UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460



OFFICE OF AIR AND RADIATION

June 2, 2014

Dear ENERGY STAR[®] TV Partner or Other Interested Stakeholder:

The U.S. Environmental Protection Agency (EPA) welcomes your input on the following Draft 1 Version 7.0 ENERGY STAR TV specification. This letter outlines the rationale for revising the specification and summarizes the proposed changes. EPA expects Version 7.0 will take effect in the late summer of 2015.

To date, consumers have purchased approximately 300 million ENERGY STAR qualified televisions, representing overall savings of \$22 billion in electricity costs and 100 million metric tons of greenhouse gas emissions. One of the greatest success stories of the ENERGY STAR program, televisions have evolved dramatically in terms of the features and functionalities manufacturers are able to deliver, while at the same time making energy saving innovation a top priority. Since Version 6.0 was finalized in 2012, the number of ENERGY STAR certified models has grown to represent the majority of the total available models on the market and EPA expects the number of qualified models to increase further as new 2014 models continue to be released this spring. Initial estimates for 2013 also indicate a high market share of products meeting the current ENERGY STAR specification. All this represents an opportunity for the ENERGY STAR program to further differentiate among the highly efficient models on the market, helping to ensure that the ENERGY STAR label remains an effective tool for consumers.

In establishing the proposed new performance levels, EPA analyzed data associated with over 900 ENERGY STAR television models, the majority of which were released since 2013, in addition to select non-qualified models provided by manufacturers. A masked version of the dataset is attached to this distribution.

The Draft 1 Version 7.0 specification includes the following key elements:

- On Mode Requirements: The proposed requirements reflect the performance of the top 14 percent of TVs currently in the EPA dataset. EPA believes the dataset reflects most models on the market today and that the proposed levels capture a variety of sizes and models from a variety of manufacturers. EPA anticipates that by the time the specification takes effect in 2015—taking into account the yet-to-be released models in early 2015—the selection of qualifying models will be even greater.
- Ultra High Definition (UHD) TVs: EPA understands that the market prevalence of UHD TVs is expected to increase and that the energy consumption of these TVs can be higher than that of HD TVs. As such, EPA seeks to recognize only top performing UHD models and to incentivize improvements in efficiency. EPA intends to consider treatment for UHD resolution based on additional data received between now and the release of Draft 2.
- Network Functionalities in Standby-Active, Low: EPA is introducing a definition for Full Network Connectivity to reflect network and Wake-On-LAN functionalities that may be present during Standby-Active, Low. Since the majority of new models are network enabled, EPA seeks to recognize efficient implementation of network connectivity and is requesting stakeholder feedback and data on the energy cost of delivering network connectivity. In order to ensure comparability of products' energy performance in Standby-Active, Low, the Department of Energy (DOE) proposes an additional test in Section 4.2 to confirm whether a TV maintains a network presence and meets the definition of Full Network Connectivity.

- Standby-Passive and Standby-Active, Low Requirements: EPA is proposing new power limits of 0.5 W for Standby-Passive Mode and Standby-Active, Low Modes without network connectivity, as a significant majority of the current ENERGY STAR certified models can meet these levels. EPA proposes a 1 W limit for products in Standby-Active, Low Mode with full network connectivity, based on existing information on power budgets necessary to support the latest networking technology. Additionally, EPA is considering requiring on-screen informational requirements for Standby-Passive Mode and Standby-Active, Low Mode settings that may be altered by the consumer via a menu such that consumers are prompted to select a discrete time period for any such setting to be enabled in order to reduce energy usage.
- Harmonization, Removal and Addition of Definitions: EPA has further harmonized definitions to align with the definitions in DOE's Final Rule that established a test procedure for televisions, has removed obsolete and outdated definitions and proposed new definitions to capture emerging features, such as thin client capabilities that are able to replace a set-top box, Full Network Connectivity, and Ultra High Definition (UHD).
- Integrated Set-top Box Functionality: EPA intends to offer partners the ability to highlight thin client capability and/or point-of-deployment modules that allow for integrated set-top box functionality on the ENERGY STAR certified products list, as these features may appeal to consumers and be a net positive for energy efficiency in the home by decreasing the number and energy consumption of set-top boxes.

Stakeholders are requested to provide comments on the Draft 1 specification and data specific to UHD TV performance and Standby-Active, Low no later than June 30, 2014. Please send comments via e-mail <u>televisions@energystar.gov</u>. All comments received will be posted to the ENERGY STAR Product Development website, unless the submitter specifically requests that his or her comments remain confidential.

On Tuesday, June 17, 2014 from 1:00 PM–4:00 PM, Eastern Time, EPA will host a stakeholder webinar to present details on Draft 1 Version 7.0 ENERGY STAR specification and the data analysis performed to date, as well as address stakeholder questions and concerns regarding the Draft 1. If you wish to attend this meeting, please <u>register at this link prior to the meeting</u>.

The exchange of ideas and information between EPA, industry, and other interested parties is critical to the success of ENERGY STAR. To track EPA's progress in revising the ENERGY STAR TV products specification and to review comments, please visit the Product Development website at <u>www.energystar.gov/RevisedSpecs</u> and click on "Version 7.0 is in development" under "Televisions."

Thank you for taking the time to review this draft specification. Please contact me at <u>Radulovic.Verena@epa.gov</u> or (202) 343-9845 with any questions or concerns. For any questions related to the test method for ENERGY STAR products, please contact Jeremy Dommu at <u>Jeremy.Dommu@ee.doe.gov</u> or (202) 586-970.

Best Regards,

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Verena Radulovic ENERGY STAR for Consumer Electronics

Enclosures: Draft 1 Version 7.0 ENERGY STAR TV Product Specification Masked Data Set Used to Determine Proposed Draft 1 Energy Efficiency Requirements and Chart Showing Proposed Draft 1 On Mode Power Requirements EPA Data Submittal Form