

From: Chris Malone [mailto:cmalone@google.com]
Sent: Tuesday, December 09, 2008 8:02 PM
To: Duff, Rebecca M.
Cc: Chris Malone; Bill Weihl; Erik Teetzel
Subject: Re: Update on ENERGY STAR Server Initiative

Hello Rebecca:

Google's detailed feedback on Draft 3 of the Energy Star Program Requirements for Computer Servers Spec is outlined, by line number, below.

In general, we support the content of the document and the continued efforts to harmonize power supply efficiency requirements with those adopted by the Climate Savers Computing Initiative. For consistency, please consider matching the EPA multi-out power supply efficiency requirement to the existing Climate Savers 'Bronze' volume server efficiency requirement. Currently, the Climate Savers specification requires 81% efficiency at 20% and 100% load whereas the EPA requirements states 82%.

Feel free to contact me if you have questions or comments.

Regards,
Chris Malone

Detailed Feedback

Line 365 - See comment in the main body of the message above.

Line 366 - The power factor requirements at 10% are overly aggressive and should be relaxed. The multi rail 10% load should have a number.

Lines 455, 456 - We re-iterate our comments from Draft 2. Specifying by memory size leads to gaming and makes the specification out-of-date quickly. SPECPower should provide a more-objective metric. Additionally, the 15W adder for a second disk in Table 4 seems overly generous. It seems inconsistent with allocating 8W for additional drives over two.

Line 526 - The maximum configuration definition is too vague. How is highest performance defined? There are different configurations for different performance goals: 4GB, or 16GB DIMMS, 300W video card or a 5W IO card, 130W CPU or 65W, etc.

Line 624 - Tier 2 requirements are very vague

Line 639 - We prefer the current power supply efficiency requirements to the Net Power Loss approach.