

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



OFFICE OF  
AIR AND RADIATION

April 7, 2010

Dear ENERGY STAR International Affiliate:

The United States Environmental Protection Agency (EPA) conducted a round of verification testing on a sample of ENERGY STAR qualified External Power Supplies (EPSs) from June through October 2009. The purpose of this letter is twofold:

- To provide you with a summary of the outcome of this testing, and present you with EPA's concerns regarding partner compliance with program requirements.
- To solicit your feedback on potential ways to improve compliance, covering the following three points:
  - Potentially overlooked program requirements
  - Facilitating future EPS verification testing
  - Information collected on EPSs pursuant to ENERGY STAR qualification

Verification Testing Results

EPA had 21 EPS models tested from a total of 13 ENERGY STAR partners. Of these, 12 failed to meet the ENERGY STAR program requirements in effect at the time of testing (Version 2.0). Of these 12 models, it was concluded that:

- seven were never intended to meet the Version 2.0 requirements for a variety of reasons, such as having a date of manufacturer that preceded the effective date of the Version 2.0 specification;
- three were intended to meet the Version 2.0 requirements, but failed because of testing methods that differed from those prescribed by the ENERGY STAR specification, or because of the unit's age and condition; and,
- it was unclear whether the remaining two were intended to meet the Version 2.0 requirements.

Please see the complete description of verification testing results attached for further details.

Through its follow-up correspondence with the EPS partners involved in this testing, EPA discovered that a significant number of EPS models on the ENERGY STAR qualified product list should not have been qualified, largely due to a lack of proper labeling. Consequently, EPA removed 295 EPS models from the ENERGY STAR qualified product list. A list of these disqualified models is attached.

Potentially Overlooked Program Requirements

As a result of correspondence with the EPS partners whose products were tested, EPA identified several issues it felt were instrumental in causing this high failure rate, and has therefore sent a memo to EPS partners to remind them of the following critical EPS program requirements:

- Proper marking: *ENERGY STAR Program Requirements for Single Voltage External Ac-Dc and Ac-Ac Power Supplies (Version 2.0)*<sup>1</sup> specifies that ENERGY STAR Partners shall clearly and permanently mark the nameplate of their qualifying EPSs with the appropriate Roman numeral (I – VI) that corresponds to specific minimum Active and No-Load efficiency levels as described in the *International Efficiency Marking Protocol*.<sup>2</sup> For an EPS to qualify under the Version 2.0 specification, it must meet level V efficiency levels or above, and therefore be marked with the Roman numeral V or above.

In light of this, the Roman numeral V must appear on all units of all ENERGY STAR qualified EPS models *unless the partner manufactures the same model to additional levels of efficiency*. In this case, only the level V efficiency model may bear the Roman numeral V.

- Following the correct test procedure: No departure from the test procedure described in *Test Method for Calculating the Energy Efficiency of Single-Voltage External Ac-Dc and Ac-Ac Power Supplies*<sup>3</sup> is acceptable. No exceptions or exemptions shall be made.
- Delisting obsolete models: If for any reason a model is no longer made to efficiency level V or marked with the Roman numeral V, then the partner must immediately have it removed from the qualified products list.
- Multiple voltages: As is stated in the specification, a model may be qualified only if it meets level V at *all applicable market voltages*. In other words, if it is sold to Europe and the United States, then it must meet level V at 115V and 230V.

EPA also wishes to note that of the EPS models it had tested, several were obtained through the purchase of ENERGY STAR qualified End-Use Products (EUPs). In most of these cases, the EUP failed to meet the *ENERGY STAR Program Requirements for End-Use Products Using External Power Supplies (Version 1.1)*.<sup>4</sup> Therefore, EPA also sent a memo to EUP partners to remind them of the following EUP program requirements:

- ENERGY STAR qualified EUPs must ship with an ENERGY STAR qualified EPS.
- EPSs shipped with EUPs marked as ENERGY STAR qualified must bear the Roman numeral V.
- ENERGY STAR qualified EUPs must not bear the ENERGY STAR certification mark, but instead bear the statement, “Powered by an ENERGY STAR qualified adapter for a better environment.”

EPA welcomes your feedback on the above points.

#### Facilitating Future EPS Verification Testing

EPA also wishes to solicit your feedback on facilitating the verification testing process for EPSs given that the selection of models for verification testing, and procurement of these models, present several challenges. First, many models on the qualified products list are not necessarily available for testing because they are built to order. Second, obtaining a selected EPS through purchase of an EUP is unreliable because it is uncertain what EPS is packaged with any given EUP. Third, direct delivery of an EPS from the manufacturer to the laboratory conducting the testing would fail to meet the requirement of obtaining a randomly selected unit for testing. Therefore, EPA would welcome your advice on how to

<sup>1</sup> Available at [http://www.energystar.gov/index.cfm?fuseaction=products\\_for\\_partners.showEPS](http://www.energystar.gov/index.cfm?fuseaction=products_for_partners.showEPS) (click “Program Requirements”).

<sup>2</sup> Available at [http://www.energystar.gov/index.cfm?fuseaction=products\\_for\\_partners.showEPS](http://www.energystar.gov/index.cfm?fuseaction=products_for_partners.showEPS) (click “International Efficiency Marking Protocol for External Power Supplies”).

<sup>3</sup> Available at [http://www.energystar.gov/index.cfm?fuseaction=products\\_for\\_partners.showEPS&s=yes](http://www.energystar.gov/index.cfm?fuseaction=products_for_partners.showEPS&s=yes) (click “Adapter Test Methodology”).

<sup>4</sup> Available at [http://www.energystar.gov/index.cfm?fuseaction=products\\_for\\_partners.showEPS&s=yes](http://www.energystar.gov/index.cfm?fuseaction=products_for_partners.showEPS&s=yes) (click “Partner Commitments”).

obtain units for testing that 1) have the same model number as those on the qualified products list; 2) have been randomly selected; and 3) are intended to meet the efficiency requirements in effect at the time of testing.

#### Information Collected on EPSs Pursuant to ENERGY STAR Qualification

Lastly, EPA is considering adding several new fields to the Online Product Submittal tool (OPS) program partners use to submit their EPS models pursuant to qualification. In adding these questions to OPS, EPA would hope to gain a clearer understanding of which qualified products are actually available in the marketplace, and which may be manufactured to efficiency levels in addition to V.

- Is this model currently available for order?
- Does this model exist only as a prototype?
- Has this model been manufactured since November 1, 2008 to an efficiency level lower than V?
- May this model be manufactured to an efficiency level lower than V?

EPA would be grateful for any comments you would like to share regarding the possible addition of these questions to OPS.

Please direct your questions or comments in response to this letter to Joshua Forgotson, ICF International, at (202) 862-2955 or [jforgotson@icfi.com](mailto:jforgotson@icfi.com), or Kathleen Vokes, EPA, at (202) 343-9019 or [vokes.kathleen@epa.gov](mailto:vokes.kathleen@epa.gov). Thank you for your continued affiliation with the ENERGY STAR program.

Sincerely,

A handwritten signature in cursive script that reads "Katharine Kaplan".

Katharine Kaplan, Acting Branch Chief  
ENERGY STAR Product Labeling