

Dell Comment on ENERGY STAR for Computer Servers Final Draft

May 4, 2009

Environmental Protection Agency
ENERGY STAR Program

We appreciate the EPA's efforts at standardizing energy efficiency and consumption of computing devices, as reflected in this ENERGY STAR Computer Server Final Draft. We are pleased to submit our comment for your review.

Sincerely yours,
Jay Taylor (512) 728-3777
Sr Engineer Global Strategist
Dell, Inc. MS PS4-30
One Dell Way
Round Rock, TX 78682

We have reviewed the Energy Star Final Draft Computer Server Specification and have the following comment.

Dell's cooperation and support of the Energy Star standards we consider essential in the ongoing efforts to reduce the impact of climate change. Dell is concerned with the developments of the Energy Star standard targeted at Servers. We consider the EPA and specifically the Energy Star program our partner in the global climate change effort.

Dell Detailed Comments and Recommendations for the Final Draft ENERGY STAR Server Specification

Dell's concern is the implementation date for introduction of the Energy Star for Server standard is not adequate for deploying a standard of this magnitude, depth and complexity. With immediate implementation of the Energy Star for Computer Servers standard; Dell's view is the implementation does not meet the spirit or the intent of Energy Policy Act of 2005. The server specification certainly falls into the new or significant revision of a product category and timing requirements of the manufacturing and distribution process are impacted by this change when coupled with the Federal Acquisition Rules, as currently written.

Reducing the environmental impact of materials such as data sheets should be prioritized and a focus on providing paperless deliverables, such as soft copy or web delivery should be embraced. For the purpose of efficiency, cost and maintaining the greenest of standards with this new set of server requirements, it is Dell's position that all Energy Star related marketing or technical materials be distributed in electronic format.

With respect to power supply power factor correction under low load conditions; Dell questions specifying PFC below the 100 watt level. The server Final Draft document revised PFC values as well. Making the changes to PFC values this late in the draft process insures that power supply designs started several months back with the first draft, will now require revisions to comply. See Dell's previous comment on implementation schedule.

In referencing another Energy Star standard that deals with single output power supplies; PFC values are not a requirement for an EPS (Also a Single Output Power Supply) below 100 watts in the Energy Star EPS specification. See attached.

In addition to the Active Mode efficiency requirements found above, power supplies with greater than or equal to 100 watts *input* power must have a true power factor of 0.9 or greater at 100% of rated load when tested at 115 volts @ 60Hz.

Processor Utilization Measurements: Energy Star proposed a measurement algorithm for processor utilization that is not common across Unix OS, Microsoft OS or Virtualization Hypervisors. The results from the above listed operating systems and hypervisors may not align with the algorithm proposed by EPA. The OS or Hypervisor CPU load should be accepted as reported.

In addition, Dell requests language is inserted to power monitoring section to explicitly state that “CPU loading accuracy requirements are limited to system operating conditions”.

Thank you for the opportunity to comment.

Jay Taylor (512) 728-3777
Sr Engineer Global Strategist
Dell, Inc. MS PS4-30
One Dell Way
Round Rock, TX 78682

