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

OFFICE OF
AIR AND RADIATION

February 19, 2008

Dear ENERGY STAR® External Power Supply (EPS) Partner or Other Interested Stakeholder:

The U.S. Environmental Protection Agency (EPA) welcomes your input on the following Final Draft Version 2.0 ENERGY STAR EPS specification. This document outlines the proposed new energy-efficiency requirements that EPS models would need to meet in order to earn the ENERGY STAR. It is intended that once final, this document will replace the current Version 1.1 specification.

While EPA was reviewing stakeholder comments on the Draft 1 specification, the Energy Independence and Security Act of 2007 was signed into law with new federal mandatory standards for EPSs to take effect on July 1, 2008.[1] As such, some stakeholders suggested that an ENERGY STAR Version 2.0 specification was not needed while others encouraged EPA to align ENERGY STAR requirements with these new standards. Based on the performance of currently available EPSs, EPA has concluded that sufficient differentiation remains among products such that an ENERGY STAR level more stringent than the pending standard could be established, offering a cost effective, more efficient alternative. Thus, EPA has proposed new efficiency levels in its Final Draft specification where 25% of the units in EPA's dataset would qualify as ENERGY STAR, taking into account the proposed Active Mode and No-Load Mode requirements.

In addition, a few stakeholders requested an increase in the maximum allowed No-Load power for ac-ac models. EPA did not implement this change because it would have made ENERGY STAR's voluntary levels less stringent than the new U.S. mandatory standards; the proposed Final Draft ENERGY STAR No-Load specification for ac-ac models is identical to the 0.5 watt limit in the Energy Independence and Security Act of 2007.

EPA was encouraged by some stakeholders to postpone the effective date for the Version 2.0 specification to allow more transition time for products such as telephony, whose ENERGY STAR specifications reference the EPS specification. Because the EPS federal mandatory standard that goes into effect on July 1, 2008 is more stringent than the current ENERGY STAR specification for EPSs, it is important, in order for ENERGY STAR to remain relevant in the market, for the new specification to go into effect as soon after that date as possible. Accordingly, EPA has proposed to extend the date until November 1, 2008, which allows approximately nine months transition.

Significant feedback was received on many elements of the Draft 1 Version 2.0 specification and, in response, EPA has made the following key adjustments to the proposed Version 2.0 energy-efficiency criteria:

[1] For more information, please visit the U.S. Department of Energy Web site at http://www.eere.energy.gov/buildings/appliance_standards/schedule_setting.html and click on the "Report to Congress on Appliance Energy Efficiency Rulemakings - Implementation Report: Energy Conservation Standards Activities," February 2008.

- Added a definition and separate Active Mode requirements for low voltage EPS models in recognition of design constraints that limit the efficiency of low voltage, high current products;
- Adjusted the Active Mode equations for EPS models at or below 49 watts output power to ensure more consistent qualification rates across various wattage ranges;
- Revised the higher wattage EPS threshold for Active Mode calculations from 36 watts to 49 watts. As such, Active Mode efficiency is based on three equations that relate to output power and cover 0 to less than or equal to 1 watt, greater than 1 watt to less than or equal to 49 watts; and greater than 49 watts;
- Changed the power factor requirement to apply to power supplies where input power is 100 watts or greater (and included a second power factor option for review and comment);
- Added new language to clarify that the effective date is based on the EPS unit's date of manufacture; and
- Inserted a new Section 6: Effective Date for ENERGY STAR Product Specifications to formally and concisely outline EPA's intentions with regards to EPS requirements in other ENERGY STAR end-use product specifications.

Finally, EPA has maintained its requirement of testing and qualification at 115 volts and 230 volts for EPSs capable of operating at multiple voltages and frequencies. At stakeholder request, when developing the Final Draft specification levels, EPA made sure to analyze the dataset in a way that is consistent with this approach – i.e., models with both 115V and 230V data must meet all levels at both voltages. A masked version of the dataset used by EPA to determine the proposed energy-efficiency requirements in this Final Draft Version 2.0 EPS specification is included as an attachment to this memorandum. Also, summary charts and graphs depicting the EPS data and the proposed levels are enclosed for stakeholder review.

Stakeholders are requested to **provide comments on the Final Draft specification no later than March 11, 2008. Please send comments via e-mail to Robin Clark, ICF International, at rclark@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. **EPA plans to finalize the Version 2.0 specification in March 2008**, allowing industry approximately nine months transition time prior to the new specification taking effect.

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 EPS specification and to review comments, please visit the Product Development Web site at www.energystar.gov/productdevelopment and click on "Revisions to Existing Specifications."

Thank you in advance for your input and suggestions. As always, I can be reached at (206) 553-6377 or Fanara.Andrew@epa.gov.

Best regards,

Andrew Fanara
ENERGY STAR Product Development
U.S. Environmental Protection Agency

Enclosures:
Final Draft Version 2.0 ENERGY STAR EPS Specification
Masked Dataset Used to Determine Proposed Final Draft Energy-Efficiency Requirements
Summary Final Draft EPS Version 2.0 Charts and Graphs