

Appliance Standards Awareness Project  
American Council for an Energy-Efficient Economy

March 6, 2023

Mr. Jeremy Dommu  
U.S. Department of Energy  
Office of Energy Efficiency and Renewable Energy  
Building Technologies Office, EE-2J  
1000 Independence Avenue SW  
Washington, DC 20585

**RE: Docket Number EERE–2022–BT–TP–0005/RIN 1904–AF11: Notice of Proposed Rulemaking for Test Procedure for Uninterruptible Power Supplies**

Dear Mr. Dommu:

This letter constitutes the comments of the Appliance Standards Awareness Project (ASAP) and American Council for an Energy-Efficient Economy (ACEEE) on the notice of proposed rulemaking (NOPR) for test procedure for uninterruptible power supplies (UPSs). 88 Fed. Reg. 790 (January 5, 2023). We appreciate the opportunity to provide input to the Department.

**We support DOE’s proposal to add an optional no-load test based on the no-load test condition specified in the IEC test method.** In the current test procedure, UPSs are tested at 25%, 50%, 75%, and 100% load. While both the ENERGY STAR UPS specification and IEC 62040-3 Ed. 3.0 allow for testing at a 0% load condition, the DOE test procedure does not capture efficiency below 25% load. In particular, the current test procedure would not account for UPS energy consumption when a desktop computer is in off or sleep mode but still plugged in, which could be captured with a test point at 0%. In the NOPR, DOE proposed to incorporate a no-load test condition, which would better represent current UPS use.<sup>1</sup> Additionally, we encourage the Department to enable voluntary reporting of the no-load power consumption to the DOE compliance certification database to help provide this important information to consumers.

**We encourage DOE to establish a separate standby metric and standard based on the no-load test condition in a future standards rulemaking.** As described above, we support the proposal to incorporate an optional test load condition at 0% load. We further encourage the Department to establish a separate standby mode metric and standard in the future based on this no-load test condition. The UPS no-load condition aligns closely with battery charger maintenance mode (maintenance mode operation occurs when a battery charger is connected to a battery and provides some limited charging in order to maintain the battery at full charge). In the 2022 battery charger test procedure Final Rule, DOE determined that maintenance mode

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<sup>1</sup> 88 Fed. Reg. 797.

would qualify under EPCA's definition of standby.<sup>2</sup> Therefore, we believe that it would be appropriate to establish a standby metric and standard for UPSs based on the no-load test condition.

Thank you for considering these comments.

Sincerely,



Kanchan Swaroop  
Technical Advocacy Associate  
Appliance Standards Awareness Project



Jennifer Amann  
Senior Fellow  
American Council for an Energy-Efficient Economy

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<sup>2</sup> 87 Fed. Reg. 55107-55108. September 8, 2022.