

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



OFFICE OF
AIR AND RADIATION

April 5, 2012

Dear ENERGY STAR® Uninterruptible Power Supply Stakeholder:

The U.S. Environmental Protection Agency (EPA) welcomes your comments on the attached **Draft Final ENERGY STAR Version 1.0 Uninterruptible Power Supply (UPS) specification and test method**. Stakeholders are encouraged to review the Draft Final and provide written comments to EPA no later than **Tuesday, April 24, 2012**.

EPA would like to thank all stakeholders who shared comments and data leading up to the creation of this Draft. This information was carefully reviewed and considered while developing this Final Draft document.

Below is a list of key changes/elements in the Draft Final. Note boxes are included throughout the draft specification to clarify EPA's reasoning for proposing the reflected changes.

- **Efficiency Requirements and Loading Profiles:** As a result of stakeholder input and EPA research, the loading profile for VI and VFI products with output power ≤ 1.5 kW has been revised to more accurately reflect the likely loading of these products. Additionally, several changes were made to the minimum efficiency levels for UPS products. Levels for VFD ≤ 1.5 kW and VI ≤ 10 kW products were reduced slightly to account for unit-to-unit variations in testing, while levels for VFI ≤ 10 kW were raised by 1 percent. After discussions with stakeholders and further data analysis, the level for VFI > 10 kW remains unchanged from Draft 3. These changes reflect EPA's assessment of efficiency levels based upon a final data review and recent discussions with stakeholders. They highlight top performing UPS products across all categories while also ensuring an adequate, cost-effective selection for consumers and institutional purchasers.
- **Metering Incentive:** After consultation with stakeholders and review of relevant standards, EPA has added clarifying language to this Draft Final specification relevant to the metering incentive. External meters bundled with a UPS may either meet Accuracy Class 2 or better as specified in IEC and ANSI standards, may meet alternative requirements stated in the specification, or, in the case of external meters sold with current transformers and supporting equipment, may exhibit a relative error less than or equal to 5 percent over this complete measurement system. Internal meters that are integrated into a UPS must exhibit a relative error less than or equal to 5 percent over the complete measurement system. As proposed in the February memo, the metering incentive has been changed to 1 percent. Finally, EPA has clarified that Dc-output UPS products > 10 kW may apply the metering incentive.
- **Backfeeding Allowance:** Based on stakeholder input, EPA has reintroduced the backfeeding allowance from IEC 62040-3 for testing UPS products with output power > 100 kW. This level has been suggested by a stakeholder as a reasonable cutoff, beyond which test loads significantly increase in cost. EPA believes that providing this option will give test houses an alternative to purchasing and operating large, dedicated test loads.

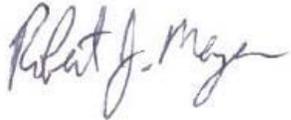
- Product Family Definition: Draft 3 inadvertently limited the definition of a Product Family to Modular UPSs. This Draft Final allows all UPS products to potentially qualify under a Product Family, provided they meet the requirements of the list of acceptable variations within the product family in the specification.
- Modular UPS: As proposed during the February 15, 2012, stakeholder webinar, EPA has revised Modular testing product selection requirements to allow manufacturers to select the minimum and maximum configurations for test. This allows manufacturers to qualify only those configurations that they offer for sale.

Submittal of Written Comments

Stakeholders are encouraged to submit written comments on the Draft Final specification to UPS@energystar.gov by **Tuesday, April 24, 2012**. For further information on specification development activities to date, visit the ENERGY STAR Product Development website at www.energystar.gov/NewSpecs and follow the link to "Uninterruptible Power Supplies."

Thank you for your continued support of the ENERGY STAR program. Please direct any specific questions to RJ Meyers, EPA, at Meyers.Robert@epa.gov, or 202-343-9923, or Matt Malinowski, ICF International, at mmalinowski@icfi.com or 202-862-2693.

Sincerely,

A handwritten signature in cursive script, appearing to read "Robert J. Meyers".

Robert Meyers
ENERGY STAR Data Center Products Manager