

IBM appreciates the opportunity to comment on the V1.1 revisions to the Computer Server Requirements and Partner Commitment. These comments cover the changes to the server requirements (pages 1-15 of the Computer Server Requirements V1.1). IBM submitted comments on the changes to the V1.1 partner commitments on 10/1/2010. IBM has two significant concerns with the proposed revisions, and several minor concerns. IBM did participate in the development of and supports the content of the comments submitted by ITI with regards to the computer server requirements. IBM offers the following specific comments to the draft document:

SIGNIFICANT CONCERNS:

Page 4; lines 112-139; Section 1.E: Product Family: EPA has not made any modifications to the product family definition. IBM and other server manufacturers have commented to EPA that the current restrictions on the boundaries of the product family over segregate the product family below the machine model number. The current boundary definitions require extensive testing to cover all the iterations of processor core count, quantity of populated sockets and socket power.

IBM recommends that EPA modify the 1.E.3 as part of the V1.1 revisions as follows:

Include processors per the following guidelines:

- a. Identify those processor models and socket power specifications available for the given machine type which enable the server to qualify to the ENERGY STAR® Computer Server Requirements. These processors can include multiple core counts.
- b. The number of populated sockets can be varied within a product family.
- c. Processor clock speed may vary within a product family.

In general terms, IBM recommends that the product family boundary criteria be expanded. If EPA does not agree that core count, number of populated sockets and socket power should all be allowed to vary within a product family, IBM recommends that the boundaries criteria be reduced by eliminating core count and number of populated sockets (second preference) or just core counts (third preference) as a criteria.

IBM will provide data on both an x86 and Power 7 machine types to EPA by October 29, 2010, to illustrate the specifics of its proposal for changes to the product family.

Page 9: Lines 255-56: EPA added a requirement for “detailed info about OS, software & power management settings used for ENERGY STAR qualification to be included in printed and electronic product literature.

This requirement was not present in version 1.0. The information on OS, software and power management settings are provided in the Power and Performance Data Sheet. Requiring companies to include this in their standard product literature establishes an unnecessary burden on manufacturers while creating confusion and adding no value for the purchaser of the server. Inclusion of this information in the ENERGY STAR®

product data sheet is sufficient to communicate the product settings used in the ENERGY STAR test.

MINOR COMMENTS

Page 3 Line 106 1.D: Operational Modes: With the reorganization of the definitions, it is noted that the only defined operational mode for a server is the “Idle State” (1.D.1) EPA should add other operating modes (such as active state) relevant to the requirements developed in the Tier 2 Computer Server Requirements.

Page 4, line 121: TDP should be spelled out.

Page 4, line 140: References to (e) and (f) should be to (5) and (6).

Page 9/10 3.5 Standard Information Reporting Requirements

EPA removed the language which allowed EPA to update the template with consultation of stakeholders. V1.0 pp.11-12

“EPA may periodically revise this template, as necessary, and will notify Partners of the revision process.”

IBM believes it may be useful for EPA to retain the capability to edit the data sheet outside of the requirements revision process, as use of the sheet by manufacturers and server purchasers may identify improvements which can be made to the form. It may be appropriate to change the sentence to read, “EPA may periodically revise the Power and Performance Datasheet, as necessary, and will consult with Partners and relevant stakeholders as part of the revision process.”

Page 11: Line 331: Change the hard drive requirement to “...hard drives **with the maximum power draw.**” The highest power HDDs are those with the highest rpm, not the highest capacity.