

Enclosed is an electronic copy of NRDC's comments on the Preliminary Draft spec issued by Energy Star for external power supplies. We appreciate the opportunity to provide our feedback on the spec and look forward to participating in any future stakeholder discussions that may occur.

Should you have any questions, please contact me directly.

Sincerely,
Noah Horowitz

Noah Horowitz
NRDC
Sr. Scientist
71 Stevenson Street, Suite 1825
San Francisco, CA 94105

415-777-0220

[From Attached Word Document]

**NRDC Comments on 2/23/04 ENERGY STAR
External Power Supply Specification**

Noah D. Horowitz, Sr. Scientist
Natural Resources Defense Council

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The Natural Resources Defense Council is an environmental advocacy organization with over 550,000 members that is dedicated to protecting public health and the environment. NRDC has been working to improve the energy efficiency of buildings and the products used within them for the past 20 years. We are extremely encouraged by EPA's efforts to date to add external power supplies to its ENERGY STAR labeling program. Below we provide our comments on EPA's Preliminary Draft dated February 23, 2004.

1. NRDC Supports EPA's Approach for Setting Efficiency Targets Based on Multiple Loading Rates and Not Just 100% Loading

Historically power supply manufacturers have only reported the efficiency of their products at 100% loading rates, if at all. This approach is inadequate because:

- a) Many consumer and office electronics products that use power supplies are seldom operated at 100% of their loading.
- b) For most single voltage power supplies, the efficiency drops off at lower loading rates. In other words, the efficiency for many power supplies may be much lower at 25 to 50% loading rates, the part of the loading curve where the product might spend the most operating hours in, than at 100% loading.

The test method that EPA is proposing to use requires measurements to be taken at 0, 25, 50, 75, and 100% loading conditions. These values are then averaged and a single value, the average efficiency is reported. We support this approach and strongly encourage ENERGY STAR to resist other commenter's advice to base the spec simply on 100% loading. The average efficiency approach spans the full range of loading rates and will provide consumers and businesses with the greatest economic and environmental benefits. Conversely, while measuring and reporting efficiency at additional loading conditions beyond 0%, 25%, 50%, 75%, and 100% does no harm, it rarely yields information that cannot be estimated or interpolated from the five sets of data already collected.

2. Clarify How to Handle Power Supplies that Can Operate on More than One Voltage

Some power supplies, particularly those with switching designs, can operate on multiple voltages, i.e. 115V and 230 V. The test method requires the power supply manufacturer to test and report the average efficiency for both 115V and 230V for such models. For the purposes of setting its specification and determining future compliance, we encourage EPA to employ the lower of the two sets of average efficiency values to determine compliance with proposed ENERGY STAR® specifications. We also recommend that EPA add language to the next version of the specification to make this point more clear.

3. Allow Labeling of Power Supplies that Meet the ENERGY STAR PS Requirements

The current version of the ENERGY STAR specification does not explicitly talk about a power supply manufacturer or an OEM's ability to label its power supply or finished product. We believe the ability to label just the power supply provides several benefits:

- a) The efficiency of an external power supply cannot be determined reliably from its size, weight, or physical appearance. It is, literally, a "black box" in which an unknown percentage of incoming AC power is wasted in the process of conversion to DC power. Absent a mandatory requirement to disclose the average percentage efficiency on the exterior of all external power supplies, the government's only means of helping purchasers identify whether a particular sample is efficient is to ask for some form of printed indicator, such as a small black and white ENERGY STAR label.
- b) It seems clear that having the label on a power supply assures that OEMs, like Sony or Black and Decker, can more readily identify and purchase an efficient power supply for use with their products.
- c) Corporate and government purchasing agents can specify the purchase of compliant products and readily verify compliance.
- d) The label on the power supply provides the EPA and utilities with a very convenient tool to identify products that are claiming to meet the ENERGY STAR requirements. Without the label on the product, measurement and verification efforts are challenging, and utility marketing and promotion efforts are nearly impossible. Unlike some utility program designs that rely on a list of "qualified product" to determine qualification for an incentive, the sheer number of power supplies makes such an approach impractical and cumbersome.

NRDC recognizes and supports EPA's long-standing efforts to protect the integrity of the ENERGY STAR brand. We believe the approach described above preserves the ENERGY STAR label while still conveying the information that is needed.

We do not advocate at this time, a widespread allowance by manufacturers to simply label the finished product as ENERGY STAR only on the basis of including a complying power supply. This will require further research by EPA on a product-by-product category basis. For product categories that already exist in the ENERGY STAR program, we do support adding the power supply requirements into the requirements for the overall product.

We also encourage EPA and other stakeholders to consider the labeling approach proposed by Australian policy makers that involves applying a numeric mark on the power supply indicating which efficiency curve a particular model meets. (See memo from dated 3/3/04 from Mark Ellis and Shane Holt.) We think this approach has a lot of merit and provides a suitable alternative to placing the ENERGY STAR logo on the external power supply. This approach has long-term benefits as it makes implementation of future specifications easy to administer.

4. Harmonize with International Efforts

Other countries and regions of the world are concurrently exploring various policy options surrounding power supplies. We believe all stakeholders will benefit from a harmonized approach that at a minimum uses common

definitions, test methods, and performance metrics. EPA has been working very closely with the other international stakeholders to achieve this international harmonization and we applaud them for doing so.

NRDC remains very interested in the area of improving the energy efficiency of consumer and office electronics products and are committed to working all stakeholders to help EPA finalize and implement its specification for external power supplies.

Should you have any questions or comments, please do not hesitate to contact me directly at 415-777-0220 or via email at nhorowitz@nrdc.org.