

September 10, 2004

Re: Draft 3 Energy Star Program Requirements and Test Procedure for External Single Voltage AC to AC and AC to DC Power Supplies

On behalf of the Association of Home Appliance Manufacturers (AHAM) we are pleased to provide our comments on the proposed Test Procedure and Specifications for the Energy Star program for External Power Supplies. AHAM staff met with Kathleen Hogan, Ann Bailey, and Andrew Fanara of the Energy Star staff on September 8, 2004 to provide our views on this matter and are filing written comments to compliment and expand upon the comments made at that meeting.

The Association of Home Appliance Manufacturers represents manufacturers of major, portable and floor care products used throughout the home in the United States. Our manufacturers include companies located both in the United States and around the world. AHAM's Supplier Division represents companies who manufacture components and materials as well as deliver services to our industry.

AHAM objects to the current draft (i.e. Draft 3) Test Procedure and Specifications for the Energy Star Program for External Power Supplies because it inappropriately captures Battery Chargers within its scope. AHAM recommends that the EPA exempt these products from the draft Test Procedure and Specifications.

In 2003, the agency created an Energy Star program for External Power Supplies that from the outset was not supposed to include Battery Chargers. As explained to stakeholders, these products would be subject to a separate, yet to be determined, Energy Star program. Unfortunately, subsequent drafts of the EPS program specifications have included most types of Battery Chargers. AHAM objects to this approach.

EPA has designed the External Power Supply Test Procedure under a "one size fits all" approach that is not appropriate for Battery Chargers. The testing in the Draft 3 procedure is only to be conducted on the "small box" that is often referred to as a wall mount transformer or wall plug-in power adaptor. This is important, because while for an External Power Supply the "small box" might appear to be a separate and distinct part of an end-product, this is not true for a Battery Charger; a Battery Charger includes more components than are present in the "small box" that plugs into the wall. Other components of a Battery Charger are found inside the battery-operated product and the EPA program does not make a clean distinction between such components. Consequently, the draft Test Procedure inaccurately measures the efficiency of Battery Chargers and is biased against many types of Battery Chargers. The result is that as a

class, Battery Chargers will always appear to be less efficient compared to External Power Supplies as a class, if measured using the EPS Test Procedure. This is due to the way that they are designed for the safety of the consumers and the performance of the product. We believe that any proper Battery Charger efficiency test procedure must measure efficiency in all modes of the battery charging sequence, not just the output of the “little black box.”

The draft Test Procedure inappropriately measures the energy consumed by Battery Chargers. First of all, the Test Procedure’s measurement of input power and output power, when loaded to arbitrary current loads, is inaccurate when applied to a product that is designed to approximate a constant current source. Secondly, the present test procedure inaccurately measures only the output of the wall-mount adaptor portion of the Battery Charger circuit and ignores the other components, charge time, charging currents at different points in the battery recharging sequence, and the characteristics of the batteries. Lastly, the draft test procedure ignores production of transient voltages and power factors. By doing so, the procedure ignores many key elements of the performance of an External Power Supply. This means that it is possible to measure “energy efficiency” through the EPA draft Test Procedure and achieve Energy Star ratings but make an External Power Supply that can cause problems for power distribution equipment, force utilities to produce more current per watt of power, and can overall be less efficient than other models.

If EPA were to adopt this Test Procedure in its current form, it would place an unjustified and severe economic burden on many appliance manufacturers. Most significantly, the draft Test Procedure will force manufacturers of transformer-based Battery Chargers to change their product designs to those that are unproven, and not economically justified. Such changes could result in cost increases for some alternatives in the range of 100% to 400%, which would especially hurt small- and medium-sized manufacturers in the U.S.

In addition, AHAM asks that EPA provide a clear measurement of the proposed energy savings as it relates to Battery Chargers and release data on the projected energy savings from different classes of External Power Supplies and especially Battery Chargers used by the appliance industry.

EPA should consider alternatives to the current draft Test Procedure and not adopt the current draft as written. AHAM believes that the EPA has not adequately considered alternative approaches. We believe that a reasonable solution is for EPA to:

1. clearly state that the External Power Supply program is not intended to cover Battery Chargers and especially Battery Chargers for appliances¹; and
2. work cooperatively with the home appliance industry to develop an appropriate test procedure for measurement of the energy efficiency of Battery Chargers.

We thank you for the opportunity to comment on this important matter and we look forward to working with you further.

¹ We would suggest that EPA consider appliances to be household products that produce heat, light, or motion.

Sincerely,

A handwritten signature in black ink, appearing to read "Wayne E. Morris". The signature is fluid and cursive, with a large initial "W" and "M".

Wayne E. Morris
Vice President, Division Services

cc Andrew Fanara, EPA
Ann Bailey, EPA
Kathleen Hogan, EPA