for which a suggested format is set forth in Appendix B of this subpart) shall include for each basic model the product type, product class, manufacturer's name, private labeler's name(s) (if applicable), the manufacturer's model number(s), and the ballast efficiency in percent.

(7) Copies of reports to the Federal Trade Commission that include the information specified in paragraph (a)(6) of this section could serve in lieu of the certification report.

(b) *Model modifications.* Any change to a basic model that affects energy consumption constitutes the addition of a new basic model. If such a change reduces energy consumption, the new model shall be considered in compliance with the standard without any additional testing. If, however, such a change increases energy consumption while meeting the standard, then the manufacturer must submit all information required by paragraph (a)(6) of this section for the new basic model. Any such submission shall be sent by certified mail to: U.S. Department of Energy, Building Technologies Program,

Mailstop EE–2J, 1000 Independence Avenue, SW., Washington, DC 20585–0121, or e-mailed to the Department at: *certification.report@ee.doe.gov*.

(c) *Discontinued models.* For a basic model whose production has ceased and is no longer being distributed, the manufacturer shall report this, by certified mail, to: U.S. Department of Energy, Building Technologies Program, Mailstop EE–2J, 1000 Independence Avenue, SW., Washington, DC 20585–0121. For each basic model, the report shall include: equipment type, equipment class, the manufacturer's name, the private labeler's name(s), if applicable, and the manufacturer's model number. If the reporting of discontinued models coincides with the submittal of a certification report, such information can be included in the certification report.

(d) *Third-party representation.* A manufacturer or private labeler may elect to use a third party (such as a trade association or other authorized representative) to submit the certification report to DOE. Such certification reports shall include all the information specified in paragraph (a)(6) of this section. Third parties submitting certification reports shall include the names of the manufacturers or private labelers who authorized the submittal of the certification reports to DOE on their behalf. The third-party representative also may submit model modification information, as specified in paragraph (b) of this section, and discontinued model information, as specified in paragraph (c) of this section, on behalf of an authorizing manufacturer or private labeler.

§ 431.372 Sampling.

For purposes of a certification of compliance, the determination that a basic model complies with the applicable energy conservation standard shall be based upon the testing and sampling procedures, and other applicable rating procedures, set forth in this part. For purposes of a certification of compliance, the determination that a basic model complies with the applicable design standard shall be based on the incorporation of specific design requirements specified in this part.

§ 431.373 Enforcement.

Process for Metal Halide Lamp Ballasts. This section sets forth procedures DOE will follow in pursuing alleged noncompliance with an applicable energy conservation standard.

(a) *Performance standards.* (1) *Test notice.* Upon receiving information in writing concerning the energy performance of a particular covered equipment sold by a particular manufacturer or private labeler, which indicates that the covered equipment may not be in compliance with the applicable energy standard, the Secretary may conduct a review of the test records. The Secretary may then conduct enforcement testing of that equipment under the DOE test procedure, a process that is initiated by means of a test notice addressed to the manufacturer or private labeler in accordance with the requirements outlined below.

(i) The test notice procedure will only be followed after the Secretary or his/her designated representative has examined the underlying test data provided by the manufacturer, and after the manufacturer has been offered the opportunity to meet with the Department to verify compliance with the applicable energy conservation standard and/or water conservation standard. A representative designated by the Secretary must be permitted to observe any reverification procedures undertaken according to this subpart, and to inspect the results of such reverification.

(ii) The test notice will be signed by the Secretary or his/her designee and will be mailed or delivered by the Department to the plant manager or other responsible official designated by the manufacturer.

(iii) The test notice will specify the basic model to be selected for testing, the number of units to be tested, the method for selecting these units, the date and time at which testing is to begin, the date when testing is scheduled to be completed, and the facility at which testing will be conducted. The test notice may also provide for situations in which the selected basic model is unavailable for testing, and it may include alternative basic models.

(iv) The Secretary may require in the test notice that the manufacturer of covered equipment shall ship at his expense a reasonable number of units of each basic model specified in the test notice to a testing laboratory designated by the Secretary. The number of units of a basic model specified in a test notice shall not exceed 20.

(v) Within five working days of the time the units are selected, the manufacturer must ship the specified test units of a basic model to the designated testing laboratory.

(2) *Testing Laboratory.* Whenever the Department conducts enforcement testing at a designated laboratory in accordance with a test notice under this section, the resulting test data shall constitute official test data for that basic model. The Department will use such test data to make a determination of compliance or noncompliance.

(3) *Sampling.* The Secretary will base the determination of whether a manufacturer's basic model complies with the applicable energy conservation standard on testing conducted in accordance with the applicable test procedures specified in this part, and with the following statistical sampling procedures for metal halide lamp ballasts, with the methods described in 10 CFR Part 431, Subpart T, Appendix B (Sampling Plan for Enforcement Testing).

(4) *Test unit selection.* (i) For metal halide lamp ballasts, the following applies:

(A) The Department shall select a batch, a batch sample, and test units from the batch sample in accordance with the following provisions of this paragraph and the conditions specified in the test notice.

(B) The batch may be subdivided by the Department using criteria specified in the test notice.

(C) The Department will then randomly select a batch sample of up to 20 units from one or more subdivided groups within the batch. The manufacturer shall keep on hand all units in the batch sample until the basic model is determined to be in compliance or non-compliance.

(D) The Department will randomly select individual test units comprising the test sample from the batch sample.

(E) All random selections shall be achieved by sequentially numbering all the units in a batch sample and then using a table of random numbers to select the units to be tested.

(ii) [Reserved]

(5) *Test unit preparation.* (i) Before and during the testing, a test unit selected in accordance with paragraph (a)(4) of this section shall not be prepared, modified, or adjusted in any manner unless such preparation, modification, or adjustment is allowed by the applicable DOE test procedure. DOE will test each unit in accordance with the applicable test procedures.

(ii) No one may perform any quality control, testing, or assembly procedures on a test unit, or any parts and subassemblies thereof, that is not performed during the production and assembly of all other units included in the basic model.

(iii) A test unit shall be considered defective if it is inoperative. A test unit is also defective if it is found to be in noncompliance due to a manufacturing defect or due to failure of the unit to

operate according to the manufacturer's design and operating instructions, and the manufacturer demonstrates by statistically valid means that, with respect to such defect or failure, the unit is not representative of the population of production units from which it is obtained. Defective units, including those damaged due to shipping or handling, must be reported immediately to DOE. The Department will authorize testing of an additional unit on a case-by-case basis.

(6) *Testing at manufacturer's option.* (i) If the Department determines a basic model to be in noncompliance with the applicable energy performance standard at the conclusion of its initial enforcement sampling plan testing, the manufacturer may request that the Department conduct additional testing of the basic model. Additional testing under this paragraph must be in accordance with the applicable test procedure, and for metal halide lamp ballasts, the applicable provisions in Appendix B to Subpart T of Part 431.

(ii) All units tested under this paragraph shall be selected and tested in accordance with paragraphs (a)(1)(v), (a)(2), (a)(4), and (a)(5) of this section.

(iii) The manufacturer shall bear the cost of all testing under this paragraph.

(iv) The Department will advise the manufacturer of the method for selecting the additional units for testing, the date and time at which testing is to begin, the date by which testing is scheduled to be completed, and the facility at which the testing will occur.

(v) The manufacturer shall cease distribution of the basic model tested under the provisions of this paragraph from the time the manufacturer elects to exercise the option provided in this paragraph until the basic model is determined to be in compliance. The Department may seek civil penalties for all units distributed during such period.

(vi) If the additional testing results in a determination of compliance, the Department will issue a notice of allowance to resume distribution.

(b) *Cessation of distribution of a basic model of commercial equipment other than electric motors.* (1) In the event the Department determines, in accordance with enforcement provisions set forth in this subpart, that a model of covered equipment is noncompliant, or if a manufacturer or private labeler determines one of its models to be in noncompliance, the manufacturer or private labeler shall:

(i) Immediately cease distribution in commerce of all units of the basic model in question;

(ii) Give immediate written notification of the determination of noncompliance to all persons to whom the manufacturer has distributed units of the basic model manufactured since the date of the last determination of compliance; and

(iii) If requested by the Secretary, provide DOE, within 30 days of the request, records, reports and other documentation pertaining to the acquisition, ordering, storage, shipment, or sale of a basic model determined to be in noncompliance.

(2) The manufacturer may modify the noncompliant basic model in such manner as to make it comply with the applicable performance standard. The manufacturer or private labeler must treat such a modified basic model as a new basic model and certify it in accordance with the provisions of this subpart. In addition to satisfying all requirements of this subpart, the manufacturer must also maintain records that demonstrate that modifications have been made to all units of the new basic model before its distribution in commerce.

(3) If a manufacturer or private labeler has a basic model that is not properly certified in accordance with the requirements of this subpart, the Secretary may seek, among other remedies, injunctive action to prohibit distribution in commerce of the basic model.

Appendix A to Subpart T of Part 431—Compliance Statement for Certain Commercial Equipment

Product: _____

Manufacturer's or Private Labeler's Name and Address:

_____

_____

[Company name] (''the company'') submits this Compliance Statement under 10 CFR Part 431 (Energy Efficiency Program for Certain Commercial and Industrial Equipment) and Part A–1 of the Energy Policy and Conservation Act (Pub. L. 94–163), and amendments thereto. I am signing this on behalf of and as a responsible official of the company. All basic models of commercial or industrial equipment subject to energy conservation standards specified in 10 CFR Part 431 that this company manufacturers comply with the applicable energy conservation standard(s). We have complied with the applicable testing requirements (prescribed in 10 CFR Part 431) in making this determination, and in determining the energy efficiency set forth in any accompanying Certification Report. All information in such Certification Report(s) and in this Compliance Statement is true, accurate, and complete. The company pledges that all this information in any future Compliance Statement(s) and Certification Report(s) will meet these standards, and that the company will comply with the energy conservation requirements in 10 CFR Part 431 with regard to any new basic model it distributes in the future. The company is aware of the penalties associated with violations of the Act and the regulations thereunder, and is also aware of the provisions contained in 18 U.S.C. 1001, which prohibits knowingly making false statements to the Federal Government.

Name of Company Official: _____

Signature of Company Official: _____

Title: _____

Firm or Organization: _____

Date: _____

Name of Person to Contact for Further Information:

_____

Address: _____

_____

Telephone Number: _____

Facsimile Number: _____

Third-Party Representation (if applicable)

For a certification reports prepared and submitted by a third-party organization under the provisions of 10 CFR Part 431, the company official who authorized said third-party representation is:

Name: _____

Title: _____

Address: _____

_____

Telephone Number: _____

Facsimile Number: _____

The third-party organization authorized to act as representative:

_____

Third-Party Organization: _____

Address: _____

_____

Telephone Number: _____

Facsimile Number: _____

Submit by Certified Mail to: U.S. Department of Energy, Building Technologies Program, Mailstop EE–2J, 1000 Independence Avenue, SW., Washington, DC 20585–0121.

Appendix B to Subpart T to Part 431—Certification Report for Certain Commercial Equipment

All information reported in this Certification Report(s) is true, accurate, and complete. The company is aware of the penalties associated with violations of the Act, the regulations thereunder, and is also aware of the provisions contained in 18 U.S.C. 1001, which prohibits knowingly making false statements to the Federal Government.

Name of Company Official or Third-Party Representative:

_____

Signature of Company Official or Third-Party Representative:

_____

Title: _____

Date: _____

Equipment Type: _____

Manufacturer: _____

Private Labeler (if applicable): _____

Name of Person to Contact for Further Information:

_____

Address: _____

_____

Telephone Number: _____
Facsimile Number: _____

For Existing, New, or Modified Models: [1]
For Discontinued Models: [2]

Submit by Certified Mail to: U.S. Department of Energy, Building Technologies Program, Mailstop EE–2J, 1000 Independence Avenue, SW., Washington, DC 20585–0121.

Appendix C to Subpart T of Part 431—Enforcement for Performance Standards; Compliance Determination Procedure for Certain Commercial Equipment

The Department will determine compliance as follows:

(a) After it has determined the sample size, the Department will measure the energy performance for each unit in accordance with the following table:

Sample size	Number of tests for each unit
4	1
3	1
2	2
1	4

(b) Compute the mean of the measured energy performance ($_{x1}$) for all tests as follows:

$$x_1 = \frac{1}{n_1}\left\{\sum_{i=1}^{n_1} x_i\right\} \qquad [1]$$

Where x_i is the measured energy efficiency or consumption from test i, and n_1 is the total number of tests.

(c) Compute the standard deviation (S_1) of the measured energy performance from the n_1 tests as follows:

$$S_1 = \sqrt{\frac{\sum_{i=1}^{n_1}\left(x_i - x_1\right)^2}{n_1 - 1}} \qquad [2]$$

(d) Compute the standard error (Sx_1) of the measured energy performance from the n_1 tests as follows:

$$S_{x_1} = \frac{S_1}{\sqrt{n_1}} \qquad [3]$$

(e)(1) For an energy efficiency standard, compute the lower control limit (LCL_1) according to:

$$LCL_1 = EPS - ts_{x_1} \qquad [4a]$$

or

$$LCL_1 = 97.5\ EPS \qquad [4b]$$

(whichever is greater)

(2) For an energy use standard, compute the upper control limit (UCL_1) according to:

$$UCL_1 = EPS + ts_{x_1} \qquad [5a]$$

or

$$UCL_1 = 1.025\ EPS \qquad [5b]$$

(whichever is less)

Where EPS is the energy performance standard, and t is a statistic based on a 99 percent, one-sided confidence limit and a sample size of n_1.

(f)(1) Compare the sample mean to the control limit. The basic model is in compliance and testing is at an end if, for an energy efficiency standard, the sample mean is equal to or greater than the lower control limit or, for an energy consumption standard, the sample mean is equal to or less than the upper control limit. If, for an energy efficiency standard, the sample mean is less than the lower control limit or, for an energy consumption standard, the sample mean is greater than the upper control limit, compliance has not been demonstrated. Unless the manufacturer requests manufacturer-option testing and provides the additional units for such testing, the basic model is in noncompliance and the testing is at an end.

(2) If the manufacturer does request additional testing, and provides the necessary additional units, DOE will test each unit the same number of times it tested previous units. DOE will then compute a combined sample mean, standard deviation, and standard error as described above. (The ''combined sample'' refers to the units DOE initially tested plus the additional units DOE has tested at the manufacturer's request.) DOE will determine compliance or noncompliance from the mean and the new lower or upper control limit of the combined sample. If, for an energy efficiency standard, the combined sample mean is equal to or greater than the new lower control limit or, for an energy consumption standard, the sample mean is equal to or less than the upper control limit, the basic model is in compliance, and testing is at an end. If the combined sample mean does not satisfy one of these two conditions, the basic model is in noncompliance.

[FR Doc. E9–15881 Filed 7–9–09; 8:45 am]

BILLING CODE 6450–01–P

[1] Provide specific equipment information including, for each basic model, the product class, the manufacturer's model number(s), and the other information required in 431.371(a)(6)(i).

[2] Provide manufacturer's model number(s).

DEPARTMENT OF LABOR

Occupational Safety and Health Administration

29 CFR Part 1956

[Docket No. OSHA–2009–0010]

RIN 1218–AC44

Illinois State Plan for Public Employees Only; Notice of Submission; Proposal To Grant Initial State Plan Approval; Request for Public Comment and Opportunity To Request Public Hearing

AGENCY: Occupational Safety and Health Administration, Department of Labor (OSHA).

ACTION: Proposed rule; request for written comments; notice of opportunity to request informal public hearing.

SUMMARY: This document gives notice of the submission by the Illinois Department of Labor of a developmental State Plan for occupational safety and health, applicable only to public sector employment (employees of the State and its political subdivisions), for determination of initial approval under section 18 of the Occupational Safety and Health Act of 1970 (the ''Act''). OSHA is seeking written public comment on whether or not initial State Plan approval should be granted and offers an opportunity to interested persons to request an informal public hearing on the question of initial State Plan approval.

Approval of the Illinois Public Employee Only State Plan will be contingent upon a determination that the Plan meets, or will meet within three years, OSHA's Plan approval criteria and the availability of funding as contained in the Department of Labor's Fiscal Year 2009 budget.

DATES: Written comments and requests for a hearing must be submitted (postmarked, sent or received) by August 10, 2009.

ADDRESSES: You may submit comments and requests for a hearing, identified by Docket No. OSHA–2009–0010, by any of the following methods:

Electronically: Comments and attachments and requests for a hearing may be submitted electronically at *http://www.regulations.gov,* which is the Federal eRulemaking Portal. Follow the instructions for submitting comments.

Facsimile: If your comments, including attachments, and requests for a hearing do not exceed 10 pages, you may fax them to the OSHA Docket