

## DOCKETED

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*Comment Received From: Sharp Electronics Corporation*

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**Sharp's comments on the final draft staff report for computers, monitors, and signage displays.**

*Additional submitted attachment is included below.*



Computer, Computer Monitors, and Electronic Displays  
Docket No. 14-AAER-02  
[docket@energy.star.ca.us](mailto:docket@energy.star.ca.us)

May 20, 2016

California Energy Commission  
Media and Public Communications Office  
1516 Ninth Street, MS-29  
Sacramento, CA 95814-5512

Subject: **Final Draft Staff Report for Computers, Computer Monitors, and Signage Displays**

**COMMENTS OF  
SHARP ELECTRONICS CORPORATION**

SHARP appreciates the opportunity to comment on California Energy Commission's Computer, Computer Monitors and Electronic Displays Proposed Regulatory Language.

On March 30<sup>th</sup>, California Energy Commission released Final Draft staff report for Computers, Computer Monitors, and Signage Displays

SHARP offers the following comments:

**Signage displays**

SHARP's primary concern relates to the scope and the power consumption of "Signage displays".

The California Energy Commission's proposed regulatory language combines signage displays into the scope of television regulations and are subject to compliance with existing television standards.

However, SHARP would point out that most signage displays have very different use cases and specifications from that of televisions. Generally, signage displays are located in public places (ex. retail, office space, transportation centers, and so on) and have much different use cases (ex. simultaneously viewed by many, touched by one or more users, and require monitoring and so on). In these above use cases, in order for users to view and use signage displays at any time, signage displays must be active at the users request and the operating condition (ex. out of order, no signal and so on) of the signage displays must be remotely monitored at all times. In order to realize the above functionality, most signage display installations require network connectivity (ex. Wi-Fi, Ethernet and so on). While signage displays with the network connectivity are in sleep mode, the circuits for monitoring network connectivity must be active. Therefore, signage displays can't avoid the power consumption increase due to the network connectivity circuit. In reference to Display specification version 7.0 of Energy Star, Energy Star Program allows 3.0W for signage displays with network connectivity in sleep mode. SHARP believes that it is best to adopt the same allowance as Energy Star 7.0, which defines the specific allowance value for network connectivity and establishes the consistency between Energy Star 7.0 and California Energy Commission.

3.5.2 Products with Full Network Connectivity confirmed in Section 6.7 of the ENERGY STAR Test Method shall apply the allowance specified in Table 6.

**Table 6: Full Network Connectivity Allowance for Signage Displays**

$P_N$ (watts)
3.0

Therefore, SHARP notes that signage displays are fundamentally different than televisions and California Energy Commission should setup the same allowance of the power consumption of signage displays with network connectivity as Energy Star 7.0. In addition, SHARP notes that signage displays with touch function, interactive digital signage, should also be allotted an allowance. Because an additional circuit for touch functionality is required and must be active at all times, these signage displays need more power consumption for the touch function circuitry. In reference to Display specification version 7.0 of Energy Star, Energy Star Program allows 1.5W for signage displays with touch functionality.

3.5.3 Products tested with an Occupancy Sensor or Touch Technology active in Sleep Mode shall apply the allowances specified in Table 7.

**Table 7: Additional Functions Sleep Mode Power Allowance for Signage Displays**

Type	Screen Size (in)	Allowance (watts)
Occupancy Sensor $P_{OS}$	All	0.3
Touch Functionality $P_T$ <i>(applicable only to Signage Displays where screen size is greater than 30 inches)</i>	$\leq 30$	0.0
	$> 30$	1.5

So, SHARP notes that signage displays with touch functionality should be allotted the same allowance as Energy Star 7.0.

**Conclusion**

SHARP strongly supports the California Energy Commission and believes that it is best served by:

- The allowance for network connectivity power consumption for signage displays in sleep mode (3.0W, the same allowance as Energy Star 7.0),

- The allowance for touch functionality power consumption for signage displays (1.5W, the same allowance as Energy Star 7.0).

SHARP appreciates this opportunity to comment on these issues and hopes that California Energy Commission strongly consider SHARP's comments as we work together to create an effective, accurate, and efficient version of the California Energy Commission's Computer, Computer Monitors and Electronic Displays Proposed Regulatory Language.

Respectfully submitted,

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