

Appliance Standards Awareness Project
Consumer Federation of America

April 5, 2017

Ms. Verena Radulovic
United States Environmental Protection Agency
Office of Air and Radiation
1200 Pennsylvania Avenue NW
Washington, DC 20460
televisions@energystar.gov

RE: ENERGY STAR Specification for Televisions, Version 8.0

Dear Ms. Radulovic:

On March 10, the U.S. Environmental Protection Agency (EPA) released the Draft 1 Version of the ENERGY STAR for Televisions Version 8.0 specification. The Appliance Standards Awareness Project (ASAP) and Consumer Federation of America are submitting this letter in response to that draft.

We have an ongoing interest and involvement in the ENERGY STAR televisions program because televisions are a ubiquitous consumer product that consumes a significant amount of energy, and like computers and other consumer electronic devices, evolves rapidly with short product development cycles. ENERGY STAR has the ability to move relatively quickly and to consider changes in technology at a pace that is relevant to the market place. ENERGY STAR is often the first forum where the energy efficiency impacts of new television technologies are reviewed, and ultimately the label indicates to consumers that the product consumes less energy and saves them money compared to similar products.

We support the detailed technical comments on the Draft 1 Version of the ENERGY STAR for Televisions Version 8.0 specification submitted by the Natural Resources Defense Council. The following comments complement those comments.

We agree with EPA's proposition that this revision of the ENERGY STAR for Televisions specification should make upgrades quickly and that its goal should be to address some of the outstanding issues regarding the persistence of energy saving features, such as Automatic Brightness Control (ABC) and Motion Detection Dimming (MDD) after users make adjustments to the picture. However, if EPA decides to extend the schedule for this revision significantly beyond the timeline laid out during the March 20, 2017 webinar we request that EPA also collect additional data to support additional changes including adjusting the Ultra High Definition (UHD) adder and including a cap on additional power consumption tied to the High Dynamic Range (HDR) effect.

We agree with EPA's proposed approach to enhance the consumer experience and to increase the persistence of energy savings but are concerned that the proposal to allow ABC to be disabled for one or two additional preset picture modes will result in a significant loss of energy savings. We suggest that

EPA modify the proposed draft to ensure that ABC delivers relatively similar savings in all preset picture modes, not just in the default home mode.

We support section 3.2.3 in the draft spec as written:

“Energy Saving Features: A TV/HTD may not be certified with any detectable or undetectable energy saving feature (e.g., Motion Detection Dimming) enabled during testing unless that feature provides comparable energy savings during typical viewing experiences (i.e., the duration of a variety of popular programming) as to those realized when tested according to Appendix H to Subpart B of 10 CFR Part 430. This prohibition applies irrespective of whether the function’s primary or intended purpose is energy savings.”

However, we recommend that EPA provide additional clarity on the meaning of “typical viewing experiences” perhaps in terms of scene length and frequency of scene changes. We also recommend that EPA adopt a similar approach to MDD and other energy saving features as recommended above for ABC. We particularly recommend that the ENERGY STAR for Televisions specification 8.0 require that MDD be in effect in all preset picture modes. If MDD saves energy effectively in the default home mode, then it should be used for other modes (e.g. sports) which are even more likely to involve rapid motion.

Televisions, and many other connected electronic devices, are now capable of downloading and installing updates to their internal software. Such updates are capable of altering television performance and energy consumption. We recommend that EPA modify the draft specification to address this possibility and clearly state that a television that complies with the ENERGY STAR for Televisions specification 8.0 before a software update, must continue to do so following the update.

With regards to HDR upscaling, Section 4.2.1 of EPA’s draft specification proposes a “test and list” approach. We support this proposal, but request that model-specific test results be made publicly available. As noted above, we recommend that the next update to the specification include a cap on additional power consumption when HDR upscaling is occurring.

In conclusion, we would like to draw EPA’s attention to the results of the recent CLASP research (cited in the NRDC comments) suggesting that for televisions available on the European market in 2016 a UHD set only required 13% more power per unit of television screen area than an HD set. This indicates that the 50% adder for UHD in the ENERGY STAR for Televisions Version 8.0 specification may be excessive. We request EPA include a revision to the UHD adder in the next revision to the Television specification, or include such a revision in version 8.0 if the timeline is extended.

Thank you for providing us with the opportunity to provide input on this specification revision.

Sincerely,



Chris Granda
Senior Researcher/Advocate
Appliance Standards Awareness Project (ASAP)



Mel Hall-Crawford
Energy Project Director
Consumer Federation of America