

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF AIR AND RADIATION

October 1, 2012

Dear Large Network Equipment Manufacturers and Other Interested Parties:

The U.S. Environmental Protection Agency (EPA) is launching the development of an ENERGY STAR® specification for large network equipment. This process will begin with work with stakeholders to determine scope for this potential ENERGY STAR product category and test procedure development, which will be led by the U.S. Department of Energy. Once these steps are completed, EPA will assemble energy performance data for large network equipment and propose ENERGY STAR requirements.

ENERGY STAR is a voluntary partnership between government, businesses, and purchasers designed to encourage the manufacture, purchase, and use of efficient products to help protect the environment. Products that earn the ENERGY STAR prevent greenhouse gas emissions by meeting strict energy efficiency guidelines. To date:

- More than 80% of Americans households recognize the ENERGY STAR label,
- Americans purchased more than 200 million products that earned the ENERGY STAR in 2011 across more than 60 product categories for a cumulative total of more than 5 billion products, and
- Americans, with the help of ENERGY STAR, saved enough energy in 2011 to avoid greenhouse gas emissions equivalent to those from 41 million cars -- while saving \$23 billion on utility bills.

The energy saving opportunities in data centers have been well documented, but barriers to energy efficiency still persist. Through ENERGY STAR, EPA is addressing these challenges by helping purchasers more easily identify energy efficient IT equipment including computer servers, uninterruptible power supplies, and data center storage.

EPA conducted a scoping effort to evaluate large network equipment for inclusion in the ENERGY STAR program by reviewing available market research and facilitating discussions with manufacturers, industry associations, and other interested parties. EPA concluded that IT purchasers would benefit from access to standardized information about the energy performance of large network equipment made available through the ENERGY STAR program. Energy use associated with network equipment is significant and the savings potential promising. One study estimates that network equipment in the USA used 18 TWh, or about 1% of building electricity, in 2008 and that consumption was expected to grow at roughly 6% per year to 23 TWh in 2012.

Source: Data Network Equipment Energy Use and Savings Potential in Buildings Steven Lanzisera & Bruce Nordman & Richard E. Brown, Accepted: 5 September 2011, Springer Science+Business Media B.V. 2011 Further, the study shows that office building network switches and residential equipment are the two largest categories of energy use consuming 40% and 30% of the total respectively. These researchers estimate that potential energy savings for different scenarios using forecasts of equipment stock and energy use range from 20% to 50% based on full market penetration of efficient technologies.¹

To be added to the large network equipment e-mail distribution list, please send your full contact information to largenetwork@energystar.gov. To stay informed about ENERGY STAR specification development and other EPA data center initiatives please visit: www.energystar.gov/datacenters.

Stakeholder participation is critical to developing a meaningful specification and to the overall success of ENERGY STAR. Please direct any specific questions to RJ Meyers, EPA, at Meyers.Robert@epa.gov, or 202-343-9923; or John Clinger, ICF International, at John.Clinger@icfi.com, or 202-572-9432. Please direct any specific test method questions to Bryan Berringer, DOE, at Bryan.Berringer@ee.doe.gov, or 202-586-0371.

Thank you for your support of the ENERGY STAR program.

Sincerely,

Robert Meyers

Robert J. Mayer

Product Manager, ENERGY STAR Data Center Products