



ENERGY STAR® Computers (Ver. 6) Workstation Comments – Draft 2

ITI Presentation

June 27, 2012

Workstations

Key Concerns

- EPA requests use of SPECWorkstation for workstation data collection under ENERGY STAR Version 6
- No idle power allocation for compute capacity add-in cards. (e.g. GPGPU)

Data Collection

- SPECWorkstation is not a functional benchmark. SPEC ceased development on this benchmark several years ago.
- Neither of the existing benchmarks, SpecViewPerf and Linpack, may be able to address new architectures. The industry is investigating more representative benchmarks.
- Data collection should be conducted by manufacturers and not part of the certification process
- **Industry will recommend one of the 2 data collection options prior to release of the final draft:**
 - a) Report SpecViewPerf and Linpack performance values.** Performance numbers should NOT be published publically. Performance numbers may not be representative due to software limitations.
-----Or-----
 - b) Enhance the workstation performance benchmark currently in development at SPEC.** Data collection would be subsequent to benchmark completion and be part of the preparatory work for ENERGY STAR version 7.

Idle power and “GPGPU”

- ***Recommendation: Use the generic term of Compute Enhancement Add-in in-lieu of the specific example of GPGPU. We support ENERGY STAR’s proposal to test compliance without the add-in(s) and provide idle power information with add-in(s).***
 - GPGPU’s are a specific example of a new class of high performance computing enhancements to workstations.
 - Existing benchmarks do not incorporate or represent the enhancements
 - Draft specification text should be corrected to reflect compliance testing without Compute Enhancement Add-in (s) and submission of idle power data engaging the Compute Enhancement Add-in card (s).