



June 20, 2011

Ms. Verena Radulovic
United States Environmental Protection Agency
Office of Air and Radiation
1200 Pennsylvania Ave NW
Washington, DC 20460

Subject: Follow up Comments to the ENERGY STAR Top Tier Proposal

Dear Verena Radulovic,

On behalf of the Northwest Energy Efficiency Alliance (NEEA), Pacific Gas and Electric Company (PG&E), Sacramento Municipal Utility District (SMUD), and San Diego Gas and Electric (SDG&E), we respectfully submit comments in regards to the ENERGY STAR Draft 1 Version 6.0 Television specification issued May 25th, 2011.

The Business and Consumer Electronics (BCE) program managers support EPA's efforts to establish a new Version 6 specification for Televisions. Given the rapid changes in the television market, we strongly recommend that EPA adopt more stringent On Mode Power Requirements to account for efficiency improvements leading up to the May 2012 effective date for Version 6. Specifically, we recommend EPA set Version 6 On Mode Power Requirements at levels meeting the existing 'Most Efficient 2011' criteria.¹ This will establish a clearer link between EPA's 'ENERGY STAR - Most Efficient' and ENERGY STAR initiatives, and ensure that the ENERGY STAR label continues to deliver consumer savings in 2012 and beyond.

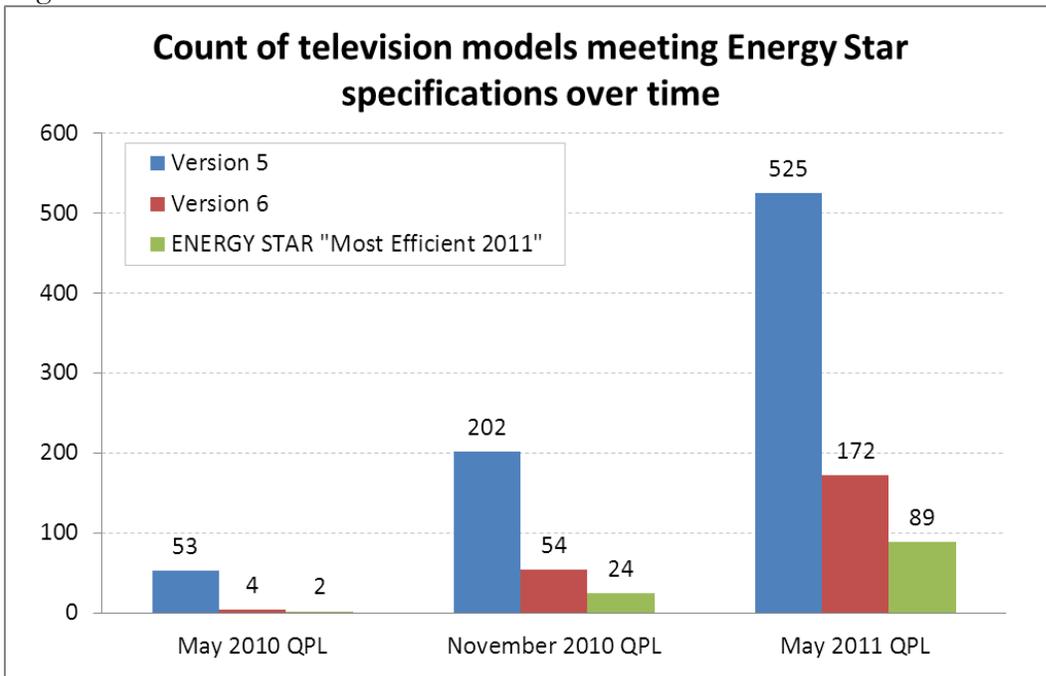
As sponsors of utility incentive programs for TVs, we work with retailers and manufacturers to help consumers become more informed about the benefits of purchasing energy-efficient TVs. The BCE Program provides financial incentives and marketing support to encourage manufacturers and retailers to educate, promote and sell the most energy-efficient TVs on the market. We currently promote products which meet and exceed existing and future ENERGY STAR specification levels. Thus, we have a strong interest in supporting a specification level which provides consistency to all program partners and underscores the relationship between the ENERGY STAR 'Most Efficient' and ENERGY STAR specifications.

1) We recommend that EPA establish more stringent On Mode Power Requirements to account for efficiency improvements leading up to Version 6's May 2012 effective date.

¹ In May 2011, EPA launched its new 'Most Efficient' initiative, which seeks to drive more energy-efficient products into the market more quickly. The 'Most Efficient' criteria are established on an annual basis, and represent the leading edge in energy efficiency.

Due to the rapid changes in the television market, it is important that EPA continue to update its criteria so that the ENERGY STAR label continues to identify the most efficient products on the market. Given the fast pace of innovation in the television market, both Version 4 and Version 5 TV specifications experienced rapid market adoption in the months prior to their effective date. As of May 2010, only 53 models qualified for ENERGY STAR Version 5. By May 2011, four months before Version 5 will take effect, this number had grown to 525 models, a ten-fold increase in one year. These models represent 40% of the total number of models on the May 2011 ENERGY STAR list, and include over 100 models with screen sizes greater than 50". Version 6 and the 'Most Efficient 2011' levels show similar increases in market adoption. As Figure 1 suggests, very few models met either of these specifications in May 2010. Based on the May 16, 2011 Qualified Product List (QPL), there are now 172 models that meet the Version 6 and 89 models that meet the 'Most Efficient 2011' criteria, and include screen sizes from 13"- 60".² Already, 50 models with screen sizes greater than 50" meet the Proposed Version 6 criteria, and 13 of these larger than 50" models meet the 'Most Efficient 2011' criteria.³

Figure 1



Based on this and previous historic trends, it is reasonable to conclude that the television market will make continual efficiency improvements leading up to Version 6's May 2012 effective date. Retailers typically make stocking decisions for the coming year's products in

² At the 2011 Consumer Electronics Show, Mitsubishi released a 73" television consuming less than 85
<http://www.engadget.com/2011/06/01/mitsubishi-officially-prices-2011-hdtvs-including-a-92-inch-dlp/>

³ A number of stakeholders have voiced concern that the Version 6 requirements are too stringent for TVs greater than 50" to meet them. However, roughly 26% of models between 50"-60" in the Version 6 dataset meet the Proposed Version 6 requirements.

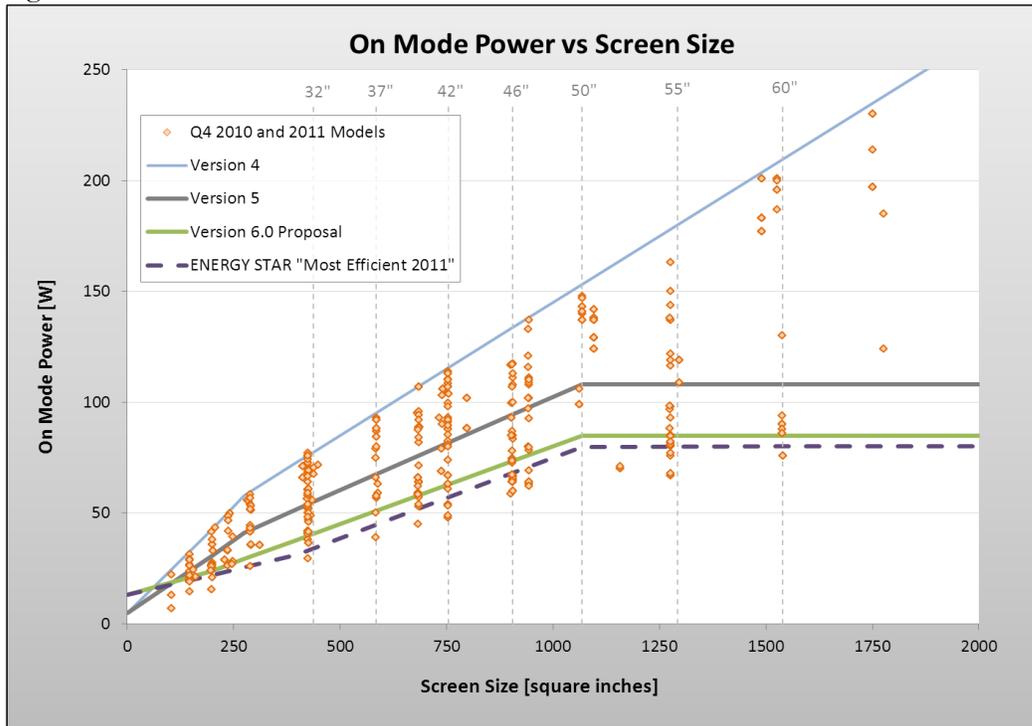
early fall. Those new TV models are typically introduced during the months of April and May, and we therefore expect to see an increase in the number of models meeting the proposed Version 6 requirements before its May 2012 effective date.

Given this increase in the number of models meeting Version 5 and Proposed Version 6 criteria, we strongly recommend that ENERGY STAR develop more stringent On Mode Power Requirements for Version 6 to account for the efficiency improvements that will occur over the coming year.

Anticipating efficiency improvements and setting more stringent Version 6 criteria will ensure that the ENERGY STAR brand continues to maximize its value to consumers by identifying only the most efficient models on the market. EPA developed the Proposed Version 6 criteria based the top 20% of models in the current dataset. These models are meant to reflect the current product offering, as of Spring 2011. To account for efficiency improvements that will likely occur between now and the May 2012 effective date, we recommend EPA define the Version 6 criteria as roughly the top 10-15% of models in the current May 2011 dataset. Based on past efficiency improvement trends and currently available technology options, we anticipate that by May 2012 EPA’s target of 20% or more of available models will meet the criteria.

To meet this goal, we recommend that EPA align its Version 6 requirements with the existing ‘Most Efficient 2011’ criteria. Roughly 12% of models in the Version 6 dataset meet the ‘Most Efficient 2011’ requirements, and are found in a wide variety of screen sizes. Figure 2 provides an overview of current, future, and proposed On Mode Requirements.

Figure 2





2) We recommend that EPA align Version 6 On Mode Power Requirements with the Energy Star’s ‘Most Efficient 2011’ criteria to establish a clear path to accelerate market adoption of the most efficient products and maintain consistent consumer messaging.

In May 2011, EPA launched a pilot program for its new ‘Most Efficient’ initiative, which seeks to drive more energy-efficient products into the market more quickly. The ‘Most Efficient’ criteria are established on an annual basis, and represent the leading edge in energy efficiency. In the case of TVs, establishing a stronger linkage between ENERGY STAR and ‘Most Efficient’ by linking specifications creates a stronger, more coordinated two-year EPA strategy to accelerate market penetration of the highly efficient models. The annual product cycles and rapidly changing market make this strategy particularly well-suited to the television market, where a model that meets ‘Most Efficient’ criteria in one year becomes ‘ENERGY STAR’ in the next.⁴

This approach provides added visibility and recognition for leading edge televisions, helping to accelerate market adoption of highly efficient technologies. In addition to the synergistic benefits for the EPA program noted above, this method would provide program partners with advance notice of future specification levels and consistent consumer messaging.

We support EPA’s efforts to further promote both its ENERGY STAR and ‘Most Efficient’ initiatives. However, we are concerned with the potential for consumer confusion and believe that EPA should establish a clear link between its ‘Most Efficient’ and ENERGY STAR initiatives. In our discussions with retailers, they have frequently stressed the importance of consistent consumer messaging, and we believe having two unrelated initiatives may cause confusion among consumers.

3) We recommend that EPA continue to identify and consider Power Management Controls in future specification development.

Power Management Controls such as occupancy sensors and automatic brightness controls (ABC) have the potential to provide additional savings opportunities to reduce TV energy consumption. We support EPA’s efforts to characterize their potential and further refine the test method for ABC enabled TVs so that they are given appropriate credit for ABC given in-home viewing conditions and usage.

⁴ Note that the ‘Most Efficient 2011’ specification covers a number of products other than TVs. Our recommendation that EPA establish a link between ‘Most Efficient 2011’ and ENERGY STAR Version 6 is strictly limited to televisions due their specific market and product cycle.



Although the market is not developed sufficiently to include Power Management Controls such as occupancy sensors in Version 6, we encourage EPA to further explore these opportunities in future specifications.

4) We recommend that EPA continue efforts to characterize the impacts of internet connectivity and viewing of 3D content on television energy consumption.

An increasing number of televisions are being shipped internet ready or with 3-D viewing capabilities. We understand that EPA may collect product information and data on these capabilities for qualified TVs. If so, we would ask EPA to report the number of qualified models with these features so we can gain a better understanding of the market share of TVs with these capabilities. It is uncertain how these additional features will impact future TV energy consumption. To better understand the potential energy impacts of these features, we recommend that EPA further characterize internet viewing habits, including the use of streaming content, static web pages, or use of interactive media. This characterization will help guide efforts to develop an appropriate test method for evaluating power draw from internet related activities. We recommend similar efforts for 3-D viewing. Currently, there is no specific test method for 3-D content and therefore its potential energy impacts are unknown. Therefore, we recommend EPA continue efforts to work with industry, similar to how EPA has worked successfully with industry to develop content and a method for testing Download Acquisition Mode, to develop a test method for 3-D content, as well as conducting further research to characterize its potential energy use.

5) We recommend that EPA modify the ‘Backlight Categorization’ category in its Version 6 dataset to include ‘LED-Direct’ and ‘LED-Edge’.

In the coming years, LEDs are expected to become the predominant technology used for LCD backlighting. As this market transitions occurs, it will be important to not only differentiate between CCFLs and LEDs, but also between LED-edge and LED-direct backlighting. Provided this data is available, we encourage EPA to publicly specify the type of LED backlighting used for all applicable models in the Version 6 dataset.

Sincerely,



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