

Draft Version 1.1 ENERGY STAR Uninterruptible Power Supplies Comment-response Document

Topic	Subtopic	Stakeholder Comment	EPA Response
Definition	General	Two stakeholders commented in opposition to the DOE definition of UPS, which defines UPSs as a battery charger. One stakeholder noted that re-categorizing these products will cause consumer confusion, while the other noted that it would exclude battery-less (e.g., flywheel) UPSs.	EPA has retained the broader, general UPS definition. EPA has only included the battery charger reference in the definition of UUT, which is test-procedure specific. EPA expects that all UPSs within the Appendix Y test method scope use batteries.
Definition	Voltage Independent (VI)	One stakeholder cautioned against using DOE's definition of VI UPSs. Specifically, it includes UPSs capable of protecting against over- or under-voltage, in contrast with the definition in International Energy Commission (IEC) standard 62040-3, which requires both over- and under-voltage protection. This would make the distinction between VI and VFD UPSs unclear. The stakeholder suggested using IEC's definition exclusively, or limiting DOE's definition to models under DOE's scope.	EPA has reverted to the Version 1.0 definition of VI for consistency with IEC 62040-3 and in consideration of the broad scope of the ENERGY STAR specification and the applicability of this definition to that full scope. However, to avoid confusion, EPA wishes to point out that under the DOE test method, VFD UPSs providing EITHER over- OR under-voltage protection will be classified as VI, per the VI definition in the Appendix Y test method, and would therefore be subject to the higher loading assumptions for VI \leq 1500 W. However the higher average loading condition for VI < 1500 W in the DOE test would cause their efficiency to appear higher, so this will not affect qualification to Version 1.1 requirements.
General		Four stakeholders commented in support of simultaneous Version 1.1 and Version 2.0 revisions.	EPA thanks stakeholders for their support.
Test Method	Test Voltage	One stakeholder noted that the DOE test method requires testing at the highest rated voltage, which would cause a discrepancy if that highest voltage is not in the table of voltages in the ENERGY STAR test procedure. The stakeholder specifically requested that 127 V/60 Hz be added to the ENERGY STAR test for consistency.	EPA does not believe that it is practical to provide a test condition for each maximum rated voltage for those products tested under the ENERGY STAR test method. There are a variety of UPSs that could face similar issues, with ratings as high as 140 and 154 V. In terms of Version 1.1, EPA believes that UPSs tested at a higher voltage should result in higher efficiency due to lower current and lower resistive losses and, therefore, this discrepancy will not negatively impact products under Version 1.1.
Test Method	Retesting	One stakeholder asked whether data collected under the ENERGY STAR Test Method for Uninterruptible Power Supplies, Rev. May-2012 (referenced by the Version 1.0 specification), specifically under voltages different than required by the DOE test method, would remain valid after June 12, 2017.	Units will remain certified to ENERGY STAR without retesting until Version 2.0 takes effect. However, manufacturers wishing to report efficiency data for products within the scope of Appendix Y will need to work with their certification body.