

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



OFFICE OF AIR
AND RADIATION

December 3, 2014

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

The U.S. Environmental Protection Agency (EPA) is pleased to share with you the Final Draft Version 7.0 ENERGY STAR TVs specification. The attached document outlines the requirements that TV products need to meet in order to earn the ENERGY STAR under Version 7.0. EPA would like to thank the many stakeholders who have invested time and effort over the past few months to contribute feedback that has informed this product specification process. EPA plans to finalize this TVs Version 7.0 specification in late December 2014, with an effective date of September 30, 2015.

The Final Draft Version 7.0 ENERGY STAR TVs specification includes the following modifications from Draft 2:

- **Preset Picture Settings and Standby-Passive and Standby-Active Low Settings:** In response to stakeholder feedback on Draft 2, EPA harmonized the language in sections 3.2.4 and 3.2.5 (Preset Picture Setting Menu and the Standby-Passive and Standby-Active Low Settings). EPA also proposes that TVs with a physical ENERGY STAR label be able to use alternative language to communicate changes in energy consumption in different settings.
- **Dataset:** To ensure the proposed requirements are based on data that is reflective of the current performance of TVs. EPA included in its Final Draft dataset all California Energy Commission (CEC) models supplemented with models from the EPA ENERGY STAR Version 6.1 database tested to the DOE Final Rule for a total of 2207 unique models.
- **On Mode Power:** In response to stakeholder feedback that the Draft 2 On Mode Power requirements recognized disproportionately fewer large models, EPA has raised the limit slightly to allow for a small set of additional larger products to qualify. The new proposal captures the top 16 percent of the TV market. Based on how rapidly the television market evolves, EPA continues to anticipate a more than adequate selection of ENERGY STAR certified models by the time the specification takes effect.
- **High Resolution Allowance:** As EPA raised the On Mode power limits, EPA adjusted the high resolution allowance from 55 percent in Draft 2 to 50 percent in this Final Draft to maintain the same stringency that was proposed in Draft 2. EPA made this adjustment in recognition of the fact that most TVs with resolution greater than or equal to 2160 lines are above 60 inches in size and, therefore, benefit from the slight easing of the criteria for larger screen sizes discussed above. The pass rate for TVs with ultra-high resolution is over 13 percent: 11 out of 87 models meet the proposed criteria. EPA is also proposing to remove the May 1, 2017 expiration date for the ultra-high resolution allowance. Doing so

enables EPA to watch the market closely and adjust the allowance when appropriate to ensure the ENERGY STAR continues to recognize the top performing products with ultra-high resolution.

- **Luminance Requirement:** In Draft 2, EPA proposed that products with a Brightest Selectable Preset Picture Setting greater than or equal to 450 cd/m² luminance have a luminance greater than or equal to 293 cd/m² in the Default Picture Setting. This approach was intended to permit products with brighter maximum screen luminance to be optimized for home use. Stakeholders generally supported this Draft 2 proposal with some stakeholders noting that the required as-shipped luminance be 228 cd/m², which is closest to the median as-shipped luminance of TVs today. EPA confirmed that the median as-shipped luminance among its dataset is approximately 232 cd/m² and therefore proposes adopting this revised proposal.

In the Final Draft, products with Brightest Selectable Preset Picture Setting luminance greater than or equal to 350 cd/m² shall have a luminance in the Default Picture Setting of greater than or equal to 228 cd/m² (which is 65 percent of 350 cd/m²). Since approximately 88.5 percent of EPA's dataset has Brightest Selectable Preset Picture Setting luminance below 350 cd/m², this revised proposal still only applies to a small subset of currently certified models. The proposal still intends to guard against TVs being shipped too dim, while permitting products with brighter maximum screen luminance to be optimized for home use.

EPA shares its Partners' desire for a smooth transition from one ENERGY STAR specification version to the next, such that ENERGY STAR labeled products meet the latest requirements when they go into effect and that partners have time to transition their collateral material. With this in mind and consistent with its approach for other product categories, EPA is sharing the following timeline for TVs:

- Effective upon completion of the Version 7.0 specification development process (expected December 31, 2014), manufacturers may elect to have their Certification Body (CB) certify their eligible products to the Version 7.0 requirements.
- On May 15, 2015 CBs will be instructed to stop certifying new product submittals to Version 6.1. Note, however, that existing certifications to Version 6.0 and 6.1 will remain valid for the purposes of ENERGY STAR qualification until September 30, 2015.
- Any product manufactured as of September 30, 2015, must meet Version 7.0 requirements to bear the ENERGY STAR mark. All certifications of products to the Version 6.0 and 6.1 specifications will be invalid for purposes of ENERGY STAR qualification and CBs will only submit product models certified to Version 7.0 to EPA.

Any comments on the Final Draft specification should be submitted no later than **Wednesday, December 17, 2014**. Please send comments via e-mail to televisions@energystar.gov. All comments received will be posted to the ENERGY STAR Product Development website, unless the submitter specifically requests otherwise.

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 Web site at www.energystar.gov/RevisedSpecs and click on "Version 7.0" under "In development" under "Televisions."

Thank you for taking the time to review these materials. Please contact me at Radulovic.Verena@epa.gov or (202) 343-9845 with any questions or concerns. For any

questions related to the test method for ENERGY STAR products, please contact Jeremy Dommus at Jeremy.Dommus@ee.doe.gov or (202) 586-970.

Best Regards,

A handwritten signature in cursive script that reads "Verena Radulovic".

Verena Radulovic, Product Manager
ENERGY STAR for Consumer Electronics

Enclosures:

Final Draft Version 7.0 ENERGY STAR Televisions Products Specification
Masked Dataset Used to Determine Proposed Final Draft Energy Efficiency Requirements and
Chart Showing Proposed Final Draft Energy Efficiency Requirements
Draft 2 Version 7.0 Specification Stakeholder Comments Summary and EPA and DOE Response
Final Draft Version 7.0 ENERGY STAR Televisions QPX Template