



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
AIR AND RADIATION

May 11, 2012

Dear Computer Server Manufacturer or Other Interested Stakeholder:

The U.S. Environmental Protection Agency (EPA) welcomes your input on the attached **Draft 2** Version 2.0 ENERGY STAR® Specification for Computer Servers. The deadline to provide comments on this Draft 2 Specification is **June 6, 2012**.

Draft 2 incorporates input received during EPA's data assembly process and from discussions with stakeholders on issues such as product family structure and blade server testing conditions. During this time, EPA has also maintained a regular participatory role in development meetings for the Server Efficiency Rating Tool (SERT) and will further develop SERT-related areas of this specification in future drafts. EPA wishes to inform stakeholders that the most recent copy of the SERT Design Document, a resource that includes extensive descriptions of technical and design criteria for the SERT product, remains publically available at http://www.spec.org/sert/docs/SERT-Design_Doc.pdf. A second Beta version of SERT will be made available for review soon. Stakeholders are encouraged to review the Design Document and forward questions or comments on the document or Beta participation to servers@energystar.gov.

The following are some of the key elements of this Draft 2 Specification:

- **Section 1:** Definitions largely mirror those presented in conjunction with the dataset development in 2011 (*ENERGY_STAR_Servers_Dataset_Assembly_Test_Method.pdf*). The definition for Computer Server is revised.
 - Also included in Section 1 are definitions for the five-point product family structure for use in Version 2.0. EPA believes that this structure reduces the amount of product testing necessary to obtain ENERGY STAR qualification while supporting the larger goal of providing sufficient information to purchasers.
- **Section 3.2:** Power supply efficiency and power factor requirements match those included with Draft 1. The Test Protocol revision reference is updated to the most current available – Revision 6.6.
- **Section 3.4:** References to blade chassis power requirements, present in Draft 1, have been removed. After discussions with stakeholders and review of blade systems currently on the market, EPA has determined that setting levels applicable to the range of chassis solutions available is not possible due to differences in how vendors choose to design shared resources. Other system-level criteria for blades remain in place.
- **Section 3.6 – 3.8:** For Idle Mode and Full Load, the Version 1.0 approach is maintained for existing products in the program: one- and two socket servers remain subject to Idle Mode power limits and three- and four-socket systems are required to disclose Idle Mode data as a prerequisite to qualification. Blade servers are required to fulfill requirements similar to those applied to three- and four-socket rackmounted servers in addition to chassis-level criteria.
- **Section 3.9:** A requirement has been added for testing systems that utilize general purpose computing on graphical processing units (GPGPUs), to support appropriate inclusion of products with these components in future specifications.

- Section 4: A notebbox introduces EPA's intent to pursue a new electronic format for the Power and Performance Database (PPDS).
- A separate Test Method is included in the distribution. It is based on the version distributed with the dataset development documentation. Incorporated revisions reflect Stakeholder recommendations to accommodate active mode testing.

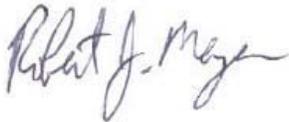
More details regarding EPA's rationale for the changes listed above are included in note boxes throughout the document.

Comment Submittal

All stakeholders are encouraged to provide written comments on the Draft 2 Specification to servers@energystar.gov by **June 6, 2012**, as noted above. All comments will be posted to the ENERGY STAR Product Development web site unless the submitter requests that their comments remain confidential. If you support particular aspects of the Draft 2 Specification, please also state this in writing. It is equally important that EPA understand which portions of the draft specification meet with stakeholder approval, in addition to identifying the sections that may need further revision.

Thank you for your continued support of the ENERGY STAR program. Stakeholder participation is critical to developing a meaningful specification and to the overall success of ENERGY STAR. Please feel free to contact me at (202) 343-9923 or Meyers.Robert@epa.gov with any questions or comments. Please also contact Bryan Berringer at (202) 586-0371 or Bryan.Berringer@ee.doe.gov for any test method-related questions.

Sincerely,



Robert Meyers
Product Manager, ENERGY STAR Computer Servers