

The member companies of JEITA International Energy Star Committee have studied Draft 3.

The following is a compilation of their comments.

ENERGY STAR Program Requirements
For Single Voltage External AC-DC and AC-AC Power Supplies
JEITA Comments on DRAFT 3 Eligibility Criteria

The JEITA International Energy Star Committee

1) Definition

A. Single Voltage External AC-DC Power Supply

- No comment

B. Single Voltage External AC-AC Power Supply

- Comments

There are no comments on existing products which JEITA handles as there is no AC/AC external power supply.

C. Active Mode

- No comment

D. No-Load

- No comment

2) Qualifying Products

- No comment

3) Energy-Efficiency Specifications for Qualifying Products

A. Active Mode

1. Tier 1

- Comments

It is very difficult to change circuits in order to achieve Tier 1 specifications when obtaining safety standards is considered.

- Acquisition (modify application) for safety standards is required for meeting specifications due to circuit changes for existing mass-produced AC adaptors which do not satisfy Tier 1 specifications. It is difficult to respond when considering the cost/resources /time required to acquire safety standards (modify application).

- It would be much later that shipments could be made to the market even with a Tier 1 validation date of 11/02/2004 as it takes around 2 to 6 months to acquire safety standards.

- If the companies focus on applying for safety standards acquisition, the standards application agent and certifying authority will be stretched thin, resulting in further delays until certification is acquired.

- At the very least it will be very difficult to apply Tier 1 specifications until circuits are changed for "AC adaptors which do not satisfy Tier 1 specifications" already mass-produced and shipped.

2. Tier 2

■ Comments

Result of data analysis for PFC circuits/no PFC circuits should be included with Tier 2.

- PFC circuit/no PFC circuit is strongly related to the power efficiency specifications in the Active Mode.
- It is difficult to achieve a power efficiency specification of 84% for Tier 1 with existing mass-produced and shipped products with PFC circuits as they have poor efficiency at a 25% load. Most products would be NG. Redesigning the circuit to achieve Tier 1 would make improvements necessary, and lead to higher costs/increased size.
- AC adaptors which exceed 200 W are very difficult to make PFC compatible and consistent with Active Mode specifications.

■ Comments

Cost studies should be sufficiently included at Tier 2 as there is little improvement effects on power efficiency relative to higher costs vis-à-vis power efficiency for the 50-100% rated loads.

- The power efficiency in the range of 50-100% loads is approaching 90%.
- Power loss in each device must be decreased in order to further improve efficiency over 90%.

Although power loss will decrease by using high cost devices for this purpose, we are able to determine that there will be no effect on power efficiency improvements commensurate with this.

■ Comment

Please provide us with the results of EPA technical data analysis.

- Factors that affect Tier 2 specifications should be clarified, data collected and analysis results presented so that these specifications become something that manufacturers/industry understand.
- For example, at what ratio do AC adaptors with PFC circuits meet the specifications?
- In addition, we would like to know the basis/reason for classifications using rated power for specifications.

The power efficiency should be comparatively low in order to focus on the cost for classes (near 150 W) with high shipping volumes.

In contrast, energy saving functions are easy to add in as cost is initially high for classes (more than 200 W) with small shipping volumes.

B. No-Load Mode

1. Tier 1

- No comment

2. Tier 2

■ Comments

"Tier 2 specifications 0.5 W" are very difficult to guarantee as product specifications when considering variations of devices and circuits.

Specifications should not be determined only from measured data but should they not also allow for some margin?

- It is very difficult for AC adaptor vendors to guarantee "Tier 2 specifications 0.5 W" as product specifications because variations must be taken into consideration.
- Although the "measured data from 3 samples" are judged as satisfying the specifications, there are instances where there is no margin vis-à-vis specifications according to the external power supply.

Manufacturers who apply for Energy Star must make the determination that there can be no assurances for the user if there is very little margin when variations are considered.

4) Test Methodology

A. Safety Standards

- Comments

Energy Star should be specified for energy savings, and should not refer to safety standards.

There is no need to worry that safety standard conformity will have to be sacrificed for energy efficiency with the AC adaptors as they are originally mandatory as safety standards for each destination to be acquired.

In addition, the following may be tasks for the existing contents.

- Do standard numbers for safety standard UL change according to the products to be used?
- Safety standard numbers may change with the times.
- There are no descriptions regarding other countries' safety standards. Is this OK? Is there no problem when external power supply specifications are deployed internationally?

B. Number of Units Required for Test

■ Comments

- There is a rule that measured data of 3 samples will be submitted for the EPA. Those data should not be disclosed on the Web because the products vary. How is the measured data applied for handled?
- Applications for the "numeric values that can be guaranteed based on the margin" should be accepted without specifying the number of samples.

C. Models Capable of Operating at Multiple Voltage/Frequency Combinations

■ No comment

D. Multiple Tap or Switch Selectable Models

■ No comment

E. Submitting Qualified Product Data to EPA

■ No comment

5) Effective Date

■ Comments

- Although final Tier 2 proposals will be issued in the second half of 2005, and set for issuance on July 1, 2006, this period (about 6 months) is too short.
- External power supply circuits must be improved and safety standards acquired for the switching period. It is very difficult to respond in a six-month period.

■ Comments

What should the response be when external power supplies which have already passed the Tier 1 specifications and had the Energy Star mark added are NG at Tier 2 specifications?

■ Comments

Although there is a description that includes "external power supply specifications" for the end-use product, these will be specifications for 2 types of external power supplies that are end-use products and accessories (optional AC adaptor) in the future. Energy Star should stick to setting energy-saving specifications for end-use products as performed currently.

■ Comments

At first, Tier 1 specifications must be reviewed for every product if "external power supply specifications" are included in the end-use products and their use spread.

- We would like detailed EPA plans to be shown.
- Although revisions of printer specifications are moving ahead at present, what about the product categories where "external power supply specifications" additions are planned specifically for IT products?

If so, which specific product categories are "external power supply specifications" to be added to and when?

6) Future Specification Revisions

- No comment