

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



OFFICE OF  
AIR AND RADIATION

July 24, 2008

Dear ENERGY STAR<sup>®</sup> Displays Partner or Other Interested Stakeholder:

The U.S. Environmental Protection Agency (EPA) and the European Commission (EC) welcomes your input on the following Draft 1 Version 5.0 ENERGY STAR displays specification. (This category was previously referred to as 'computer monitors,' but will be referred to as 'displays' moving forward due to its broader scope.) EPA is revisiting the ENERGY STAR specification for displays to set performance levels that ensure the ENERGY STAR mark continues to represent the top performers in terms of energy efficiency. This document outlines the proposed new energy-efficiency requirements that displays will need to meet in order to earn the ENERGY STAR mark. It is intended that once final, this document will replace the current Version 4.1 computer monitor specification. The proposed effective date for Tier 1 of this specification is October 21, 2009.

On behalf of EPA, I would like to thank all stakeholders who have provided (i) feedback in response to the ENERGY STAR Computer Monitor Discussion Guide (distributed on October 29, 2007) and (ii) data in response to two separate data requests made for non-qualified and qualified products on December 20, 2007 and March 11, 2008 respectively. The feedback and data received have helped to create the foundation for this Draft 1 specification.

The Draft 1 Version 5.0 specification includes the following key elements:

- Broadening the scope of the specification to allow other types of electronic displays to qualify, i.e., digital photo frames and professional signage, by providing a general 'display' definition in the specification.
- Proposed Tier 1 On Mode requirements that take into account both screen resolution and viewable screen area, based on the following equations:
  - If  $MP < 1$  megapixel and viewable diagonal screen size  $< 30$  inches, then  $P = 6.5*(MP) + 0.06*(A) + 3$ .
  - If  $X \geq 1$  megapixel and viewable diagonal screen size  $< 30$  inches, then  $P = 14*(MP) + 0.15*(A) - 19$ .
  - If viewable diagonal screen size is  $\geq 30$  inches, then  $P = 14*(MP) + 0.20*(A) - 44$ .

P is expressed in watts and rounded up to one decimal place, MP is the number of megapixels in decimal form (e.g., 1,920,000 pixels = 1.92 megapixels), and A is the viewable screen area of the product rounded to the nearest whole number, found by multiplying the viewable display width by the viewable display height.

- TBD Tier 2 On Mode requirements, with a proposed effective date of October 21, 2011.
- A proposed Tier 1 Sleep Mode requirement of two watts and an Off Mode requirement of one watt, both of which are identical to the requirements in the current Version 4.1 monitor specification.
- A proposed Tier 2 Sleep Mode requirement of one watt, which is identical to the Tier 2 Off Mode requirement.
- Testing products at their default, as-shipped luminance setting to determine ENERGY STAR qualification.

A masked version of the dataset used by EPA to determine the proposed energy efficiency requirements in this Draft 1 Version 5.0 displays specification is included as an attachment to this memorandum, accompanied by a set of charts summarizing the proposed requirements. Stakeholders are requested to **provide comments on**

**the Draft 1 specification no later than Wednesday, August 27, 2008. Please send comments via e-mail to Elliott Rector, ICF International, at [erector@icfi.com](mailto:erector@icfi.com).** All comments received will be posted to the ENERGY STAR Product Development Web site, unless the submitter specifically requests that their comments remain confidential. **On Thursday, September 25, 2008, EPA will host a stakeholder meeting in Washington, DC to discuss this Draft 1 specification.** Please relay your intention to participate in this meeting to Elliott Rector. (More information on meeting location and a Draft agenda will be forthcoming shortly.)


An updated proposed timeline for the displays specification revision process is provided below for stakeholder reference:

Thursday, July 24, 2008 – Draft 1 Version 5.0 displays specification distributed to industry  
Wednesday, August 27, 2008 – Comments due on Draft 1 specification  
Thursday, September 25, 2008 – Stakeholder meeting on Draft 1 Version 5.0 displays specification  
Wednesday, October 22, 2008 – Draft 2 Version 5.0 displays specification to industry  
Wednesday, November 12, 2008 – Comments due on Draft 2 specification  
Wednesday, December 10, 2008 – Draft Final Version 5.0 displays specification to industry  
Wednesday, December 31, 2008 – Comments die on Draft Final displays specification  
Wednesday, January 21, 2009 – Final Version 5.0 displays specification to industry  
Wednesday, October 21, 2009 – Effective date for Version 5.0 displays specification

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 displays specification and to review comments, please visit the Product Development Web site at [www.energystar.gov/productdevelopment](http://www.energystar.gov/productdevelopment) and click on "Revisions to Existing Specifications."

Thank you for taking the time to review this Draft specification. Please feel free to contact me directly with any questions or concerns at (202) 343-9046 or via e-mail at [kent.christopher@epa.gov](mailto:kent.christopher@epa.gov).

Best Regards,



Christopher Kent, EPA Product Manager  
ENERGY STAR Product Specification Development

Enclosures:

Draft 1 Version 5.0 ENERGY STAR Displays Specification  
Masked Dataset Used to Determine Proposed Draft 1 Energy Efficiency Requirements  
Charts to Depict Proposed Draft 1 Energy Efficiency Requirements