

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460



OFFICE OF
AIR AND RADIATION

June 4, 2009

Dear Enterprise Storage Manufacturer or Other Interested Party:

The U.S. Environmental Protection Agency (EPA) welcomes your input on the attached Specification Framework Document and proposed schedule for the Version 1.0 ENERGY STAR[®] Enterprise Storage specification development process.

The framework document defines the key components that are the core of all product specifications developed for the ENERGY STAR program. The program process for information technology equipment is coordinated between the EPA and the European Union. Wherever possible, portions of the framework are populated with information representing EPA's initial perspective on the industry, potential opportunities for energy savings, and questions for consideration. This preliminary content is intended to encourage creative and constructive feedback from stakeholders, and should not be considered final. **The deadline for submitting comments on the Specification Framework Document is July 3, 2009. Please e-mail your comments to storage@energystar.gov.**

The primary objectives of the ENERGY STAR Enterprise Storage specification are: (1) to encourage widespread adoption of appropriate hardware and software strategies to improve energy efficiency; (2) to provide purchasers with the means to identify the most energy efficient systems for their specific end-use application; and (3) to provide the appropriate tools and information to designers and managers looking for ways to improve the efficiency of their data center operations.

As a first step towards these objectives, EPA has begun development of the following framework elements:

- **Definitions:** This element is intended to explicitly define both those products that are covered by the specification and those that are not, and to clearly differentiate between Enterprise Storage and other ENERGY STAR product categories. Definitions are also provided for operational modes, key components, and sub-classes of products.
- **Eligible Product Categories:** This element will build off the Definitions to identify specific product categories to be covered by ENERGY STAR. EPA intends to develop or adopt a taxonomy to segment the Enterprise Storage

market. EPA's intention is for the Version 1.0 specification to cover as much of the market as can be reasonably addressed in a timely manner, while maximizing the opportunities for energy savings.

- **Energy Efficiency Criteria & Test Procedures:** This portion of the specification will include metrics for assessing the energy efficiency of storage products from each Eligible Product Category. EPA will review a variety of hardware – and software-focused solutions to achieve greater energy efficiency in Enterprise Storage systems. EPA will either adopt existing industry test procedures or develop new test procedures for use in the ENERGY STAR program.
- **Information & Management Requirements:** The recently released ENERGY STAR Version 1.0 specification for Computer Servers instituted Standard Information Reporting and Data Measurement and Output requirements for qualifying products. EPA intends to implement similar reporting requirements in the Enterprise Storage specification, to encourage manufacturers to publish standardized product power consumption data for use in capacity planning and hardware procurement.

Once comments on the framework have been received and evaluated, EPA will begin development of the Draft 1 ENERGY STAR specification for this product category. This and subsequent draft documents will be distributed to stakeholders for comment via e-mail and posted to the ENERGY STAR Product Development Web site at www.energystar.gov/NewSpecs. The Web site will be regularly updated to include the latest specification development information, including draft proposals, meeting notices and presentations, EPA correspondence, public comments, and EPA responses. EPA will also host public conference calls and in-person meetings throughout the specification development process, on an as-needed basis, to promote an open and ongoing dialogue with stakeholders. As with Computer Servers, ENERGY STAR criteria for Enterprise Storage will take effect immediately upon completion of the specification for all eligible product types.

EPA proposes the following specification development timeline for consideration:

- June 4 – EPA distributes Specification Framework Document for review
- July 3 – Comments due on Specification Framework Document
- July 17 – Stakeholder meeting to discuss framework and preview Draft 1 Specification
- Early August – EPA Distributes Draft 1 Specification
- Ongoing – Subsequent draft specifications and stakeholder comment periods
- 1Q-2010 – Target Finalization and Effective Date

Stakeholders are encouraged to review the Specification Framework Document and proposed schedule and send comments to storage@energystar.gov **no later than Friday, July 3, 2009.**

Thank you for your continued support of the ENERGY STAR program. If you have any questions regarding these documents, please feel free to contact me at fanara.andrew@epa.gov or (206) 553-6377.

Sincerely,

A handwritten signature in black ink, appearing to read 'Andrew Fanara', with a long horizontal line extending to the right.

Andrew Fanara
U.S. Environmental Protection Agency, Climate Protection Partnerships Division
ENERGY STAR Program Manager