



May 20, 2005

Rebecca M. Duff  
Project Manager  
ICF Consulting  
1725 Eye Street, NW, Suite 1000  
Washington, DC 20006

Ref: Preliminary Draft of Eligibility Requirements  
Energy Star® Program Requirements for Computers

Dear Ms. Duff:

The Information Technology Industry Council, ITI, appreciates the opportunity to submit comments in response to the Preliminary Draft of Eligibility Criteria for Computers under the Energy Star™ Program (ES). Our comments will also be preliminary, as we anticipate offering a more thorough response at the ITI-hosted meeting next month in Austin.

At the outset, we want to thank EPA for your willingness to work with us to resolve the power management (PM) problem. Finding a satisfactory, technology-neutral solution to this issue, whatever its cause or causes, will go a long way toward achieving the energy savings that are targeted by certain provisions proposed by EPA (e.g., idle mode), without imposing new requirements on manufacturers that will be costly and difficult to implement, and may well increase consumer dissatisfaction with PM in general. We look forward to continued engagement on this critical matter in the coming months.

The following comments address various portions of the preliminary draft, as noted:

- **Definitions**

The proposal seeks to draw distinctions between various technologies under the general category of “computer.” For example, it distinguishes “workstation” from “high-end desktop systems, when in truth, there is no generally accepted definition for a workstation. In fact, we will argue that “workstations” should not even be included in under Energy Star, given their role in the marketplace.

Regarding servers, the proposal introduces the term “desktop-derived.” We conducted a search on Google and every reference for it pointed to the 80-Plus initiative sponsored by Ecos Consulting. In other words, it is not an industry term, nor generally recognized by industry. Accordingly, this, too, needs to be defined via a consensus process before it is subject to ES specifications and included in an

ES MOU. As noted at the March meetings, industry welcomes the opportunity to work with EPA and other interested parties to work toward consensus definitions for workstations, various categories of servers, etc.

In addition, it is critical to define scientifically valid test methods for measuring power consumption in each of the power states covered by the specification. Industry welcomes the opportunity to work with EPA to develop such test methods.

- **Idle Mode**

The same arguments apply to EPA's introduction of the concept "idle mode." We remain opposed to the inclusion of an idle mode specification for computers for the same reasons that we have opposed inclusion of an "active mode" specification, e.g., because it could negatively impact product performance and therefore customer satisfaction (clearly of critical importance, in light of the overarching issue of power management disablement). By endeavoring to regulate idle mode, EPA may be introducing a whole new level of complication, especially with the advent of 64-bit operating system architecture, which will require additional hardware resources (e.g., memory, hard drives, bus interfaces, etc.) and power.

As expressed at the March meeting and again this past Wednesday, we still believe that the best solution for addressing "idle mode" is to resolve the PM disabling problem. Nevertheless, we are discussing alternatives to "idle mode" that we will outline at the June meeting.

- **Maximum Response Time (note on page 2)**

This is a customer preference/satisfaction issue that appears intended in part to address the power management disabling issue. We anticipate that resolution of the latter will eliminate any need to mandate a response time. In our opinion, shortening the default power management time may actually lead to further power management disabling as consumers become frustrated with a computer that quickly falls asleep.

- **Internal Power Supply Efficiency:**

On principle, we continue to oppose EPA establishing separate consumption specifications for internal components. Moreover, early research indicates that the proposed changes to power supply efficiency would be *very* costly, and would require at least 18 months in re-design lead time. Even then, there is no guaranty that there will be sufficient sources of supply to ensure manufacturers can meet production schedules, etc. Nevertheless, we are willing to work with EPA to identify possible ways to address power supply efficiency that is cost-effective for manufacturers and consumers.

- **Standby for Portables**

As was mentioned and agreed to at the March meeting, the effective date of standby mode for laptops should be harmonized with that adopted by the California Energy Commission, Australia and New Zealand, i.e., 2008. We appreciate EPA's commitment to accept this recommendation. We also recommend that this provision be clarified. Specifically, it is our understanding that this requirement applies to the power supply itself and not the notebook computer.

- **≤ 5 Watt Sleep Mode Limit for High-End Computers**

Given the large memory configurations and existing memory technology used on high-end computer systems and the introduction of new technologies in the sleep state, it will be extremely difficult to meet the 5W limit using even the existing ACPI S3 (save to RAM) mode, as the memory alone will dissipate more than the allowed 5 Watts. In order to make 5W, it may be necessary to use some technology equivalent to ACPI S4 (save to disk). Due to the need to spin up the disk to resume, this will necessitate a slow response time, which could exacerbate the disabling problem.

Moreover, a strict 5W limit would restrict the ability to improve the wake logic in order to address the issue of disabling power management features (due to dissatisfaction with network connectivity and general wake support in the build-out networked environment). Potential energy savings from improving power management disabling far outweigh the relatively small savings from reducing sleep power.

We also question the validity of establishing an arbitrary limit that is not tied to any other factor. Industry is developing an alternative proposal that addresses this issue. It will be outlined at the June meeting.

- **Tier II**

As previously stated, we believe that the power management disabling issue cannot be delayed to future discussions, but should be addressed as a priority. Fixing this issue will lead to far greater energy savings than the existing draft proposal to set limits on idle, sleep and standby. We welcome discussion on this topic.

Other elements put forward in Tier II such as system energy efficiency should be delayed until power management disabling, definitions, idle, sleep and other issues are resolved. In our opinion, these issues alone will require an extensive amount of time to discuss and resolve.

## **Request**

In preparation for, and to ensure maximum progress at, the June sessions, it would be helpful if EPA would make available all relevant data that was utilized to develop the Preliminary Draft, e.g., the “idle mode” research, specific data on projected savings from higher efficiency power supplies, etc. We may have additional requests prior to and following the meeting, and welcome EPA’s inquiries as well.

Thank you for the opportunity to submit preliminary comments on the draft Eligibility Criteria for Computers. We look forward to continuing this constructive engagement on a matter of distinct importance to all Energy Star stakeholders.

Best Regards,

Ken J. Salaets  
Director