



## **NRDC Comments on ENERGY STAR's Final Draft Version 6.0 Eligibility Criteria for Televisions**

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On behalf of the Natural Resources Defense Council (NRDC) and its 1.3 million members and on line activists, we submit our comments on the EPA's Final Draft of ENERGY STAR Version 6.0 Eligibility Criteria for TVs. **NRDC remains strongly supportive of EPA's final draft proposal and urges ENERGY STAR to finalize its specification as soon as possible to maximize alignment with the design and manufacturing cycles for new TVs introduced in 2013.** Our comments supplement those provided by NRDC on May 29, 2012 and focus on some remaining details related to automatic brightness control, testing internet ready TVs, and forced menu implementation.

**1. Automatic Brightness Control** – NRDC acknowledges the timing challenges EPA faces between updating its specification on a timely basis vs. waiting for DOE to finalize its test method for TVs, in particular the portions that deal with Automatic Brightness Control. NRDC is supportive of the approach proposed by ENERGY STAR relative to Automatic Brightness Control. In particular, we support the ABC Sensor Validation Testing requirements contained in Section 4.3.1. These new requirements will prevent a manufacturer from gaming the system and “earning” the 10% incremental power allowance for TVs with ABC even though the sensor does not reduce power consumption in a meaningful way as ambient room light levels decrease.

Our two recommendations to further enhance the ABC requirements are:

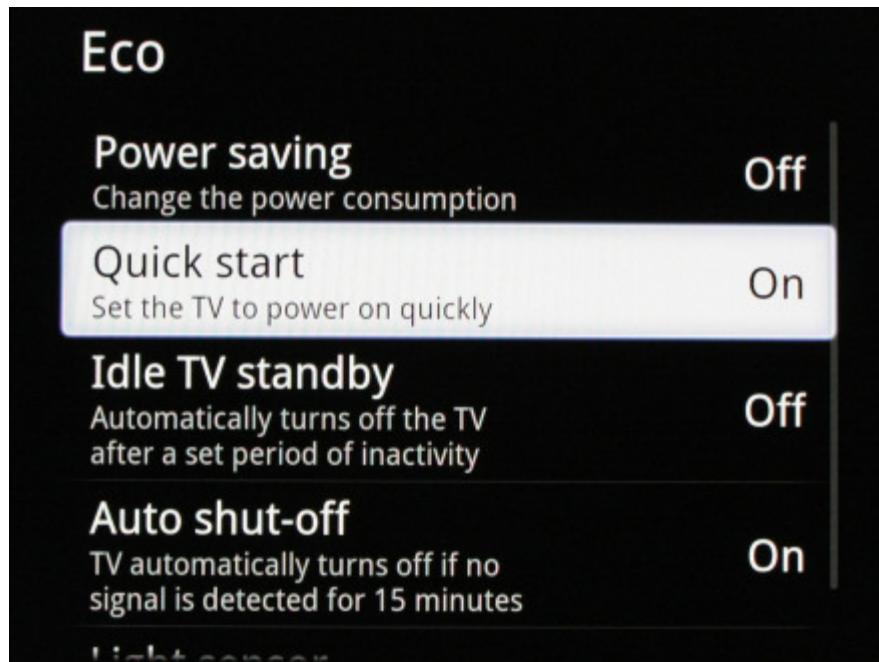
- a. Should DOE's test method for TVs with ABC include a test point above 100 lux, then ESTAR should require that the measured on mode power at this brighter test point may not be less than the measured on mode power at 100 lux. We encourage EPA to include language adding this requirement to its specification.

b. ENERGY STAR should include language in the specification requiring manufacturers to report the discrete power levels measured at 10, 50, 100 lux ( and any additional points required by DOE) and this data will be published on ENERGY STAR's Qualified Product List (QPL).

**2. Internet Enabled TVs and Standby Modes** – NRDC has consistently urged in various test method and specification setting forums that “internet ready” TVs be connected to the internet prior to the performance of power measurements. Per the text box on lines 213-217 and Section 4.2 of the latest draft, EPA has attempted to address this point. As we read through these sections we were somewhat confused by the terminology, in particular the similarity between standby-passive with network connectivity and standby-active, low mode.

**We encourage EPA to review these sections prior to finalization and to add greater clarity wherever possible. In particular, we believe additional details are needed as to how to set up the TV prior to measuring the standby power level of a TV that was connected to the internet.** For example, for some TVs the user may be presented with a choice of settings regarding how the TV behaves and its standby power use. As we presented in our earlier comments, [the product review from CNET](#) for a previous Sony TV with built in Google TV, provided the following text and screen shot of some of the user selectable options that have significant impact on standby power use. For example, by selecting quick start (which would seem far superior to the implicit alternative of “slow start”) this model would now consume 24 W instead of 0.3 W and the TVs overall energy use would double due to all the hours this TV would now consume 24W of power.

*Sony's traditional Eco menu adds a Quick Start mode that enables the GT1 to turn on in about 4 seconds--just like a standard TV--as opposed to the 45-odd seconds it takes to boot up Google TV normally. In that mode, the TV uses 24 watts of standby power instead of the default 0.14. The TV's picture-in-picture is restricted to viewing a small window showing the TV source inset into the larger Google screens.*



EPA appears to have developed a two pronged approach for addressing standby power – a) It has kept the 1W requirement standby requirement for non internet ready TVs and for internet ready TVs that are not connected to the internet and b) requires manufacturers to test and only report the standby power use of internet ready TVs when connected to the internet prior to testing.

Specific concerns/recommendations we have for testing standby power of internet ready TVs:

- We agree with EPA’s proposed language in Section 3.4.2 “For products that offer more than one standby-passive mode, the standby-passive mode with the lowest power consumption shall be enabled by default.” We ask that EPA apply this same logic to new terminology it might adopt, such as Standby-Active, Low Mode.
- EPA should require manufacturers to test and report the standby power use of TVs connected to the internet when alternate settings such as Quick Start are selected (or the default setting is deselected). This data shall be posted on the ENERGY STAR QPL for each effected product and would inform potential specification revisions in Version 7.

**3. Forced Menu Settings/Prompts** – ENERGY STAR deserves a lot of the credit for shifting TVs from being shipped in an overly bright and power consumptive setting as a means to ensure TVs appear bright on the retail floor, to TVs having a forced menu

intended to move consumers to pick a brightness setting (and correspondingly lower power level) more appropriate for their homes. In section 3.2.3 and the notes EPA added, some compromise language meant to alert consumers when they might have picked a setting other than home mode was added. We have two recommendations on this matter:

a. Modify the current language “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.” (Section 3.2.3.iii)

We think the above text should only apply to TVs where a setting that uses more power than “home” is selected. We think it is unnecessary and counterproductive from an energy point of view to alert and require confirmation for users who might have picked a setting which uses less power than home (such as cinema mode for some TVs).

b. Modify the language that currently says “ Upon selection of retail picture setting at initial start up, either (1) display a second prompt requiring the user to confirm the choice of “retail setting , or (2) display information on the startup menu that the home picture setting is the setting in which the product qualifies for ENERGY STAR. (Section 3.2.3.ii)

While we support the intention here we think an improved implementation would be:

- Expand the coverage of this section to any time a setting more power consumptive than home is selected, not just during the initial set up. It’s possible that some users may elect to change the settings to something like vivid, which may use 25% more power, at a later time when they are getting better acquainted with the various menus and options within a TV.
- We think the clauses in section 3.2.3 ii should be connected by “and” not “or”.
- Modify the warning from being simply, confirm you picked retail, to something along the lines of “the setting you picked will cause your TV to use more power, confirm you meant to pick this setting (and if not then reverts back to home setting)”.

**4. Hospitality TVs** – Throughout the specification revision process there has been little discussion about the extra allowances provided to TVs sold into the hospitality sector ((e.g. hotels). While we don’t have a specific recommendation, we encourage EPA to further study the power use and energy savings opportunities of these models when the user is not watching TV or accessing the network. This data will help inform this portion of the specification as Version 7 is developed. We suggest that EPA add a Section 7 titled “CONSIDERATIONS FOR FUTURE REVISIONS”, as EPA has done in the Final Draft V6 Displays specification, and include language on EPA’s future plans to address hospitality TVs.