

I am responding to you as Manufacturer and representative of EU Code of Conduct. My Company and all EU members support the intent and activity to waste less energy. I think that all EU members and manufacturers would like to make the maximum effort to have a world wide harmonized standard.

I will break comment down into 3 categories Test method, Limits, Exceptions and Products Affected

#### Test Method

The data provided by Chris Caldwell and our experience does not show any benefit to doing multiple point efficiency and averaging. Nearly all products test show a relatively flat efficiency from 25 to 100% with no big changes between products. We propose a simpler standard that requires efficiency at 100% rated load.

#### Limits

In general the limits proposed are acceptable with the following 2 exceptions.

1)The EU Members are proposing reducing no-load standby power for products less than 15W to be reduced from current spec of 0.5W to 0.3W by 2007.

2)For products In Europe there is a requirement for products that have greater input power above 75W to have additional power conversion stage to limit harmonic currents on AC line. This was brought into effect to eliminate neutral fire hazards in "Star" power distribution systems and to reduce distribution losses in AC Power grid for additional current that effectively does not get used. The standard requiring this EN61000-2-3. Although the US does not mandate this there is a benefit to using this. I have tried to calculate this benefit but do not have a good source for Power distribution losses that would give me valid comparisons.

The problem with adding circuitry to improve this adds another power conversion stage and efficiency loss. The European Members are proposing a 5% allowance in limits for products above 75W input that comply to EN61000-302 Class A limits.

#### Exceptions and Products affected

There are a number of products including Battery chargers, multiple output products that provide standby power to Energy start systems that are not possible to get compliant to current limits. These products have microcontrollers and other "System Function" loads that draw power or are constantly operating to support other Energy saving functions. We propose limiting the specification to single output products with exception for external power supplies with battery charging function built inside the products.

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