To: Rebecca Duff, ICF Consulting
1725 Eye Street NW, Suite 1000
Washington, DC 20006

From: The Power Sources Manufacturers Association Energy Committee

Date: May 20, 2005

Re: ENERGY STAR Preliminary Draft Computer Specification

This letter is to provide feedback to the EPA on the subject Specification, based upon our review of what has been labeled as Preliminary Draft Version 4.0. As a prelude to our comments, we would like it well understood that the PSMA Energy Committee believes that this specification is a needed document and will be very beneficial in contributing to our common goals of improved energy efficiency in electronic systems. However, the suggestions and comments offered below should be taken in the context of continuing the discussion rather than as changes that need to be made. PSMA represents power supply manufacturers, not computer manufacturers, and therefore cannot speak with authority on computer design issues. That stated, the following is offered for your consideration:

1. This specification is completely silent on the subject of power factor correction and we think that is a significant omission. Providing high power factor in a computer power supply adds some measurable power consumption cost (as well as a cost in dollars) and since high power factor is not yet a mandated requirement world wide, ignoring it actually incentivises against improving power factor. Our suggestion would be that, at least in the Active Mode, a lower efficiency limit be allowed for systems having an input power factor higher than 0.9. (Or a higher limit be required for those without.)

2. The definition of the various computer operating modes could perhaps benefit from further clarification. The terms: "Sleep Mode" and "Standby Mode" seem reversed in their use. One would assume that "Standby"

infers a higher level of readiness than "Sleep" and yet this draft defines Standby as the lowest power consuming level. And it would help if the definitions actually describe the system configuration: i.e., hard drive running, memory off, monitor disabled, etc.

3. On the same subject, the "Idle Mode" requirement appears a little awkward in that it seems more important that the computer not be allowed to remain in the Idle Mode for any length of time rather than worry about the power used in this mode. It might actually be difficult to measure Idle efficiency in a well designed computer that only offered a finite time to make the measurement before automatically switching to a lower power state. As an additional consideration, the requirement for Active Mode efficiency is specified at 20%, 50%, and 100% of rated power. Surely one of these ranges would cover Idle Mode power.

4. And that raises the question of what is meant by the term "Rated Power"? In the other modes, it appears reasonable to address the computer as a complete system where input power can easily be measured. But in Active Mode, the use of "percent of rated output" can not be referring to computing output so it should be made clear that we are now talking about the power supply separate from the computer. And this assumes that the power supply can be separated from the computer. It also means that the energy efficiency of the computer itself is not a part of the equation.

5. And, finally, it should be recognized that imposing a finite limit of input power in the Sleep and Standby Modes may impose a significant hurdle for higher power systems. If a goal is not to impose "significant" financial hardship, a sliding power limit may warrant further consideration.

We thank you for this opportunity to provide our inputs into this process and would be glad to continue the conversation as the specification develops.

Regards,

Robert A. Mammano for PSMA Energy Committee

Contact Information:
      E-mail: Mammano@ti.com
      Phone: 714-665-4065