

CALIFORNIA ENERGY COMMISSION1516 Ninth Street
Sacramento, California 95814Main website: www.energy.ca.gov**NOTICE OF PROPOSED ACTION****PROPOSED AMENDMENTS TO APPLIANCE EFFICIENCY REGULATIONS****California Code of Regulations,
Title 20, Sections 1601 Through 1608****CALIFORNIA ENERGY COMMISSION****Docket Number 08-AAER-1A****August 29, 2008****INTRODUCTION**

The California Energy Commission (Energy Commission) proposes to amend its Appliance Efficiency Regulations. The purpose of this rulemaking is to carry out the mandates established in Assembly Bill 1109 (Huffman, Chapter 534, Statutes of 2007) (AB 1109), to set new efficiency standards for general purpose lighting by December 31, 2008. It is the Energy Commission's intent in this rulemaking to adopt accelerated effective dates for the federal Tier I and Tier II lighting efficiency standards established in the Federal Energy Independence and Security Act of 2007 (EISA 2007, as codified in 42 U.S.C. beginning at section 6291) and to adopt efficiency standards for portable lighting luminaires that will increase the energy efficiency of the luminaires. The proposed standards will have a beginning effective date of January 1, 2011 for the federal Tier I standards for general service incandescent lamps, and an effective date of January 1, 2018 for standards related to the expected Tier II federal high efficacy general service lamp standards. The proposed standards for portable luminaires will have an effective date of January 1, 2010. In a parallel and separate rulemaking (Docket 08-AAER-1B) the Energy Commission intends to adopt lighting efficiency standards for high intensity discharge metal halide luminaires as part of the AB 1109 mandate to set new efficiency standards for general purpose lighting by December 31, 2008.

The Energy Commission has prepared this Notice of Proposed Action (NOPA) and an Initial Statement of Reasons (ISOR) regarding the need for the proposed amendments. The Energy Commission has also published the Express Terms (45-Day Language) of the proposed amendment language. These documents can be obtained from the contact persons designated below or from the Energy Commission website at [\[http://www.energy.ca.gov/appliances/index.html\]](http://www.energy.ca.gov/appliances/index.html).

PUBLIC HEARING

The Energy Commission's Energy Efficiency Committee (Committee) will hold a public hearing on the following date to receive public comment on the Express Terms:

WEDNESDAY, SEPTEMBER 17, 2008

9:00 a.m.

California Energy Commission

Hearing Room A

1516 Ninth Street

Sacramento, California

(Wheelchair accessible)

Audio for the September 17, 2008, Committee hearing will be broadcast over the Internet. Details regarding the Energy Commission's webcast can be found at [\[www.energy.ca.gov/webcast\]](http://www.energy.ca.gov/webcast).

At this hearing any person may present statements or arguments relevant to the proposed action. Interested persons may also submit written comments. If possible, please provide written comments to be considered at the Committee hearing by **September 15, 2008**. The Energy Commission appreciates receiving written comments at the earliest possible date.

PROPOSED ADOPTION DATE

The Energy Commission will hold a public hearing for consideration and possible adoption of the 45-Day Language Express Terms on the following date unless the Energy Commission decides to modify the Express Terms through the issuance of 15-day language.

WEDNESDAY, OCTOBER 22, 2008

10:00 a.m.

California Energy Commission

Hearing Room A

1516 Ninth Street

Sacramento, California

(Wheelchair accessible)

Audio for the October 22, 2008, adoption hearing will be broadcast over the internet.

If you have a disability and require assistance to participate in these hearings, please contact Lou Quiroz at (916) 654-5146 at least 5 days in advance.

At the hearing, any person may present written or oral comments on the proposed amendments. Interested parties may also submit written comments. If possible, please provide written comments to be considered at the adoption hearing by

October 21, 2008. The Energy Commission appreciates receiving written comments at the earliest possible date.

PUBLIC COMMENT PERIOD AND WRITTEN COMMENTS

The public comment period for this NOPA will be from **August 29, 2008**, through **October 13, 2008**. Any interested person may submit written comments on the proposed amendments. Written comments will still be accepted at the public Committee hearing and Energy Commission adoption hearing if they are received by 10:00 a.m. on **October 22, 2008**. Written comments shall be e-mailed to [Docket@energy.state.ca.us], mailed or delivered to the following address (e-mailing is preferred):

California Energy Commission
Docket No. 08-AAER-1A
Docket Unit
1516 Ninth Street, Mail Station 4
Sacramento, California 95814-5504

All written comments must specify **Docket No. 08-AAER-1A** on the document. When comments are e-mailed on behalf of an organization, the comments should be a scanned copy of the original on the organization's letterhead and include a signature of an authorized representative.

AUTHORITY AND REFERENCE

The Energy Commission proposes to adopt the amendments under the authority of Public Resources Code sections 25213, 25218(e), 25402(c)(1) and 25402.5.4. The proposed amendments implement, interpret, and make specific Public Resources Code sections 25402(c)(1).

INFORMATIVE DIGEST/POLICY STATEMENT OVERVIEW

Existing law (Public Resources Code section 25402(c)(1)) requires the Energy Commission to adopt regulations that prescribe minimum efficiency levels for appliances. The Energy Commission first adopted appliance efficiency regulations in 1976 and has periodically revised them since then. The current regulations include provisions on testing of appliances to determine their efficiency, reporting of data by manufacturers to the Energy Commission, standards establishing mandatory efficiency levels, and compliance and enforcement procedures, as well as general provisions on the scope of the regulations and definitions.

In addition, the California Lighting Efficiency and Toxics Reduction Act of 2007, added by AB 1109 and codified in Public Resources Code section 25402.5.4, found energy consumption for lighting accounts for nearly 20 percent of the state's electricity demand. The bill also declares that energy efficiencies of existing lighting technologies vary

significantly, and that current light bulb purchases are predominately for less efficient incandescent bulbs.

To address these issues, AB 1109 requires that the Energy Commission, on or before December 31, 2008, adopt minimum energy efficiency standards for all general purpose lights on a schedule specified in the regulations, "The regulations, in combination with other programs and activities affecting lighting use in the state, shall be structured to reduce average statewide electrical energy consumption by not less than 50 percent from the 2007 levels for indoor residential lighting and by not less than 25 percent from the 2007 levels for indoor commercial and outdoor lighting, by 2018."

The Energy Commission is proposing to adopt the lighting efficiency standards for general service lighting, as provided by recently enacted federal law, and new efficiency standards for portable luminaires.

Early Adoption of Federal Efficiency Standards for General Service Lamps

In the rulemaking proceeding that is the subject of this NOPA, the Energy Commission is proposing to amend the Appliance Efficiency Regulations to adopt accelerated effective dates for the federal lighting efficiency standards as established by the Federal Energy Independence and Security Act of 2007 (EISA 2007 and codified in 42 U.S.C. beginning at section 6291). 42 U.S.C. section 6295 allows California to set earlier effective dates than what was established in the federal law. (42 U.S.C. §§ 6295(i)(6)(A)(vi), and 6297(b)(1)(B)(ii)). The Energy Commission proposes to: (1) move up the federal effective dates of January 1, 2012 through January 1, 2014, for the federal general service incandescent lamps (Tier I) standards to January 1, 2011 through January 1, 2013, for California, and (2) adopt Tier II standards for general service lamps effective January 1, 2018, for California, two years earlier than expected federal Tier II standards.

The Energy Commission has found that proposed standards that adopt early effective dates for the federal efficiency standards are achievable with available new lamp technologies at a reasonable cost to consumers. The Energy Commission has also found that compact fluorescent lamps (CFL) already exist in the market to meet the proposed efficiency standards under this rule. Further, the Energy Commission has found that there will be no additional cost to consumers because currently available CFLs are compliant with both the federal Tier I and expected Tier II efficiency standards. The cost benefit analysis shows that the proposed lighting standards are cost effective and would result in significant energy savings.

Standards for Portable Luminaires

The Energy Commission also intends to adopt efficiency standards for portable lighting luminaires that will increase the energy efficiency of the luminaires. Portable luminaires include plug-in table and floor lamps with varying lamp/socket configurations. Most portable lighting fixtures are designed to accept lamps that are federally regulated.

The proposed standards will require these luminaires, after January 1, 2010, to be equipped with one of the following alternatives: (1) a dedicated fluorescent lamp pin-based socket connected to a high frequency electronic ballast with specified efficiency requirements; (2) a GU-24 line-voltage socket that is not rated for use with an incandescent lamp; (3) a light emitting diode (LED) luminaire or LED light engine with integral heat sink with specified efficiency, (4) a dimmer control or high-low control with a maximum rating for single-ended, non-screw based halogen lamp sockets, or (5) an appropriate number of co-packaged specified compact fluorescent lamp (CFL) or other high efficacy lamps that can be screwed in the luminaire.

The Energy Commission has found that the compliance options provided by the proposed regulation save similar amounts of energy, are equally technically feasible and offer flexibility as requested by the lighting industry. The cost benefit analysis shows that the proposed lighting standards are cost effective and would result in significant energy savings. The cost benefit analysis assumed a most likely compliance option choice of co-packaging of portable luminaires with CFLs or other high efficacy lamps (alternative #5).

The Energy Commission has found that by adopting the federal Tier I and expected Tier II standards with effective dates earlier than that established by federal law and efficiency standards for portable lighting luminaires will allow California to maximize energy savings from these lamps in order to meet the AB 1109 lighting energy reduction requirements for indoor residential and indoor commercial general purpose lighting.

LIST OF DOCUMENTS INCORPORATED BY REFERENCE

ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA (IESNA)

IESNA LM-16-1999;	IES Practical Guide to Colorimetry of Light Sources
IESNA LM-79-08;	Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

UNDERWRITERS LABS (UL)

UL-153	Standards for Portable Luminaires
UL 588	Standard for Seasonal and Holiday Decorative Products
UL 1598	Standards for Luminaires

FEDERAL

47 CFR Part 15/18	Federal Communications Commission: Non-consumer Emission Limits
U. S. EPA Energy Star	Program Requirements and Criteria for CFLs – Version 4.0 March 7, 2008.

CALIFORNIA

2008 Building Efficiency Standards, California Joint Appendix, JA8	Testing of Light Emitting Diode Light Sources
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INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)

IEEE C.62.41-1991

Recommended Practices on Surge Voltages in Low-voltage AC Power Circuits

ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA (IESNA)

IESNA LM-79-08

Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

INTERNATIONAL COMMISSION ON ILLUMINATION (CIE)

CIE Publication 13.3 1995

Method of Measuring and Specifying Colour Rendering Properties of Light Sources

OPTICAL SOCIETY OF AMERICA (OSA)

Journal of Optical Society of America, Volume 58 (1986)

FEDERAL LAW

The proposed amendments do not conflict with federal law. There are extensive federal appliance efficiency regulations adopted by the U.S. Department of Energy that preempt states from adopting similar regulations. However, federal law has provided California with the authority to adopt the federal Tier I and expected Tier II lighting standards at earlier effective dates (42 U.S.C. sections 6295(i)(6)(A)(vi), and 6297(b)(1)(B)(ii)), and there are no federal standards for portable lighting luminaires resulting in federal preemption. The proposed amendments are not mandated by federal law.

OTHER STATUTORY REQUIREMENTS

California law requires that the Energy Commission's Appliance Efficiency Regulations (1) apply to appliances that use a significant amount of energy on a statewide basis, (2) be based on feasible and attainable efficiencies or feasible improved efficiencies, and (3) be cost-effective based on a reasonable use pattern (i.e., not result in added total costs to the consumer, considering both the increased costs of the efficiency improvement and the reduced utility bill costs resulting from the improved efficiency, over the design life of the appliance). (Pub. Resources Code section 25402(c)(1).)

California Lighting Efficiency and Toxics Reduction Act of 2007 (AB 1109) requires: "On or before December 31, 2008, the Energy Commission shall adopt minimum energy efficiency standards for all general purpose lights on a schedule specified in the regulations. The regulations, in combination with other programs and activities affecting lighting use in the state, shall be structured to reduce average statewide electrical energy consumption by not less than 50 percent from the 2007 levels for indoor residential lighting and by not less than 25 percent from the 2007 levels for indoor commercial and outdoor lighting, by 2018." (Pub. Resources Code section 25402.5.4)

LOCAL MANDATE

The proposed amendments will not impose a mandate on state or local agencies or districts.

ECONOMIC AND FISCAL IMPACTS

The Energy Commission has made the following initial determinations.

FISCAL IMPACT

Costs Requiring Reimbursement. The proposed amendments will not impose on local agencies or school districts any costs for which Government Code sections 17500 - 17630 require reimbursement.

Other Non-Discretionary Costs or Savings for Local Agencies. Local agencies that purchase lighting appliances subject to efficiency standards sometimes have to pay increased purchase costs for those appliances. However, those costs are always recovered by reductions in electricity bills.

Costs or Savings for State Agencies. State agencies that purchase lighting appliances subject to efficiency standards sometimes have to pay increased purchase costs for those appliances. However, those costs are always recovered by reductions in electricity bills.

Cost or Savings in Federal Funding to the State. The proposed amendments will not result in any costs or savings in federal funding to the state.

EFFECT ON HOUSING COSTS

There will be no significant effect on housing costs. The costs of owning and operating a home will decrease slightly as a result of lower electricity costs. Homeowners that purchase appliances subject to the proposed efficiency standards will have to pay increased purchase costs for those appliances; however, those costs will be more than made up by reductions in electricity bills.

SIGNIFICANT STATEWIDE ADVERSE ECONOMIC IMPACT DIRECTLY AFFECTING BUSINESS, INCLUDING THE ABILITY OF CALIFORNIA BUSINESSES TO COMPETE WITH BUSINESSES IN OTHER STATES

The Energy Commission has made an initial determination that there will be no significant (or insignificant) statewide adverse economic, fiscal, or environmental impact directly affecting businesses, including small businesses, as a result of the proposed amendments, including the ability of California businesses to compete with businesses in other states.

Nevertheless, the Energy Commission invites interested persons to submit alternative proposals to lessen any adverse economic impact on business that might exist, which may include the following considerations:

- (i) Establishment of differing compliance or reporting requirements, or timetables that take into account the resources available to businesses.
- (ii) Consolidation or simplification of compliance and reporting requirements for businesses.
- (iii) Use of performance standards rather than prescriptive standards.
- (iv) Exemption or partial exemption from the regulatory requirements for businesses.

IMPACTS ON THE CREATION OR ELIMINATION OF JOBS WITHIN THE STATE, THE CREATION OF NEW BUSINESSES OR THE ELIMINATION OF EXISTING BUSINESSES, OR THE EXPANSION OF BUSINESSES IN CALIFORNIA

The proposed amendments will have no impact on the creation or elimination of jobs within the state, the creation of new businesses or the elimination of existing businesses, or the expansion of businesses in California.

COST IMPACTS ON REPRESENTATIVE PERSON OR BUSINESS

Businesses and individuals that purchase lighting appliances subject to efficiency standards sometimes have to pay increased purchase costs for those appliances. However, those costs are always more than made up by reductions in electricity bills. The Energy Commission is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

BUSINESS REPORTS

The proposed amendments to the Appliance Efficiency Regulations would require mandatory data submittal of energy efficiency data (i.e., Business Reports) from manufacturers of general service lamps and portable luminaires. There are few manufacturers of the appliances in California that would be required to report under the proposed regulations. The Energy Commission estimates that the annual reporting cost would be \$400.00 per manufacturer.

It is necessary for the health, safety, or welfare of the people of the state that the proposed regulations apply to business for two basic reasons. First, the Legislature has required the Energy Commission to adopt efficiency standards, and the submittal of data is necessary to determine compliance with the standards. Second, the data required to be submitted will be used to increase consumer awareness, to complement

utility efficiency programs, and for research, all of which will foster additional efficiency, which, in turn, will lead to economic, energy reliability, and environmental benefits.

SMALL BUSINESS

Like all businesses, small businesses benefit from appliance regulations. Small businesses that purchase lighting appliances subject to efficiency standards sometimes have to pay increased purchase costs for those appliances. However, those costs are always more than made up by reductions in electricity bills.

ALTERNATIVES

Before it adopts the proposed amendments, the Energy Commission must determine that no reasonable alternative it considered (or that has otherwise been identified and brought to its attention) would be more effective in carrying out the purpose for which the amendments are proposed, or as effective as and less burdensome to affected private persons than the proposed amendments. To date, the Energy Commission has found no alternatives to the proposed action that would be more effective, or as effective and less burdensome.

DESIGNATED CONTACT PERSONS

Please contact the following person, preferably by e-mail, for general information about the proceeding or to obtain any document relevant to the proceeding, including the Express Terms, the Initial Statement of Reasons, the Form 399, and any other document in the rulemaking file:

Linda Franklin
California Energy Commission
1516 Ninth Street, Mail Station 25
Sacramento, California 95814-5512
Telephone: 916-654-4064 Fax: 916-654-4304
E-mail: [lfrankli@energy.state.ca.us]

Please contact the following person, preferably by e-mail, for substantive questions:

Harinder Singh
California Energy Commission
1516 Ninth Street, Mail Station 25
Sacramento, California 95814-5512
Telephone: 916-654-4091
Fax: 916-654-4304
E-mail: [hsingh@energy.state.ca.us]

The backup contact person for substantive questions is:

Melinda Merritt
California Energy Commission
1516 Ninth Street, Mail Station 25
Sacramento, California 95814-5512
Telephone: 916-654-4536
Fax: 916-654-4304
E-mail: [mmerritt@energy.state.ca.us]

Mr. Singh and Ms. Merritt also can assist in obtaining documents and in answering general questions.

PUBLIC ADVISER

The Energy Commission has a Public Adviser whose function it is to assist the public in participating in Energy Commission proceedings. Please contact her if you have general questions about how to function effectively in the rulemaking:

Elena Miller, Public Adviser
California Energy Commission
1516 Ninth Street, Mail Station 12
Sacramento, California 95814-5512
Telephone: 916-654-4489
Fax: 916-654-4493
E-mail: [pao@energy.state.ca.us]

NEWS MEDIA INQUIRIES

News media inquiries should be directed to the Media and Communications Office at (916) 654-4989, or by e-mail at [mediaoffice@energy.state.ca.us].

AVAILABILITY OF THE TEXT OF THE PROPOSED AMENDMENTS (EXPRESS TERMS), THE INITIAL STATEMENT OF REASONS (ISOR), AND THE INFORMATION UPON WHICH THE PROPOSAL IS BASED (RULEMAKING FILE)

The first action to take to obtain documents in this rulemaking proceeding is to visit the Energy Commission's appliance efficiency website at [www.energy.ca.gov/appliances].

The website will have all of the documents prepared by the Energy Commission, including the Express Terms of the proposed amendments (written in plain English and set forth in a format that indicates both the existing text and the proposed text), the Initial Statement of Reasons, and all documents relied upon by the Commission, as well as most of the other documents in the rulemaking file. The Express Terms and the Initial Statement of Reasons are also available at no cost from the contact person, Linda Franklin (see above).

The Energy Commission's Docket Office has available all of the documents in the rulemaking file; for copies, please contact:

Docket Office
California Energy Commission
1516 Ninth Street, MS 4
Sacramento, California 95814-5504
916-654-5076

AVAILABILITY OF MODIFIED AMENDMENTS (15-DAY LANGUAGE)

At the **October 22, 2008** adoption hearing, the Energy Commission may adopt the proposed amendments substantially as described in this NOPA. If modifications are made, and they are sufficiently related to the originally-proposed amendments, the full modified text with changes clearly indicated will be made available to the public at least 15 days before the Energy Commission adopts the amendments. A notice of the availability of any such text will be placed on the Energy Commission's website and will be mailed to all persons to whom this notice is being mailed, who submitted written or oral comments at any hearing, who submitted written comments during the public comment period, or who requested to receive such modifications. In addition, copies may be requested from the contact person named above and from the Docket Office. The Energy Commission will accept written comments on any such modified text for at least 15 days after the text is made available to the public. Adoption of the 15-Day language will be considered at a public hearing scheduled in the notice of availability.

FINAL STATEMENT OF REASONS

The Energy Commission will prepare a Final Statement of Reasons on the amendments, responding to all relevant comments made during the proceeding. The Final Statement of Reasons will be available from the contact person named above and from the Docket Office, and will be posted on the Energy Commission's website.

INTERNET ACCESS

Documents prepared by the Energy Commission for this rulemaking, including this NOPA, the Express Terms, the ISOR, and most other documents in the rulemaking file, will be posted on the Energy Commission's website, [<http://www.energy.ca.gov/appliances>].

Note: The California Energy Commission's formal name is the State Energy Resources Conservation and Development Commission.