

Final Draft Version 3.0 Computer Server Comment Summary

Ref. #	Comment Summary	Response
1	Two stakeholders request that EPA allow manufacturers to use V1.1.1 raw test measurements to calculate V2.0.1 scores, which will enable the certification of products previously certified to Version 2 without the need to re-test products. The stakeholders state that this will save manufacturers time and expense conducting new tests for Version 3.0 while still providing an accurate V2.0.1 metric score.	EPA shares the desire to reduce unnecessary testing burden and will post a calculator developed by The Green Grid to assist with the conversion of raw SERT V1.1.1 test measurements to SERT V2.0.1. EPA encourages the use of this tool to allow for the quick recertification of products to Version 3.0 without any unnecessary additional testing burden.
2	One stakeholder suggests excluding Direct Current Servers from the Specification, because SERT is only intended to be used with servers running on AC power.	The current SERT test effectively excludes direct current servers from the ENERGY STAR specification scope. If a future version of SERT allows for the testing of direct current servers, these products would be eligible under the program scope. As such, EPA has not changed the scope of the specification.
3	Two stakeholders request that, under the description of Low-end Performance configuration, on Line 318, the sentence 'a memory capacity at least equal to the number of DIMM slots in the server' is changed to read 'a memory capacity at least equal to the number of memory channels in the server'. The stakeholders state that use of memory channels instead of DIMM slots is consistent with SERT™ test procedures and the ISO 21836 standard under development, and reflects the actual server configurations in the TGG dataset. They also state that this definition will ensure harmonization of ENERGY STAR test procedure and configuration definition with ISO standard and with other jurisdictions adopting SERT active efficiency approach.	The definition has been updated to reflect this change.
4	Two stakeholders identified a formatting error on line 110: Instead of 5) being assigned to 'Note', it should be assigned to 'Multi-node server' on line 113. The stakeholders state that this section was correctly formatted in Draft 3.	EPA has corrected this formatting error in the final specification.

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5	One stakeholder comments that references to "Flood2 and Capacity2" SERT worklet name in lines 466-469 should be changed to "Flood3 and Capacity3", because the SERT2.0.x memory worklet was changed and the worklet name is now Flood3 and Capacity3.	EPA has updated the Flood and Capacity references to match what is in SERT V2.0.1.
6	One stakeholder recommends alternate requirements for Per-blade or Per-node Active State Efficiency Thresholds, which should be calculated into the Table 3. In addition, the stakeholder suggests that EPA should add a formula to explain the Eff ACTIVE requirements per-Blade or per-Node condition in section 3.5.3.	The requirements presented in the Final Draft reflect months of discussion and negotiation with stakeholders to identify the correct metric and levels to appropriately identify the most energy efficient servers in the market today. This approach has gained wide acceptance from stakeholders and as such, EPA has maintained the criteria in the final Version 3.0 specification proposed in the final draft. When the next specification revision process opens, the value of alternative approaches may be considered.
7	One stakeholder encourages EPA to provide the basis and assumptions used to generate the savings analysis, including significant variables such as configuration and application that impact energy savings.	EPA has developed savings values for the Version 3.0 specification. The overall, weighted savings is 30% more efficient than a baseline product. This was calculated by comparing the energy consumption vs. performance of the products in the ENERGY STAR data set that do not meet the proposed criteria with an average energy consumption (holding performance constant) that those products would consume if they met the ENERGY STAR criteria. EPA is happy to discuss details of the analysis with interested stakeholders. Stakeholders should contact servers@energystar.gov to schedule a time.

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8	<p>One stakeholder requests that EPA provide information to all stakeholders on how they can engage in revisions to 80 PLUS program requirements. This stakeholder is concerned about EPA relying on a private program with a closed, opaque specification process, if stakeholders are not given an avenue to engage with the 80 PLUS program requirements. Under this scenario, this stakeholder believes it is the responsibility of EPA to ensure that the 80 PLUS requirements are sufficiently stringent for the Computer Servers Specification. The stakeholder requests that EPA work with the 80 PLUS program to develop PSU efficiency requirements that are more stringent at the low load levels typically experienced by computer server PSUs.</p>	<p>The 80Plus program has been leveraged for the ENERGY STAR computer server specification since its inception in 2009 and in computers since 2006 and has had a long record of success over that time. The Agency does not believe that there is a need for ENERGY STAR to develop anything unilaterally in this space as it would be duplicative of these other efforts. EPA continues to encourage stakeholders to engage with 80 PLUS on developing requirements at lower load levels, and can facilitate introductions as appropriate. Any updates to the 80 PLUS criteria will be assessed with the next revision to the computer server specification.</p>