

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

OFFICE OF AIR AND RADIATION

August 28, 2013

Dear Data Center Storage Manufacturer or Other Interested Stakeholder:

The U.S. Environmental Protection Agency (EPA) is pleased to provide you with the Final Version 1.0 ENERGY STAR Data Center Storage Specification and the Final ENERGY STAR Data Center Storage Test Method. EPA would like to thank the many stakeholders who have invested time and effort over the past several years contributing feedback to this specification revision process. The effective date of the Version 1.0 ENERGY STAR Data Center Storage Specification is **December 2**, **2013**. This letter highlights key features of the new specification and outlines the process for certifying products to it.

Differentiating energy efficient data center storage equipment will help data center owners and operators select products that will save them money on their energy bills, will assist manufacturers of efficient equipment in increasing sales, and will drive down the energy use of datacenters—estimated to be more than 2% of total US electricity consumption. The ENERGY STAR Data Center Storage specification enhances the suite of ENERGY STAR datacenter equipment specifications which currently includes Computer Server and Uninterruptible Power Supply specifications.

In addition, this specification:

- Introduces an approach to product families that allows both homogenous and heterogeneous storage device configurations to be certified.
- Includes requirements focused on power supplies, capacity optimizing methods, and standard performance data measurement and output.
- Allows for variations within product families to incorporate newer storage devices and other system
  improvements over the life of the storage product, striking a balance between additional testing burden
  and representative test data.

The Version 1.0 Specification requires all products to test and submit data using the Storage Networking Industry Association (SNIA) Emerald<sup>TM</sup> Power Efficiency Measurement Specification V2.0.2.

EPA received five sets of stakeholder comments on Final Draft Version 1.0 Data Center Storage Specification that primarily requested clarifications, pointed out typos, and suggested minor adjustments to specification language. In response, this final specification reflects these non substantive updates. Stakeholder comments, draft versions of the specification, and related materials are available on the ENERGY STAR website at <a href="https://www.energystar/gov/NewSpecs">www.energystar/gov/NewSpecs</a> under the link for "Data Center Storage."

## Next Steps:

The effective date of the Version 1.0 ENERGY STAR Data Center Storage Specification is December 2, 2013.

Manufacturers new to the ENERGY STAR program may submit a Partnership Agreement and existing manufacturer partners may submit a new Commitment Form to <a href="mailto:join@energystar.gov">join@energystar.gov</a> to initiate the application process for the Data Center Storage program. For information about this process, please visit <a href="https://www.energystar.gov/join">www.energystar.gov/join</a>.

Certification bodies (CBs) may start submitting applications for EPA recognition now. EPA will prioritize review of applications and notify CBs when they have achieved recognition.

Third-party laboratories interested in obtaining EPA recognition for the ENERGY STAR Data Center Storage program are encouraged to begin the accreditation process with their accreditation body, if they have not already done so. First-party, un-accredited labs can conduct testing if they participate in a witnessed or supervised testing program run by an EPA recognized CBs. For more information, please visit <a href="https://www.energystar.gov/testingandverification">www.energystar.gov/testingandverification</a>.

## **Third-party Certification:**

As a reminder, all new products must be certified by an EPA recognized CB before being labeled and marketed as ENERGY STAR certified. Upon satisfactory completion of all certification requirements, a CB will notify the partner that the product is ENERGY STAR certified and will submit certified product data to EPA for listing on the ENERGY STAR website. For more information on the Third-party Certification program, please visit <a href="https://www.energystar.gov/3rdPartyCert">www.energystar.gov/3rdPartyCert</a>.

EPA thanks stakeholders who provided feedback during the specification revision process and looks forward to working with you as you certify and market your energy-efficient Data Center Storage products. Please direct any questions to RJ Meyers, EPA, at <a href="Meyers.Robert@epa.gov">Meyers.Robert@epa.gov</a>, or 202-343-9923; or John Clinger, ICF International, at <a href="John.Clinger@icfi.com">John.Clinger@icfi.com</a>, or 215-967-9407.

Thank you for your continued support of ENERGY STAR.

Sincerely,

Robert Meyers

Product Manager, ENERGY STAR Data Center Storage