

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



OFFICE OF
AIR AND RADIATION

June 19, 2012

Dear ENERGY STAR Computer Stakeholder or Other Interested Party:

The U.S. Environmental Protection Agency (EPA) has learned of an evolution in the workstation market that calls for a clarification to the ENERGY STAR Version 5.2 Computer Specification to ensure EPA provides clear direction regarding qualification. This memo describes and seeks stakeholder comment on the proposed clarification. Comments must be **provided by July 3, 2012** for consideration.

Recent developments in graphics processing technology have led to the development of computing products that utilize GPU capabilities for more general computing needs. These GPGPUs are found primarily in computer server and workstation products and are intended to enhance the processing capabilities of these systems through the use of add-in cards plugged into peripheral hardware slots.

The ENERGY STAR Version 5.2 Computer Specification, finalized before this shift in the market, does not contain provisions for handling GPGPU add-in cards. As such, EPA proposes for stakeholder comment the following clarification to the specification.

Proposed Clarification to Version 5.2 Computer Specification

This proposed clarification, reflected in edits to Section 4.2.1.iii of the Version 5.2 ENERGY STAR Computer specification, will make clear that workstations with GPGPUs are eligible for ENERGY STAR qualification under the existing Workstation family requirements. New language is emphasized in **bold** lettering:

*iii. For qualification of a product family of Workstations under the Workstation or Desktop product type, the product configuration that represents the worst-case power consumption with a single GPU within the family is considered the Representative Model. Note: Workstations that meet ENERGY STAR requirements with a single graphics device may also qualify a configuration with more than one graphics device **or with one or more GPGPU add-in cards**, provided the additional hardware configuration is identical with the exception of the additional graphics device(s) **and/or GPGPU(s)**. The use of multiple graphics includes, but is not limited to, driving multiple displays and ganging for high performance, multi-GPU configurations (e.g. ATI Crossfire, NVIDIA SLI). In such cases, and until such time as SPECviewperf® supports multiple graphics threads, manufacturers may submit the test data for the workstation with the single graphics device **and without GPGPU cards** without retesting the system.*

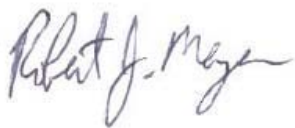
Workstations families that will include products utilizing GPGPU cards must be tested for Idle and Maximum power consumption both without any GPGPU cards and with a single card installed. Resulting data must be provided at time of qualification for ENERGY STAR.

The handling of workstation GPGPUs must be further refined during development of the ENERGY STAR Version 6.0 Computer Specification.

EPA welcomes stakeholder comment on this proposed clarification. **Those providing comment are asked to share feedback via email to computers@energystar.gov by July 3, 2012.** Following review of any comments, EPA will issue final guidance to stakeholders via the ENERGY STAR website. Please direct questions regarding this proposal to Meyers.Robert@epa.gov.

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

Sincerely,

A handwritten signature in black ink that reads "Robert J. Meyers". The signature is written in a cursive style with a large, sweeping initial "R".

Robert Meyers
Product Manager, ENERGY STAR Computers