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DATE: August 27, 2008

SUBJECT: Draft 1 Version 5.0 ENERGY STAR Displays Specification

ITI appreciates the opportunity to provide comments on the referenced and related documents. We also look forward to participating in the stakeholder meeting at the ICF offices on September 25th. In order for ITI to prepare our presentation and possible counterproposals for the September meeting, we request that EPA and the EU provide in advance a detailed explanation of the processes utilized to develop the specifications in Draft 1. We would appreciate receiving this in writing, but would also be happy to schedule a conference call with you for that purpose.

The following are comments and recommendations relative to specific sections of Draft 1. We may have additional questions and recommendations that we may submit prior to the meeting on September 25th.

Partner Commitments

There are some important, substantive differences between the draft text of the Displays Commitment statement and similar provisions in other office product “Program Requirements.” This could present particular challenges for manufacturers that offer multiple product lines and, therefore, sign multiple Commitments. We suggest that EPA develop a consistent “Partner Commitment” statement that applies to all qualified products offered by a manufacturer.

Labeling Requirements

In line with the comment above, the draft Display Commitment statement relatively to labeling does not include text that is included in other product specifications that provides manufacturers with some flexibility in how they meet this requirement. For example, the Computer 4.0 specification includes the following:

EPA will consider alternative proposals regarding approach, duration, or size for electronic labeling on a case-by-case basis.

That specification, as well as the Imaging 4.0 specification, includes a variation of the following:

On product packaging/boxes for products sold at retail.

We believe that such flexibility should also be included for Displays, particularly given the diversity of products covered by the proposed specification.

Energy-Efficiency Specifications for Qualifying Products

As with other proposed ENERGY STAR specifications, we found it difficult to determine how or why EPA and the EU arrived at the proposed levels, especially given that some of the proposed limits would in effect violate the “25 percent rule” relative to the number of qualifying models. In general, it appears that the larger the display size, the less likely a product will qualify. Of particular note is the impact on so-called “professional signage,” where only about 13 percent of current models can meet the proposed limits.

We also wish to express opposition to basing computer display power levels on a screen pixel format. This would be very burdensome to test, and probably is not a very good differentiator, given that the majority of such displays use essentially the same format.

Regarding “Sleep Mode Enabling” (Section 3.C.2), it is not clear how the requirement for activation of Sleep Mode within 15 minutes of user inactivity would apply to products such as digital picture frames or professional displays where, during normal use conditions, users would not be actively engaged with an input interface. Unlike computer monitors, these products are more similar to a television or stereo in that the user expects the product to remain active during viewing or listening without the need to re-activate the product every 15 minutes (or even every 30 or 60 minutes). While there is logic in applying this requirement to devices where interaction is part of the function, applying it to digital picture frames and professional signage would result in a high level of customer dissatisfaction with the product, as well as with the manufacturer and ENERGY STAR brands. Moreover, many manufacturers already provide a programmable timer feature or allow programming the display so that it is only active during certain hours of the day. Accordingly, we recommend excluding digital picture frames and professional signage from this requirement.

Regarding On Mode Requirements, we have concerns that, if adopted as proposed, the revised Display specification could well prevent certain high performance displays from qualifying for the ENERGY STAR program. These displays utilize Super In-Plane Switching and similar technologies that are favored by professionals for such uses as CAD, design/graphics and media because of their high performance visual ergonomics. Many federal government users also require this type of display technology. However, such displays tend to have significantly higher power consumption profiles due to their use of densely interdigitated electrodes. Accordingly, ITI will be developing and offering an alternative recommendation for including such products under ENERGY STAR.

Data Submissions/Test Methods

ITI opposes requiring manufacturers to test and submit power data in low and average room ambience settings. It is very difficult to control in a factory setting, which among other things could result in variations in test data, etc. We recommend that testing be limited solely to average lighting conditions.

We also recommend removing the requirement to test units under a default as-shipped luminance setting. Testing displays at a single set luminance level will ensure a fair comparison across all manufacturers. Displays are often sold in the retail space at high luminance settings to attract customers to the product. By requiring testing to be conducted at default as-shipped luminance, manufacturers will ship with a lower luminance to comply with Energy Star limits. This will often result in customer dissatisfaction due to differences in out-of-box versus retail experience. Customers tend to fall into two categories: users that are able to adjust display brightness with ease, and users that lack the knowledge to adjust display brightness and will be left with a dim display. This in turn will lead to an increase in complaints and returns, which will result in an increase in cost to the manufacturer. Even worse, it will result in damaged brand reputation and customer loyalty.

Display brightness is probably the most customer noticeable marketing feature. The decision on what brightness to set for shipping displays should be made by the manufacturer and not indirectly dictated by ENERGY STAR. By testing at a set luminance level, test conditions will be equal across the board without running the risk of shipping with artificially low luminance levels to meet ENERGY STAR levels.

Regarding On Mode Step 10 (Item J), ITI recommends changing the test procedure to integrate readings from the power meter over a 5 min period of time after the initial 20 min warm-up. The current proposal would result in an inconsistent testing method. Integrating the readings as we propose will ensure that all displays are tested over the same amount of time in a repeatable manner.

Finally, we recommend modifying the current test conditions for Japan to test at a single frequency of 100V/50Hz. Including the 100V/60Hz test condition unnecessarily increases the test workload. Frequency does not significantly affect power consumption, so testing at 100V/50Hz would be adequate to represent test results at 100V/60Hz.

Effective Date

ITI was surprised that EPA and the EU did not postpone the October 2009 effective date, given the inordinate delay in publishing Draft 1. It will be very difficult and costly for manufacturers to make the necessary design changes comply with the new Display specification, once it is finalized. If the lead time is not extended, we anticipate that very few ENERGY STAR-qualified models will be available on the market.