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 Performance numbers should NOT be published publicly. 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).