

DOCKETED

| | |
|-------------------------|--|
| Docket Number: | 16-AAER-02 |
| Project Title: | Appliance Efficiency Rulemaking for Computers, Computer Monitors, and Signage Displays |
| TN #: | 217515 |
| Document Title: | ITITechNet Comments on CEC Computers, Computer Monitors, and Signage Displays |
| Description: | N/A |
| Filer: | System |
| Organization: | ITI/TechNet |
| Submitter Role: | Public |
| Submission Date: | 5/9/2017 3:55:37 PM |
| Docketed Date: | 5/9/2017 |

Comment Received From: Alexandria McBride

Submitted On: 5/9/2017

Docket Number: 16-AAER-02

ITI/TechNet Comments on CEC Computers, Computer Monitors, and Signage Displays

Additional submitted attachment is included below.



CEC Computers, Computer Monitors, and Signage Displays (Docket #16- AAER-02)

Appliance Efficiency Rulemaking

**ITI/TechNet Comments on the Additional 15-Day Language
May 9, 2017**

Authors.

The Information Technology Industry Council (“ITI”; <http://www.itic.org>) and the Technology Network (“TechNet”; <http://www.technet.org>).

The contacts for our organizations are: Alexandria McBride, (202) 626-5753, AMcBride@itic.org, and Andrea Deveau, (805) 234-5481, adeveau@technet.org

1. INTRODUCTION

After approximately four years of constructive dialogue with California Energy Commission (CEC) staff and other stakeholders, ITI and TechNet (also referred to hereafter as “industry”) supported the adoption of the Computers, Computer Monitors, and Signage Displays regulation on December 14, 2016. As part of industry’s support of the regulation, CEC staff committed to address an issue regarding test procedure alignment with ENERGY STAR. The proposed “Additional 15 Day Language” makes important clarifications around the test procedure and specifically the use of automatic brightness control-enabled systems. ITI and TechNet support the proposed language and appreciate the prompt resolution to this issue.

ITI and TechNet are committed to continued engagement with CEC and other stakeholders to support implementation of the rule. As part of this engagement, industry has three comments and recommendations pertaining to the Express Terms for Computers, Computer Monitors and Signage Displays. We look forward to discussing these comments further with CEC staff.

2. SUMMARY OF KEY ISSUES

Mobile Workstation Definition

Industry recommends the following clarification to item (3) in the Mobile Workstation definition:

A mobile workstation must meet all of the following criteria:

- (1) Has a mean time between failures (MTBF) of at least 13,000 hours;
- (2) Has qualified or is currently being reviewed for qualification by two or more independent software vendor (ISV) product certifications;
- (3) Has **Supports** either:
 - (i) At least one discrete GPU with frame buffer bandwidth of 96 gigabytes per second or greater; or
 - (ii) A total of 4 gigabytes or more of system memory with a bandwidth of 134 gigabytes per second or greater and an integrated GPU;
- (4) Supports the inclusion of three or more internal storage devices; and
- (5) Supports at least 32 gigabytes of system memory.

There are multiple reasons for this recommendation:

1. All Mobile Workstations can claim *support* of 96 GB/s frame buffer bandwidth but not every California customer orders a configuration with a discrete graphics card.
2. Integrated GPU’s with 134 GB/s memory bandwidth will not be implemented on Mobile Workstations by 1 January 2018 due to availability.
3. Commercial Mobile Workstation California customers will be limited in the configurations that they can order because the product does not meet the current Mobile Workstation definition and does not meet the Notebook TEC limit.
4. The recommended change will not negatively affect the CEC’s total energy savings projections because the Mobile Workstation category is already exempt from the TEC limits.

5. Due to the engineering hours and difficulty of obtaining ISV certifications there is no risk that commercial notebooks will be incorrectly added to the Mobile Workstation category.

Mobile Gaming System

Industry recommends the following clarification to item (4) in the Mobile Gaming System definition:

“Mobile gaming system” means a computer that is primarily used for gaming and that is designed specifically for portability and to be operated for extended periods both with and without a direct connection to an AC mains power source. A mobile gaming system is sold with an integrated display and a physical keyboard, and has all of the following criteria:

- (1) First discrete GPU with frame buffer bandwidth of 128 gigabytes per second or greater;
- (2) System memory of 16 gigabytes or more;
- (3) An external power supply with a nameplate output power of 150 watts or greater;
and
- (4) Total battery capacity of ~~90~~ 68 watt-hours or greater.

According to ITI member company data, 99 watt hours is the largest available for sale with notebooks (air shipment restrictions). With that restriction, most notebooks don't go above 90 WH. Most Gaming notebooks have battery sizes from 51 – 89, and very little have an option to go up to 99 WH. Therefore, 68 WH is not covering all Gaming Notebooks, but does allow some of the larger Gaming Notebooks to be classified as a Mobile Gaming systems. A standard notebook has a range from 32-62 WH size. Thus, 68 WH is better limit to be partnered with the other 3 requirements to let a product be classified as Mobile Gaming System.

Discrete GPU Definition

Industry recommends that CEC staff removes the final sentence of the Discrete GPU definition (bolded below):

“Discrete GPU” means a graphics processing unit (GPU) with a local memory controller interface and local graphics-specific memory. **Discrete GPUs are not packaged on the same die or substrate as the CPU.**

The last sentence of the Discrete GPU definition is a departure from the latest ENERGY STAR computers specification, which impacts global harmonization. Industry did not have adequate time to provide feedback after CEC changed the Discrete GPU definition during the original 15-day language period.

Industry believes this change will significantly inhibit the future product innovation and the customer choice in California. Industry requests that CEC remove the new sentence added in the 15-day language. Industry looks forward to working with CEC to address any concerns and provide additional data as requested.