

July 29, 2013

**Comments for Panasonic Corporation of North America
2013 Rulemaking on Appliance Efficiency Regulations**

Order Instituting Rulemaking Proceedings

Phase 1: Consumer Electronics – Displays

Docket No. 12-AAER-2A

Email: docket@energy.ca.gov

California Energy Commission

**DOCKETED
12-AAER-2A**

TN 71724

JUL 29 2013

Panasonic Corporation of North America (hereafter referred to as Panasonic) is the North American business unit of Panasonic Corporation, a worldwide leader in the manufacture and sale of television and displays technologies. Our company continues to be actively engaged in advanced research and development to improve the energy efficiency of currently available products as well as future technologies, which will provide advanced features and performance to consumers.

Panasonic is pleased to offer comments on the Order Instituting Rulemaking (OIR); Phase 1: Consumer Electronics – Displays; Docket No. 12-AAER-2A. Our comments are primarily focused on the proposed scope of the regulations as presented during the May 29th 2013 California Energy Commission Staff Workshop on Displays.

Resources continue to be devoted on an international level by Panasonic to assist in the development of standards, which can provide realistic, accurate and reliable measurements of the power consumption of televisions and displays. Panasonic recognizes various display technologies utilize power differently in order to create the pictures and performance characteristics desired by consumers. Keeping these differences in mind, Panasonic shares in the goal of establishing universal test measurement procedures and standards, which are technology neutral and result in a realistic assessment of the power consumed by these different television and display models and technologies in a typical consumer environment.

Display Categories:

The Commission's May 29th, 2013 Staff Workshop on Displays presentation for the 2013 Appliance Efficiency Pre-Rulemaking exhibited the following Display Categories under initial consideration:

- Computer Monitors
- Digital Picture Frames
- Professional Signage (e.g. airport signage)
- Electronic Billboards

The majority of the information conveyed during the workshop dealt exclusively with computer monitors. Panasonic has no comment regarding the inclusion of computer monitors in the proposed scope.

During the discussion, one stakeholder stated that ENERGY STAR Displays versions 5 or 6 could be used as a framework, but not the actual power limits. Panasonic's main objection is the inclusion of the ENERGY STAR Displays V6.0 definition for Signage Displays:

Signage Display: An electronic device typically with a diagonal screen size greater than 12 inches and a pixel density less than or equal to 5,000 pixels/in². It is typically marketed as commercial signage for use in areas where it is intended to be viewed by multiple people in non-desk based environments, such as retail or department stores, restaurants, museums, hotels, outdoor venues, airports, conference rooms or classrooms.

The problem with using this definition is its direct overlap with the current CEC definition for "Television Monitor." CEC has already clarified the Television Monitor definition in a 2010 letter responding to questions from the Consumer Electronics Association (CEA). The response to Question 2 appears below:

Appliance Efficiency Rulemaking Televisions
Docket No. 09-AAER-1C
Log # 56065 03/29/2010
To: Consumer Electronics Association / D. Johnson
From: CEC / M. Jones
Subject: Response to CEA 3-29-10

Question 2. Would the following products be considered "Televisions?"

- a. A broadcast or post production monitor that shows video, but does not include a broadcast tuner?
- b. A monitor in an airport that shows television images (such as CNN Airport Network), but does not include a broadcast, cable, or satellite tuner?
- c. A display in a retail location or other public place that is intended to show information and does not include a tuner?

Answer: All products meeting the definition of a "Television (TV)" in section 1602(v)¹ are covered by the regulations. The definition includes a "Television Monitor," which is defined as a television without an internal tuner/receiver or playback device. Based on the limited information provided in the question,

¹ All references to section numbers are to Title 20 of the California Code of Regulations.

the examples given would meet the definition of a Television and be subject to the regulations.

It is clear that Professional Signage displays have been covered by the CEC Televisions regulation under the Television Monitor category. Therefore, Professional Signage displays should not also be covered in the proposed Displays regulation. Subjecting this product to the proposed Displays efficiency standard would constitute "double" regulation and would result in major disruption in the California display market.

Upon receipt of this clarification letter from the CEC on March 29, 2010, Panasonic complied by designing and registering our professional display products to adhere to the 2009 Appliance Efficiency Rulemaking, Phase I, Part C Docket No. 09-AAER-1C (Appliance Efficiency Rulemaking Televisions).

The CEC letter states; “The definition includes a “Television Monitor”, which is defined as a television without an internal tuner/receiver or playback device.” It subsequently notes that a “monitor in an airport...” would meet the definition of a Television and be subject to the regulations.

Further, the CEC letter instructs that “a display in a retail location or other public place that is intended to show information and does not include a tuner” would also be subject to the regulations.

Panasonic believes the OIR display categories of Professional Signage (e.g. airport signage) and Electronic Billboards are already regulated by the Appliance Efficiency Rulemaking for Televisions. Therefore, it would be unnecessary and burdensome to simultaneously subject these same products to the proposed OIR Displays. It would also likely be impossible for these products to simultaneously comply with both regulations due to expected differences between the current Televisions regulation and the proposed Displays regulation.

Also, it is important to consider there is literally no perceivable difference between a “Television Monitor” and a Display as defined. Neither product has an internal tuner/receiver, and both show video and audio signals.

Likewise, it is also nearly impossible to discern a meaningful difference between an Electronic Billboard and “a display in a retail location or other public place that is intended to show information and does not include a tuner,” which is already subject to the CEC Television regulations.

Panasonic believes the above points support our assertion that Professional Signage (e.g. airport signage) and Electronic Billboards should not be included in the proposed OIR Displays regulation.

Display Size:

The existing CEC Television regulation already includes Professional Signage and Electronic Billboards with a screen area not greater than 1,400 square inches. This corresponds to a 16:9 aspect ratio High Definition display with a screen diagonal of approximately 57.24 inches.

The market for Professional Signage and Electronic Billboards is dwarfed in comparison with the consumer television market. If the Professional Signage and Electronic Billboards sales volumes are further restricted to screen sizes above 1,400 square inches, there is even less need to regulate this very small market segment.

Although the sales volumes of Professional Signage and Electronic Billboards are quite small, the diversity of applications for these products is very large. Indoor versus Outdoor (Sunlight Readable) applications require vastly different display attributes such as contrast, brightness, and viewing angle. The outdoor applications might include public squares, sports stadiums, amusement parks, highway billboards, and emergency public notification. The indoor applications might include airports, retail

stores and shopping malls. Many of the indoor applications may also be brightly lit due to skylights and large windows requiring the same display characteristics as those used in outdoor venues.

Given this diverse array of applications and display characteristics, it would be extremely difficult if not impossible to develop a regulation that is realistic and achievable by the majority of these products. This is especially true in that various technologies may be uniquely suited for a specific application. An example might be a direct view LED display designed for large outdoor spaces. It would be unfair to apply a single regulation to all of these displays using a variety of very different current technologies as well as future displays using technologies not yet available in the market.

Any effort to develop a universal regulation encompassing all of these diverse display applications would certainly result in stifling innovation and limiting choice in this dynamic and very important market segment. The relatively small sales volume and corresponding energy use of this market does not justify the negative impact to future creativity and technologies in this field.

Again, Panasonic is pleased to offer our comments on the myriad of issues raised in this OIR docket on proposed Displays regulations. As a leading manufacturer of all technology types, we bring a unique perspective to the issues and extensive experience in the design of the various display technologies. We would be happy to answer any questions you may have on our comments, and look forward to working with the CEC in its review process at the conclusion of the written comment period.

Sincerely,

Mark J. Sharp
Group Manager
Corporate Environmental Department

cc: Peter Fannon
David Thompson