

## DOCKETED

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**CALIFORNIA ENERGY COMMISSION**1516 Ninth Street  
Sacramento, California 95814Main website: [www.energy.ca.gov](http://www.energy.ca.gov)

## Notice of Availability of 15-Day Language

Computers, Computer Monitors, and Signage Displays  
Appliance Efficiency Rulemaking

California Energy Commission  
Docket No. 16-AAER-02

### INTRODUCTION

On September 9, 2016, the California Energy Commission published a Notice of Proposed Action proposing modifications to the Energy Commission's appliance efficiency regulations to include energy efficiency standards for computers and computer monitors, to clarify that signage displays are subject to the television efficiency standards, and to clarify that certain appliances are not included in the battery charger systems efficiency standard. After reviewing comments received during the 45-day comment period and during the October 10, 2016, public meeting, the Commission has determined that changes to the proposed regulations are necessary. The Commission invites the public to review and comment on these changes. The proposed revisions are summarized below and included in this notice. Additionally, the proposed revisions and other supporting documents are available on the Energy Commission website at: <http://www.energy.ca.gov/appliances/2016-AAER-02/rulemaking/>.

The information upon which the proposed regulations are based is at the website listed above. The public may also request copies of the proposed regulations by contacting Angelica Romo-Ramos at [Angelica.Romo@energy.ca.gov](mailto:Angelica.Romo@energy.ca.gov) or (916) 654-4147.

The entire rulemaking file is available for viewing (and copying) throughout the rulemaking process at the California Energy Commission, 1516 9<sup>th</sup> Street, Sacramento, California, 95814.

### BACKGROUND

The Energy Commission is charged with reducing the inefficient consumption of energy and water by prescribing efficiency standards and other cost-effective measures for appliances that require a significant amount of energy and water to operate on a statewide basis. Such standards must be technologically feasible and attainable and must not result in any added total cost to the consumer over the designed life of the appliance.

In determining cost-effectiveness, the Energy Commission must consider the value of the water or energy saved, the effect on product efficacy for the consumer, and the life-cycle cost to the consumer of complying with the standard. The Commission also must consider other relevant factors including, but not limited to, the effect on housing costs, the total statewide costs and benefits of the standard over the lifetime of the standard, the economic effect on California businesses, and alternative approaches and the associated costs. Taking all of these factors into account, the Commission has determined that efficiency standards for computers and computer monitors should be added to the existing regulations.

The Appliance Efficiency Regulations (Title 20, Sections 1601-1609 of the California Code of Regulations) contain definitions, test procedures, labeling requirements, and efficiency standards for state- and federally-regulated appliances. Appliance manufacturers are required to certify to the Energy Commission that their products meet all applicable state and federal regulations pertaining to efficiency before their products can be included in the Commission's database of approved appliances to be sold or offered for sale within California.

## **PROPOSED 15-DAY LANGUAGE**

The 15-Day Language changes identified in this notice include:

Changes to computers:

- Modifying the definitions and language in the text for clarity, grammar, and typographical errors. The purpose of these changes is to increase understanding of the regulatory requirements. The changes are not intended to expand or narrow the scope or effect of the proposed efficiency standards.
- Adding a new definition for the first discrete GPU to clarify which discrete GPU is eligible to receive the specific adder for the first discrete graphics.
- Adding a new mode weighting, "remote wake," in the computers test procedure. This is in response to comments that the "full capability" mode weighting did not apply to many operating systems, and recommending that "remote wake" mode weighting be used instead.
- Modifying the interface scores in Table V-1:
  - Adding a USB port category below 30 watts of power. The purpose of this change is to reduce the gap for expandability score of USB ports with respect to their power requirements.
  - Dividing Thunderbolt 3.0 or higher expandability score into multiple categories, similar to USB ports. Because a Thunderbolt port has functionality similar to a USB port, this change provides consistency between their expandability scores.
  - Modifying some language in the text for clarity.

- Adding a new document incorporated by reference, ECMA-383 (2010), to reference the computation of the frame buffer bandwidth for discrete graphics.
- Exempting computers that cannot have an operating system from requirements associated with operating systems.
- Modifying the effective dates for integrated displays in Table V-8 to align with the effective dates for computers.
- Modifying the system memory bandwidth requirement for the high bandwidth system memory adder to ensure that the adder value is positive over the entire range of covered values.
- Modifying the small volume manufacturer exemption. This change is in response to comments received on the limit for the number of base units in order for the exemption to apply.
- Modifying Table X to clarify the text and add data fields. This change is made to ensure the data that is needed to determine compliance and the data that is required in section 1604 are collected.

#### Changes to monitors:

- Modifying definitions and language throughout the text for clarity, grammar, and typographical errors. The purpose of these changes is to increase understanding of the regulatory requirements. The changes are not intended to expand or narrow the scope or effect of the proposed efficiency standards.
- Deleting the January 1, 2011, requirements for signage displays, as they are superseded by the January 1, 2013, requirements in existing regulations.
- Providing for computer monitor allowances in Table V-5 to be added together for computer monitors that have multiple characteristics. The purpose of this change is to adjust the proposed standard to ensure that an adequate adder allowance is available to a computer monitor that provides more than one feature.
- Reducing the Tier 2 allowance for gaming monitors with incremental hardware-based assistance. The purpose of this change is to drive further technically feasible and cost effective improvements in these types of monitors.
- Modifying the certification requirements for medical computer monitors. Medical computer monitors are not required to meet the proposed standard or testing requirement. The purpose of the change is to make sure manufacturers certify medical computer monitor models to the Energy Commission for the purposes of data collection to monitor the market growth.

- Adding data fields to Table X to ensure that data necessary to determine compliance is being collected.

## **DOCUMENTS INCORPORATED BY REFERENCE**

The Energy Commission has added a document incorporated by reference to the “frame buffer bandwidth” definition in Section 1602(v). The new document incorporated by reference is Ecma International Standard ECMA-383 (December 2010), published in December 2010 by the European Computer Manufacturer’s Association and is available for free at ECMA International Rue du Rhone 114 – CH – 1204 Geneva, by phone at +41 22 849 6000, or by fax at +41 22 849 6001 and on their website at [http://www.ecmainternational.org/publications/standards/Categories\\_to\\_be\\_used\\_with\\_Ecma-383.htm](http://www.ecmainternational.org/publications/standards/Categories_to_be_used_with_Ecma-383.htm) and <http://www.ecma-international.org/publications/files/ECMA-ST/ECMA-383.pdf>. This document will also be available for review in person at the Energy Commission. For these reasons, the Energy Commission concludes that this document is reasonably available to the affected public in conformance with California Code of Regulations, Title 1, Section 20(c).

## **STATUS CONFERRED**

The changes to the original express terms also establish a status conferred situation for medical computer monitors that meet the definition of device pursuant to Section 210(h) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 321(h)) and are listed and approved as such by the United States Food and Drug Administration (FDA). Under our regulations, these devices are exempt from Section 1605.3(v)(4) and the testing procedures contained in Section 1604(v)(4), but will still be required to comply with the certification requirements in Section 1606 and the marking requirements contained in Section 1607. The FDA has expertise in designating devices as medical devices, and the Energy Commission has determined that it is reasonable to rely on their expertise to identify what devices should qualify for this exemption.

## **ADDITIONAL DOCUMENTS RELIED UPON**

The Energy Commission has relied upon the following technical, theoretical, or empirical studies, reports, or similar documents in drafting the 15-day language:

Various stakeholders. Integral stakeholder input received after 45-day comment period.

## **PUBLIC HEARING**

The Energy Commission will consider adopting the proposed regulations during its regularly scheduled business meeting on:

**Wednesday, December 14, 2016**

10:00 a.m.

California Energy Commission  
1516 Ninth Street  
Art Rosenfeld Hearing Room  
Sacramento, California  
(Wheelchair accessible)

Remote Access Available by Computer or Phone via WebEx™  
(See instructions below.)

Instructions for accessing Energy Commission hearings using either method can be found at <http://www.energy.ca.gov/webcast/index.html>. If you have a disability and require assistance to participate in these hearings, please contact Christina Edwards at [Christina.Edwards@energy.ca.gov](mailto:Christina.Edwards@energy.ca.gov) or (916) 657-3825 at least 5 days in advance.

## **PUBLIC COMMENT**

Any interested person may submit written comments on the proposed changes. The written comment period for the 15-Day Language will be from November 23, 2016, through 5:00 PM on December 13, 2016.

Please submit comments using the e-commenting feature on the Commission's 2016 Appliance Efficiency Rulemaking webpage <http://www.energy.ca.gov/appliances/2016-AAER-02/rulemaking/>. Click on "Submit e-comment." A full name, email address, comment title, and either a comment or an attached document (.doc, .docx, or .pdf format) is mandatory. After a challenge-response test used by the system to ensure that responses are generated by a human user and not a computer, click on the "Agree & Submit Your Comment" button to submit the comment to the Commission Dockets Unit.

Please note that written comments, attachments, and associated contact information included within the written comments and attachments (e.g., your address, phone, email) become part of the viewable public record.

You are encouraged to use the electronic filing system, described above, to submit comments. If you are unable to submit your comments electronically, a paper copy of your comments may be sent to:

California Energy Commission  
**Docket No. 16-AAER-02**  
Docket Unit  
1516 Ninth Street, MS-4

Sacramento, CA 95814-5504

Or email them to: [DOCKET@energy.ca.gov](mailto:DOCKET@energy.ca.gov)

The Energy Commission will also accept oral comments during the hearing on December 14, 2016. Comments may be limited to three minutes per speaker. All comments will become part of the public record of this proceeding.

## **PUBLIC ADVISER AND OTHER COMMISSION CONTACTS**

The Energy Commission's Public Adviser's Office is available to assist any person who wishes to participate in this proceeding. If you want information on how to participate in this proceeding, please contact the Public Adviser, Alana Mathews, at [PublicAdviser@energy.ca.gov](mailto:PublicAdviser@energy.ca.gov) or (916) 654-4489, or toll-free in California at (800) 822-6228.

News media inquiries should be directed to the Media and Public Communications Office at (916) 654-4989, or by email at [mediaoffice@energy.ca.gov](mailto:mediaoffice@energy.ca.gov).

If you have questions on the subject matter of this proceeding, please contact Harinder Singh at [Harinder.Singh@energy.ca.gov](mailto:Harinder.Singh@energy.ca.gov) or (916) 654-4091 for questions concerning monitors and signage displays or Soheila Pasha at [Soheila.Pasha@energy.ca.gov](mailto:Soheila.Pasha@energy.ca.gov) or (916) 657-1002 for computers. If you have legal questions about this proceeding, please contact Senior Attorney Lisa DeCarlo at [Lisa.Decarlo@energy.ca.gov](mailto:Lisa.Decarlo@energy.ca.gov) or (916) 654-5195.