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Re: Panasonic Comments on ENERGY STAR TVs Version 6.0 Final Draft Specification

Panasonic appreciates the opportunity to comment on the ENERGY STAR TVs Version 6.0 Final Draft Specification. As a leading manufacturer and marketer of all television technologies, Panasonic is a strong supporter of the ENERGY STAR brand and its program objectives, which have been exemplified in current lineup of our most efficient TV models ever.

Automatic Brightness Control (ABC):

The Eligibility Criteria Section 3.3.1 specifies a 10% adder to the Maximum On Mode Power Requirement for products with Automatic Brightness Control (ABC) enabled by default and whose performance is validated as outlined in Section 4.3. While this approach is simple to implement, it does not adequately account for the real power savings associated with the ABC feature.

After careful review of the 2012 Panasonic ENERGY STAR V5.3 qualified TVs (including LCD and Plasma), we find more than a 20% average difference in the On Mode power with and without ABC. Panasonic recommends that the On Mode power adder be 20% rather than the proposed 10%. This will more accurately reflect the power difference attributed to the ABC feature in our products currently in the market. A 10% adder does not provide sufficient incentive or cost justification for manufacturers to implement the ABC feature.

An even better approach to account for the actual ABC power savings as realized in a home environment would be to continue to use the existing ABC measurement procedure as described in ENERGY STAR TVs Version 5.3. This requires measurements at 0 lux and at least 300 lux. A further advantage of this approach is that it ensures harmonization with past versions as well as other regulations and standards including FTC, CEC, and CSA.

The 0 lux measurement is well supported by the data published in the CEA 2012 Home Illumination Technical Report and the CLASP 2011 Analysis of Background Illuminance Levels During Television Viewing. These studies show that TV viewing occurs with a background illuminance between 0 and 1 lux during 11.6% and 13.1% of the measurements according to the CEA and CLASP data respectively. This data shows 25% of the TV viewing occurs under 7.1 lux according to CEA and under 4.6 lux according to CLASP. Additionally it is found that 50% of the measurements occur at less than 14.0 and 15.1 lux for the CEA and CLASP data respectively.

The 300 lux point has been chosen because it represents the maximum illuminance typically experienced while watching television in the home. Only 2.5% and 1.9% of TV viewing occurs at greater than or equal to 300 lux according to CEA and CLASP respectively.
Given these reasons, Panasonic recommends that the ABC measurement method from ENERGY STAR TVs Version 5.3 be continued in Version 6.0.

**ABC Sensor Validation Testing:**

As stated earlier, Panasonic believes that the ABC measurement of ENERGY STAR TVs Version 5.3 should be continued. If the approach of adding 10% (ideally 20%) to the Maximum ON Mode Power Requirement is adopted instead, then the Section 4.3.1 text requires the following modification. The word “increase” should be changed to “decrease” in two occurrences in the first paragraph.

Ideally, Panasonic recommends that this requirement be harmonized with the ENERGY STAR Displays Version 6.0 Final Draft Eligibility Criteria. Section 3.3.3 requires a 20% power differential between measurements at 10 lux and 300 lux.

**Display a Message Anytime TV is Changed from Home Picture Setting:**

The Eligibility Criteria Section 3.2.3.iii requires the following:

*Display a message each time any setting other than the “home” picture setting is selected to inform the user that the “home” picture setting is the setting in which the product qualifies for ENERGY STAR.*

While it is likely that the vast majority of the users select the “Home” picture mode upon initial setup, Panasonic believes there will be customer complaints if a message is required anytime that an attempt is made to take the television out of the “Home” picture mode at a later time.

Panasonic proposes that the intended benefit could be realized by simply requiring an ENERGY STAR logo to appear on the Picture Setting Selection Menu when the Home picture setting is highlighted or selected. If a different picture setting is highlighted or selected, then the logo would disappear from this menu.

If instead, it is decided by ENERGY STAR to require a message each time a picture setting other than Home is selected, then we would recommend that the user be permitted to disable this message feature. Regardless, the television would be shipped with the message feature enabled by default.

**Networking Features Additional Testing:**

The Eligibility Criteria Section 3.4.3 states:

*For products that offer network connectivity, the Standby Passive Mode with network connectivity enabled shall be measured and submitted for qualification.*

Panasonic believes that this section should be removed. The intention is to test and report as detailed in Section 4.2 the Standby-Active, Low Mode with a network connected, not the Standby-Passive Mode. According to the definition of Standby-Passive Mode, it cannot be additionally switched into another mode with an external signal. Therefore it should not be tested with a network connected.
Panasonic has been a longtime proponent of the ENERGY STAR program and believes its partnership with EPA has provided a valuable tool by which consumers can make better informed choices about their purchases of energy efficient products.

As always, Panasonic appreciates the opportunity to comment on the ENERGY STAR Program and welcomes the opportunity to further discuss our views with you.

Sincerely,

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