



Electrical Sector
3301 Spring Forest Road
Raleigh, NC 27616 -2922
tel: 919 872-3020
fax: 919 878-2330

Date: December 6, 2011

Robert J. Meyers
US Environmental Protection Agency
Energy Star for UPS
Washington, D.C. 20460

Eaton Corporation would like to respond to the Environmental Protection Agency (EPA) proposed Draft 3 ENERGY STAR® for UPS Specification. We appreciate the EPA's continued efforts to reach out to stakeholders in all aspects of the Energy Star for UPS program including the specification, test procedure, and power & performance datasheet.

Specification

With the addition of a power factor requirement, the specification should be clarified as to what load type and level, with Eaton's recommendation being 100% resistive load. The 100% load level is both an industry practice and an IEC requirement.

The credit related to the kilowatt-hour meter is a very reasonable compromise that resolves the industry's general opposition to the requirement or call for output kw-hr meter. We would recommend that the meter credit should be an option available to all UPS models, not just those above 10kW. Data center usage for UPS models smaller than 10 kW is quite common in today's information technology environment. We believe that the accuracy requirements should be specified. Eaton believes that 5% accuracy is reasonable to expect.

After much discussion with stakeholders, the EPA revised the specification limits in Draft 3 for the smaller power VFI units to be consistent with the higher power VFI models. This allowed some specification relief on those smaller models where we believe that fixed losses (fans, LED displays, and other housekeeping devices) become a significant percentage of rated output power. Eaton believes that this same logic should be applied to the smaller VFD and VI models since those same technical constraints exist for smaller VFD and VI units. Eaton would urge the EPA to again consider a modification for ALL lower power units.

Test Procedure

Eaton notes the considerable number of changes made to the test procedure. While we understand the challenges faced by the EPA to manage the testing of a wide range of products we would like to make some recommendations that may offer improvement to the test method. To protect against gamesmanship, the product under test FW revision and configuration should be included in the test report. We believe the procedure for assuring thermal stability to be overly burdensome and time consuming and recommend a return to the IEC 62040-3 test procedure. The reporting of dynamic response characteristics has no place in the test procedure which should be focused on efficiency alone; we recommend removal of the dynamic response measurement. Finally, we see no reason to have zero load as a measurement point and recommend removing it.

We look forward to the final publication of the Energy Star for UPS Specification.

A handwritten signature in black ink, appearing to read "Miguel E. Chavez", with a horizontal line underneath.

Miguel E. Chavez
Director of Engineering
Power Quality Operations – Americas
Eaton Corporation

MiguelEChavez@eaton.com
Tel +1 919-878-6080