

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



OFFICE OF
AIR AND RADIATION

August 10, 2009

Dear Audio/Video Equipment Manufacturer or Other Interested Party:

The U.S. Environmental Protection Agency (EPA) welcomes your input on the attached Draft 2 Version 2.0 ENERGY STAR Audio/Video specification ("Draft 2"). EPA is revisiting the ENERGY STAR specification for audio/video equipment to (1) set new energy efficiency criteria for products that are currently covered by the ENERGY STAR Version 1.0 Audio/DVD specification, in order to ensure that the ENERGY STAR mark continues to represent the top performers in terms of energy efficiency; and (2) include energy efficiency criteria for a broader set of Audio/Video products previously not included in the Version 1.0 specification.

On May 22, 2009, EPA released the Draft 1 Version 2.0 Audio/Video specification and test procedure to the stakeholder community. A revised test procedure was subsequently released on July 15, 2009. EPA received many constructive comments on the Draft 1 specification and a limited amount of product test data over the past two months. The feedback and test data have been used to inform the development of this Draft 2 document.

Important modifications from Draft 1 to Draft 2 include:

- Auto Power Down (APD), Primary Function, and Idle state definitions have been added or modified to address several stakeholder concerns, and to meet the EPA's intention to encourage systems to turn off when they are not in use. EPA is requesting suggestions for how to define "loss of signal" criteria to trigger APD for audio and video input signals generated by external sources.
- The list of excluded products now includes (1) products which include an IP video tuner and are not sold under a service contract, as these will be addressed in the next revision of ENERGY STAR for Set Top Boxes, (2) whole-house AV systems, which will be considered by EPA separately in 2010 in the context of "home controls," and (3) videoconferencing systems and wireless microphone systems, as insufficient test data was received to inform the development of ENERGY STAR requirements.
- On and Sleep mode power consumption limits for various product functions have been proposed based on an analysis of AV test data recently submitted by stakeholders and from previous ENERGY STAR data collection efforts. EPA is still waiting for clarification on amplifier test data, and will propose power consumption limits for audio amplification upon receipt of additional information.
- Unique On mode requirements for stand-alone, dedicated audio digital signal processor (DSP) devices have been included in the specification. Based on stakeholder feedback, there is an opportunity for ENERGY STAR to achieve significant energy savings by defining APD requirements and Sleep mode power consumption limits for these products. However, the "audio signal processing" function that is the sole function of a

DSP device is a generic function of many products in the Audio/Video market. EPA believes that providing a separate allowance for this generic function would be inappropriate, since power consumption due to basic signal processing in other AV products will be included in the modal power limits for other product functions.

- Detailed test setup and instrumentation requirements have been removed from the test procedure. Test setup and instrumentation for both On mode and Sleep mode tests are now required to conform to the requirements in the internationally-recognized IEC 62301 test standard.
- IEC-62087 standard video content is now specified as the source content for various optical media player test procedures.
- Effective dates for product qualification for both Tier 1 and Tier 2 Version 2.0 Audio/Video specification have been proposed, along with details about qualifying products that are currently eligible for qualification under the Version 1.0 ENERGY STAR Audio/DVD program.

On and Sleep mode power allowances for several of the product functions proposed in earlier drafts of this document have been removed from the specification since test data indicates that these functions do not require additional power. To build a more complete set of test data, EPA continues to encourage stakeholders to take a more active role in the specification development process by testing their products and submitting test data for consideration.

As always, the exchange of ideas and information among EPA, industry, and other interested parties is critical to the success of ENERGY STAR. Manufacturers are strongly encouraged to e-mail feedback on Draft 2 Version 2.0 specification to AudioVideo@energystar.gov by **September 11, 2009**.

EPA plans to host a conference call to discuss the Draft 2 specification on **September 15, 2009**. Call-in information and an agenda will be distributed prior to the meeting.

To track EPA's progress in revising the specification for audio/video products, visit the ENERGY STAR Product Development Web site at www.energystar.gov/RevisedSpecs. Please direct any specific questions to Kathleen Vokes, EPA, at vokes.kathleen@epa.gov or Stephen Pantano, ICF International, at spantano@icfi.com.

Thank you for your continued support of ENERGY STAR.

Sincerely,



Kathleen Vokes
US Environmental Protection Agency
ENERGY STAR for Audio/Video