

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



OFFICE OF
AIR AND RADIATION

October 29, 2019

Dear ENERGY STAR® Data Center Storage Partner or Other Interested Stakeholder,

With this letter, the U.S. Environmental Protection Agency (EPA) is releasing the Draft 1, Version 2.0 ENERGY STAR data center storage [specification](#). Stakeholders are encouraged to submit any comments to storage@energystar.gov by November 29, 2019.

EPA previously released a Discussion Guide for stakeholder review and comment focused on simplifications to the storage program, introducing EPA's planned approach for differentiating based on active mode, and requesting initial feedback on the development of Emerald V4.0. EPA is now releasing a Draft 1 specification that considers all of the feedback received in response to the Discussion Guide. Note boxes throughout the specification provide EPA's rationale for proposals. Also attached to this distribution is a [data package](#) that includes the EPA dataset, Draft 1 proposed levels, and potential product qualification estimates.

The Draft 1, Version 2.0 specification incorporates the following key elements:

Energy Criteria: Active state energy efficiency requirements have been proposed for Block I/O products optimized for transaction and/or streaming workloads. All Block I/O storage products will need to meet these requirements in order to certify. These requirements are not proposed to apply to File I/O products in Version 2.0, primarily due to an insufficient amount of File I/O product data to determine levels.

Internal Power Supplies (IPS)s: Based on stakeholder feedback, the stringency of the IPS requirements has been increased to align with 80Plus Platinum for single-output IPSs and 80Plus Gold for multi-output IPSs.

Simplified Testing: As proposed in the Discussion Guide, product families will be represented by a single optimal configuration test point per certified workload type. The simplification of test points will reduce test burden and greatly simplify the product family structure.

Comment Submittal

EPA welcomes stakeholder input on the attached Draft 1, Version 2.0 specification. Stakeholders are encouraged to submit any comments to storage@energystar.gov by November 29, 2019. All comments will be posted to the [ENERGY STAR Product Development website](#) unless the submitter requests otherwise.

Stakeholder Webinar

EPA will host a webinar to answer any questions on this Draft 1 specification on November 5, 2019 from 1-3 PM Eastern Time. Please register [here](#) if you plan on attending.

The exchange of ideas and information between EPA, industry, and other interested parties is critical to the success of ENERGY STAR. Specifications and meeting materials will be distributed via email and posted on the ENERGY STAR website. To track EPA's progress on this specification, please visit the [storage product development website](#).

Please contact me at Fogle.Ryan@epa.gov or 202-343-9153 or John Clinger, ICF, at John.Clinger@icf.com or 215-967-9407 with questions or concerns about this specification revision. For other Data Center Storage related questions, please contact storage@energystar.gov.

Thank you for your continued support of the ENERGY STAR program.

Sincerely,

A handwritten signature in blue ink, appearing to read "Ryan Fogle".

Ryan Fogle
EPA Manager, ENERGY STAR for IT and Data Center Products

Enclosures:

[Draft 1, Version 2.0 Specification](#)

[Draft 1 Data Package](#)