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FINAL STATEMENT OF REASONS ADDENDUM

Computers, Computer Monitors, and Signage Displays Appliance Efficiency Rulemaking

California Energy Commission Docket Number 16-AAER-02 Notice File Number Z2016-0830-07

August 2017

The following changes are made to the Final Statement of Reasons:

- 1. On page 5, the following sentence is inserted after the first full paragraph: This document was made available for public inspection at the California Energy Commission building, 1516 Ninth Street, Sacramento, California 95814 during business hours from 9:00 a.m. to 5:00 p.m. beginning on November 23, 2016 through December 13, 2016. This document was also made available indefinitely on the Energy Commission's website starting on November 23, 2016.
- 2. Various non-substantive changes have been made to the express terms to correct grammatical errors, typographical errors, missing existing text, correcting punctuation, renumbering and underlying changes to reflect OAL guidance, and directions for where in the existing text the new text is located. Specifically, the following changes were made:

In Section 1602(v)

- Under "Computer monitor," added and struck out "and that is" before "not marketed for use as a television" to reflect existing language being removed.
- Under "Expandability score," added "(ES)" after the term to reflect the abbreviation used in Table V-7.
- Under "First discrete GPU," changed the capital D in discrete to lower case; removed errant double strikeout at beginning.
- Under "Gaming monitor," added a comma after "for example"; changed semicolon after "40Hz)" to a period and capitalized the t in the; removed "an" from before "incremental hardware based assistance."
- Under "Small volume manufacturer," added "under section 1606(k)" after "preceding the certification" to provide clarity on what "the certification" refers to; deleted comma after certification.
- Under "Very high performance monitor," changed capital M to lowercase m in "megapixels" under number 2.

In Section 1604(v)

- Under (2) and (3) corrected that referenced date to April 24, 2014 per DOE regulations; under (2) added a reference to signage displays to indicate that they must use this test method; and added the following language under (2) indicating that the federal test procedure was incorporated by reference as it regards signage displays: "The test method for signage displays manufactured on or after April 24, 2014, is 10 C.F.R. Section 430.23(h) (Appendix H to Subpart B of part 430) (January 1, 2014)."
- Under documents incorporated by reference, underlined "Number" and "Title" to reflect this is new language and place above "California Energy Commission Test Methods"; corrected address under "IEC Central Office" to match what is currently in the regulations; replaced "IEEE Standard for Wireless LANs" with the full title from the IEEE test procedure "IEEE Standard for Information technology--Telecommunications and information exchange between systems Local and metropolitan area networks--Specific requirements Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications"; corrected address for "Institute of Electrical and Electronics Engineers" to match what is currently in the regulations.

In Section 1605.3(v)

- Under (3)(D), underlined "(D)."
- Under (5)(B)(1), reformatted the numbering of "(i) and (ii)" to "a. and b."
- Under (7)(A), reformatted the numbering of "(1), (2), and (3)" to "1., 2., and 3."

In Section 1606

• Under Table X, Moved the title "Table X" to its own line above "Data Submittal Requirements"; removed "V" from the left-hand column since it is already contained in the existing regulations; added hyphen between "Energy" and "Efficient" for "Energy-Efficient Ethernet Capability."

In Section 1606(k).

- Under (1)(A), deleted comma after "certification."
- 3. On page 10 after the last paragraph, the following paragraphs are inserted:

Signage Displays

This rulemaking simply clarifies that signage displays were regulated with the adoption of the television standards in 2010. The definition of television adopted in the 2010 rulemaking is: "an analog or digital device designed primarily for the display and reception of a terrestrial, satellite, cable, Internet Protocol TV (IPTV), or other broadcast or recorded transmission of analog or digital video and audio signals. TVs include combination TVs, television monitors, component TVs, and any unit that is marketed to the consumer as a TV. 'Television (TV)' does

not include computer monitors." The bolded language describes the criteria that signage displays meet. The 2010 rulemaking intended to cover signage displays and included data regarding displays to justify that the regulations met the statutory requirement to be cost effective and technically feasible and the Commission specifically stated that displays were not exempt from the television regulations. (See *Final Statement of Reasons – Amendments Adopted Into Appliance Efficiency Regulations*. California Energy Commission. Docket 09-AAER-1C. July 2010, p. 74 ("Television Rulemaking FSOR".)

After the 2010 television rulemaking, the Commission became aware that some, but not all, signage display manufacturers were confused as to whether they were covered by the standard. Therefore, the Commission determined that adding clarity to the regulations was important to ensure these manufacturers complied. The definition for signage display in this rulemaking nests within the television definition, even though signage displays are defined as not being marketed for use as a television and the television definition includes being marketed as a television as one possible criteria for determining whether an appliance is a television. Under the television definition, any unit that is marketed to the consumer as a TV is included, but this is not the only criteria by which something can be considered a television under the definition. Thus, units that are not marketed as a TV would still be considered a television if they met any of the other criteria identified in the definition, including being "an analog or digital device designed primarily for the display and reception of ... broadcast or recorded transmission of analog or digital video and audio signals" as is the case with signage displays. A signage display, such as the screens showing arrivals and departures at the airport, is a digital device displaying digital video signals to passengers. Some of these signage displays have internal TV tuners; others do not. Both are covered, however, under the Commission's broad definition of television. Depending on how a particular user of a signage display (such as an airport) connects and configures the appliance, it may receive the image displayed via IPTV, broadcast, or recorded transmission. Any of these mechanisms for displaying digital video signals to passengers brings the appliance under the scope of the television standards and applicable regulations. This is also true for signage displays used in other settings. Therefore, the inclusion of signage displays in this regulation clarifies existing law and does not constitute establishing a new standard for a new product, necessitating a one year delay from adoption for the effective date.

The effect of this clarification will likely be minimal. In clarifying that signage displays are regulated as televisions under the television standards and test procedure, and in exempting professional signage displays from that scope, the Energy Commission does not expect any significant change in or effect on signage displays sold or offered for sale today. There are three aspects to compliance under the Appliance Efficiency Regulations: testing the appliance, certifying that the appliance meets the applicable efficiency standard, and meeting the efficiency standard itself. The clarification in these regulations would ensure that manufacturers understand the need to test, certify, and comply with the applicable standards, and that retailers know to look for product models in the appliance efficiency database before offering them for sale.

While the testing and certification requirements may be new to signage display manufacturers who were unaware they were required to comply and, therefore, were not already complying with

the standards, it is unlikely that the clarification will have a substantial effect on the actual signage displays being sold or offered for sale. As stated in the Final Statement of Reasons for the television efficiency standards (Television Rulemaking FSOR, pages 65-66, response to comments #73-75), several television technologies available at the time of that 2009 rulemaking already complied with the standards, including displays using light-emitting diode (LED) technology, liquid crystal display (LCD) technology, hot cathode fluorescent light (HCFL), and cold cathode fluorescent lamp (CCFL) technologies. Technologies that would not have met the efficiency standards included most plasma screen televisions and all cathode ray tube (CRT) televisions. Many signage displays were already meeting the Commission's Tier 2 standards at the time of the adoption of those standards in 2010 (see Television Rulemaking FSOR page 74, response to comments #238 and 239).

Today, most, if not all, signage displays are made using LED, LCD, and (decreasingly) CCFL technologies, so they would easily meet the television active-mode standards. As a result, the Energy Commission does not expect to see any major market disruption or shifts as a result of clarifying that signage displays are included as televisions under the Commission's appliance efficiency standards. The Energy Commission does expect to see more of these models certified in the appliance efficiency database, helping it to monitor the potential of these products for future efficiency standards. To the extent that signage displays were not or are not in compliance with the Commission's regulations, they would be subject to enforcement action by the Commission; any such action, however, would not result in a recall of any non-compliant products.