

On behalf of Hewlett-Packard Company (HP), I am writing the U.S. Environmental Protection Agency (EPA) ENERGY STAR Office to provide comments on the ENERGY STAR® Program requirements for Single Voltage External AC-DC Power Supplies (Draft 3 Eligibility Criteria).

Below, HP provides several suggestions to improve the proposed rules.

#### Tier 2

The EPA indicates they plan to have Tier 2 rules become effective on July 1, 2006. In addition, the EPA discusses beginning the review process for Tier 2 approximately one year in advance of that date to gather data and provide input to help create Tier 2.

HP thinks there is a problem with the EPA's proposed timing for Tier 2. The problem starts with the expectation that most manufacturers of external power supplies (EPS) will have recently gone through a major redesign of their EPS to meet the European Union's (EU) new Restrictions on Hazardous Substances (RoHS) law. RoHS essentially eliminates lead, mercury, cadmium, hexavalent chrome, and other materials from most electronic equipment. In order to sell products in the EU, products must meet RoHS by July 1, 2006. Since RoHS compliant equipment must be available by July 1, 2006, EPS equipment manufacturers will have to design and implement new EPS units well in advance of that date. For end-use products using custom EPS, this could easily take 6-9 months. Then additional time may be required to ensure existing inventory of non-RoHS equipment has been sold and then replaced by RoHS compliant units. RoHS will force most EPS products used worldwide through a significant design change, likely during the second half of 2005.

If the EPA finalizes new rules shortly after this major effort to redesign EPS for RoHS, we think many product manufacturers will be very hesitant to go through another major redesign in a relatively short period of time in order to meet new Tier 2 ENERGY STAR rules. Reduced participation in ENERGY STAR would not benefit the program. We also do not think there is enough time for the EPA to pull up the schedule for implementing Tier 2. The EPA needs time to properly evaluate the impacts of Tier 1 in order to establish effective and reasonable targets for Tier 2. With these issues in mind, HP recommends the EPA delay implementation of the Tier 2 rules by 18 months (January 1, 2008 effective date).

#### End Use Product Rules

We understand the scope of the new EPS rules will not encompass details related to EPS use with ENERGY STAR qualified end-use products. However, we think it is important for the EPA to begin considering how the EPS requirements would affect end-use products.

HP is particularly concerned with the potential idea the EPA might require ENERGY STAR qualified end-use products to meet newly updated EPS rules as they become effective. This would be extremely difficult for manufacturers to meet end-use product requirements and EPS requirements which are on different schedules. HP recommends the EPS rules affecting ENERGY STAR end-use products be fixed at one set of values until the end-use product rules are updated. Basically the EPS rules would be static for end-use products until the end-use product rules are updated.

#### No Load Requirements

The Draft 3 EPA rules will capture approximately 14% less of the EPS than the EPA's stated goal of having the new rules represent the top 25% of products in the marketplace. HP also continues to think the amount of EPA data used to establish rules for higher output EPS is limited and may not truly represent higher output EPS. HP recommends the EPA allow some greater

power allowances for higher output devices (as we mentioned in our comments for Draft 2). Following are our recommendations:

<b>NAMEPLATE OUTPUT POWER (W)</b>	<b>MAXIMUM POWER IN NO-LOAD (W)</b>
0<W≤10	0.5
10<W≤75	0.75
75<W≤180	1

#### Revisit Testing Methodology

HP has recently seen a situation where ENERGY STAR EPS power requirements and EPS safety requirements came into conflict.

An advantage of using a so-called limited power supply (LPS) type of EPS for end-use products is that it allows the end-use product manufacturer to avoid adding halogenated flame retardants to the product plastics to increase its fire safety. This allows manufacturers to save money, increase the recycling options/potential for those plastics, and reduce their product testing requirements as the EPS manufacturers essentially do some of it (saves cost and product development time).

The LPS requirements limit the supply to less than 100W output for the range of input voltages. In the situation we have seen the LPS requirements can be maintained, but these results in the ENERGY STAR active mode efficiency at the 25% load level to cause the EPS to fail ENERGY STAR. If the EPS is modified to make it more efficient at the 25% level, then the 100W LPS output limit is violated and the EPS is no longer considered an LPS. Thus the end-use product must be modified to include plastics with flame retardant additives and hence experience the negative impacts discussed above.

HP recommends the EPA eliminate the requirement for testing EPS at the 25% level. This would resolve the particular conflict discussed above, as well as for other products which may be impacted by the same situation.

We appreciate this opportunity to comment and improve the ENERGY STAR program.