



March 14, 2008

Andrew Fanara
c/o Rebecca Duff (ICF)
ENERGY STAR Program Manager
Environmental Protection Agency
1200 Pennsylvania Ave. NW
MC 6202J
Washington, DC 20460

Dear Andrew:

The Consortium for Energy Efficiency (CEE) appreciates the opportunity to provide comments on the ENERGY STAR Draft 1 Program Requirements for Computer Servers. CEE values its close working relationship with ENERGY STAR and industry stakeholders to develop common energy performance specifications and application guidance for use by member efficiency programs.

The CEE Data Centers and Servers Committee (the Committee), which includes CEE member energy efficiency program managers, convened to review this specification. At this time, the Committee has several questions for the Environmental Protection Agency (EPA) regarding the draft specification. Going forward, the Committee asks that EPA provide the Committee with relevant feedback, data and guidance to help address these questions:

1. **Scope of servers covered:** It is the Committee's understanding that EPA intends to be as inclusive as possible in the types of servers covered by the specification.
 - a. By requiring power management capability (e.g., dedicated management controller) would smaller servers that are not equipped with this capability be excluded from qualifying under ENERGY STAR (e.g., 1U or 2U units, small towers)? If so, approximately how much of the server market does this category represent?
 - b. Would requiring power supply test procedures at the higher 230VAC/60hz level exclude servers intended for U.S. standard office environments (120VAC/60hz) from qualifying for ENERGY STAR? If so, approximately how much of the server market does this category represent?
 - c. The proposed computer server definition includes the following characteristic: "Support for => 16 GBytes error-correcting code (ECC) and/or buffered memory". If this element becomes a defining computer server characteristic, how much of the current server market would be excluded from qualifying for ENERGY STAR?
2. **Server "baseline" energy consumption and savings:** The Committee is interested in opportunities that will help to maximize energy savings in data centers. To inform Committee consideration of server efficiency requirements and the levels of energy savings available:

- a. What does EPA consider to be the baseline or “standard” server energy performance (kWh/year) across the range of server types intended to be covered by ENERGY STAR?
 - b. What does EPA anticipate is the range (lower and upper boundaries) of energy consumption (kWh/year) savings for an ENERGY STAR rated server model over a “standard” server model across server types?
3. **Idle Power:** The Committee is interested in EPA’s data and findings on the potential, additional energy savings of an Idle Power requirement. What is the anticipated energy savings potential (kWh/year) for servers that can idle at very low power consuming levels versus an equivalent server that does not have a “sleep” function? The Committee is particularly interested in those installations where night and weekend workloads are minimal (e.g., office automation file servers).

In addition to the Committee’s questions, CEE feels that guidance from EPA on several aspects will help energy efficiency program administrators make an informed decision about the relevance of this specification for inclusion in programs. CEE asks that EPA help to further refine our understanding of:

1. How significant are the energy savings potentials and the distinctions in server performance in the market?
2. Based on past market information and pace of technology change, for how long would the Tier 1 ENERGY STAR server distinction be relevant?
3. How much of the total data centers savings potential, for what ENERGY STAR could potentially cover in data centers, does this server specification opportunity represent?

The Committee looks forward to working closely with ENERGY STAR in order to mutually leverage the developing knowledge base from this development process. We would like to thank EPA for the opportunity to comment on the ENERGY STAR Draft 1 Program Requirements for Computer Servers. Please contact CEE Sr. Program Manager, Jason Erwin, at 617-589-3949, ext. 212 with any questions about these comments.

Sincerely,



Marc Hoffman
Executive Director