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Memorandum

To Una Song, U.S. Environmental Protection Agency
Cc Ann Bailey, John Taylor, Ed Wisniewski, Jason Erwin

From Marc Hoffman Date May 21, 2010

Re ENERGY STAR Computer Server Draft 1, v 2.0 and Data Center Storage Draft 1, v. 1.0

CEE is the binational organization of energy efficiency program administrators, whose members are responsible for ratepayer-funded efficiency programs in 41 states and 8 Canadian provinces. In 2009, CEE members' budgets represented over 88 percent of the total \$6.1 billion in state- and province-authorized program budgets. In short, CEE members actively work to make ENERGY STAR the relevant platform for energy efficiency across North America. The following comments were developed based on feedback by the CEE Data Centers & Servers Committee (the Committee) after a review of the ENERGY STAR Computer Server Draft 1 and Data Center Storage Draft 1 specifications. The Committee recognizes that there are significant energy savings opportunities in data centers and believes that ENERGY STAR can be an important tool in the data centers market.

The development of ENERGY STAR specifications for computer servers and data center storage is complex. The draft specification documents discuss the many types of products potentially included within the scope of these specifications, the various types of server and storage systems offering different functions or amenities, the fact that these products are used in many applications (e.g., data centers, offices) and in varying configurations. One foundational question for EPA is: With so many elements and variables involved in server and data storage energy performance, how will EPA make a labeling approach work that delivers on the brand tenets and promise of ENERGY STAR?

In addition to the fundamental question of why a labeling approach is the preferred path for these products, the Committee requires additional information to inform meaningful comments in support of the ENERGY STAR specification development process. The following data and information, which the Committee has communicated to EPA during the Computer Server Tier 1 comment periods, are necessary to inform the potential for voluntary, prescriptive efficiency programs:

- 1. The expected energy savings or range of savings for ENERGY STAR servers or data storage devices versus their equivalent, non ENERGY STAR counterparts
- 2. The basis and assumptions used to generate the savings range, and the significant variables (e.g., configuration, application, utilization etc.) that impact the actual energy savings or range of savings that can be expected
- 3. At a minimum, national level server and storage product market penetration data that indicates the relative market share of ENERGY STAR server and storage products versus the overall server market and storage market, respectively. These data could be national unit shipment data, for example

- 4. National level information or any data that inform the approximate percentage of server or storage sales that replace older server or storage equipment versus the percentage of sales that serve new IT demand or growth (could be on an annual or some other periodic basis), and
- 5. Data and analysis to inform the expected amount of incremental product cost, if any, associated with a more energy efficient server or storage device versus its non energy efficient counterpart. Efficiency programs often base their financial incentive amounts on the incremental cost of an efficient product versus "standard" product.

The Committee requests that EPA share its basis for energy savings, market penetration and cost information for servers and storage with the Committee as soon as these data and analysis are available. Thank you in advance for considering and responding to these Committee questions as EPA considers an ENERGY STAR for Computer Servers and Data Center Storage specifications. Please contact Jason Erwin, CEE's Commercial Sector Lead, with any questions.

Marc Hoffman

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