

Mr. Ryan Fogle  
United States Environmental Protection Agency  
ENERGY STAR Program  
1200 Pennsylvania Ave NW  
Washington, DC 20460

April 28, 2017

**RE: ASAP comments regarding ENERGY STAR Draft Version 1.1 and Version 2.0 Specifications for Uninterruptible Power Supplies**

Dear Mr. Fogle,

On April 13, 2017, the U.S. Environmental Protection Agency (EPA) presented draft 1 of versions 1.1 and 2.0 of its ENERGY STAR for uninterruptible power supplies specification by webinar. This letter submits comments on those draft specifications on behalf of the Appliance Standards Awareness Project (ASAP).

ASAP appreciates the presentation of this information, and the opportunity to provide input into the ENERGY STAR process. We strongly support the ENERGY STAR for UPS program, and the draft revisions to the specifications. We also support the technical comments submitted by the Natural Resources Defense Council on this topic. Rather than repeat those comments in detail, we summarize the salient points as follows:

**We support EPA's approach of introducing both a minor and a major revision of the UPS specification.**

Since EPA last revised v. 1.0 of the ENERGY STAR for UPS specification in 2012, the percentage of UPS products available on the U.S. market that are ENERGY STAR qualified has grown to nearly 100%. With near complete market migration to compliance with the ENERGY STAR specification, the energy efficiency requirements are ripe for an upgrade. A review of ENERGY STAR's UPS qualified-product list suggests that EPA's proposed efficiency requirements are reasonable, achievable, and correspond roughly to 25% of products on the current market across a range of UPS types and manufacturers, ensuring that consumers will still have a broad choice of ENERGY STAR qualified UPS under the proposed revisions.

**We recommend that EPA amend the proposed drafts to require UPS manufacturers to also test their products at 0%, 5% and 10% of reference test load.**

As discussed in detail in NRDC's comments, we concur that the test points for proportions of reference test load points included in version 1.0, and proposed for both versions 1.1 and 2.0, are not representative of actual UPS use. We believe this to be true for all types of UPS, but particularly not representative for UPS used with desktop computers, a common consumer application. In addition, consumers may lack the technical knowledge, or not have access to a

sufficiently broad range of UPS models at retail, to match a UPS to its intended application based on rated capacity.

An ENERGY STAR for UPS test procedure that does not represent real world applications could result in consumers not receiving the savings they expect when purchasing an ENERGY STAR qualified UPS. Therefore, we strongly recommend that EPA require that UPS be tested at 5% and 10% of reference test load. Similarly, the current test procedure does not account for UPS energy consumption when the desktop computer or other application plugged into the UPS is in off or sleep mode. Therefore we also recommend the inclusion of a test point at 0% of reference test load to capture UPS standby losses.

At this point there are insufficient data to characterize UPS energy efficiency at these common, lower load test points and we agree with NRDC that it would be appropriate for ENERGY STAR to require UPS manufacturers to test all of their products at these new test points and to report the results, but would not be appropriate to include the results in the UPS annual energy use equation until more information has been collected and analyzed.

**We generally support the revised energy efficiency levels proposed by EPA for both versions 1.1 and 2.0, with a suggestion.**

ENERGY STAR has proposed to decrease efficiency levels for VFD and VI UPS from Version 1.1 to 2.0 for both VFD and VI UPS with  $P > 10,000$  W. As noted in comments submitted by the Northwest Energy Efficiency Alliance, this proposed decrease does not appear to be the result of adoption of DOE's new UPS test procedure<sup>1</sup> because this applies only to UPS capable of operating at 115 V and 60 Hz that use NEMA 1-15P or 5-15P plug, and is therefore not applicable to high power UPS. We therefore suggest that EPA not decrease efficiency requirements for  $P > 10,000$  W VFD and VI UPS without providing further justification.

Sincerely,



Christopher Granda  
Senior Researcher/Advocate  
Appliance Standards Awareness Project

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<sup>1</sup> 81 FR 89806 (December 12, 2016)