Proposal for the Inclusion of Power Overhang State in the ENERGY STAR Televisions Specification

EPA has received stakeholder questions about whether time spent in a high power operating state after the user has turned off the television should be classified as part of Download Acquisition Mode. It is EPA’s belief that these limited duration events have a negligible impact on total TV energy consumption, and should be allowed as an extension of On Mode provided that power does not exceed On Mode limits and duration is limited to 3 minutes per occurrence.

This proposal was originally included in the Draft Version 4.2 ENERGY STAR Televisions specification distributed to stakeholders on September 14th, 2010. In response to divergent stakeholder feedback and a need to avoid delays to finalization of that specification, EPA removed Power Overhang requirements from the Final Version 4.2 specification distributed on October 26th, 2010 with the plan to engage with stakeholders on this topic and develop a refined approach for power overhang in the Version 5.3 specification.

To facilitate stakeholder review, EPA has captured the Agency’s original proposal regarding power overhang and the comments EPA received on this proposal below. EPA is requesting stakeholder comment on this proposal by December 15, 2010 sent to televisions@energystar.gov.

Original EPA Proposal

Proposed Definition:

- **Power Overhang**: A power state within On Mode that is intended to facilitate a rapid return to full functionality in the event a product is accidentally switched off. This power state is present in some products that are designed to remain in a highly-functional “ready” state for a limited amount of time after being switched off by the user.

Proposed Requirements:

- Any Power Overhang state that occurs after the user has sent a command to switch the product into Sleep Mode, and immediately preceding entry into Sleep Mode, shall be less than 3 minutes in duration.
- Measured Power during the Power Overhang state shall be less than or equal to the Maximum On Mode Power Requirement ($P_{ON\_MAX}$) specified in section 3.3.1.

Stakeholder Comment on EPA Proposal

- “While we recognize the need to include a definition, the program utilized the on-mode power consumption of TVs to determine the impact this state represents and to develop a 3 minute time allowance in this mode. This does not take into consideration TVs that utilize power levels similar to those observed in DAM. We ask to allow a 6 minute or more allowance for products that consume
significantly less energy compared to on-mode power levels. Net impact will be
significantly less than the 5 kWh per year calculated using on mode power.”

• “Power overhang may also be due to cool-down requirements for projection
  lamps. Limiting power in this mode could significantly decrease product life.
  Therefore, exclude this mode of operation from the definition of power overhang,
  and set the duration of the entire transition to Sleep mode to less than 9 minutes.”