Ref. #	Commenter	Topic	Subtopic	Stakeholder Comment	DOE Response
,	Summary	Test Setup	Voltage Specification	DC servers with input voltages in the range of 360 V – 400 V is not uncommon. The stakeholder recommends that this dc voltage level be specific in the test method.	The Final Draft ENERGY STAR Specification does not include dc powered servers in its scope; therefore, DOE has excluded dc powered servers from the Final Draft ENERGY STAR Test Method for Computer Servers (Rev. Dec-2012).
2	2 Summary	Test Setup	Voltage Specification	The Test Method for Servers should include the option of 208 V three-phase AC power specifications for three-phase powered servers.	Because it is possible that some servers may only be powered by three-phase AC power, DOE has updated Table 1 and Table 2 in section 4.A) of the Final Draft ENERGY STAR Test Method for Computer Servers (Rev. Dec-2012) to include 208 V for three-phase powered servers.
3	3 Summary	Test Setup	Voltage Specification	Voltage standards of 100 V, 110 V, 200 V, 208 V, 220 V, 230 V, and 400 V \pm 5% should be specified in the Test Method to foster international adoption of the test method for servers.	DOE agrees with this comment and has updated Table 1, Table 2 and Table 3 of the Final Draft ENERGY STAR Test Method for Computer Servers (Rev. Dec-2012) to include single phase and 3-phase voltage and frequency requirements for international standards. The values specified are consistent with the Server Efficiency Rating Tool (SERT) Run and Reporting Requirements.
	l Summary	Test Setup	Editorial	There is an inconsistency in the capitalization of the terms ac and dc in the specification, test method and Power and Performance Data sheet. We recommend that "AC" and "DC" be used to represent alternating current and direct current respectively.	The capitalization of the abbreviations for alternating current (ac) and direct current (dc) is now consistent throughout the Final Draft ENERGY STAR Test Method for Computer Servers (Rev. Dec-2012), the Final Draft ENERGY STAR Specification for Computer Servers, and all related documents.
5	5 Summary	Test Setup		The minimum temperature should be 20 °C in alignment with the SERT requirements. Minimum temperature of 18 °C as specified in the Draft 3 Test Method for Servers could increase hours of chiller operation and increase energy use in air conditioning. In addition, 18 °C is not comfortable for human work conditions.	To be consistent with SERT's requirements, DOE has modified the lower limit of the ambient temperature requirement to 20 °C. However, DOE believes that setting the ambient temperature upper limit to a manufacturer-documented value may not allow for consistent testing and comparison between different products. As such, DOE has maintained the maximum ambient temperature at 30 °C in section 4 B) of the Final Draft ENERGY STAR Test Method for Computer Servers (Rev. Dec-2012).

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6	Summary	Test Setup	Ambient Conditions	Also, the ambient temperature upper limit and the relative humidity should be within the documented operating conditions of the LIUT.	DOE also believes that the relative humidity (RH) conditions specified by manufacturers will fall between 15% - 80% RH, as specified in the Draft 3 ENERGY STAR Test Method for Computer Servers (Rev. Aug-2012). As such, DOE has maintained the 15% - 80% RH range in the Final Draft ENERGY STAR Test Method for Computer Servers (Rev. Dec-2012).
7	Summary	Test Setup	Power Analyzer	Section 4.D) of the Draft 3 Test Method should be replaced by	DOE agrees with this comment and section 4.D) of the Final Draft ENERGY STAR Test Method for Computer Servers (Rev. Dec-2012) is consistent with section 4.3 of SERT's Design Document for the release candidate. The update to this section includes: Modifications to the power analyzer accuracy specifications Configuration information for the SERT controller system Referencing the SERT Design Document
٤	3 Summary	Test Setup	Editorial		DOE agrees with this comment and section 4.D)6) of the Final Draft Test Method for Computer Servers (Rev. Dec-2012) is now consistent with the stakeholder's recommendation.
S) Summary	Test Conduct	Storage		EPA is not excluding qualification for systems that do not come with installed storage devices. In support of qualifying such systems, Section 5.1.F) of the Draft 3 ENERGY STAR Test Method for Computer Servers (Rev. Aug-2012) provides instructions on how to test computer servers that do not include pre-installed storage devices. The intent of this section is to provide instruction on how to test these products, not explain coverage of products. Thus, DOE has not modified this section of the text in the Final Draft.

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10	Summary	Test Conduct	UUT Preparation	Update the language in section 5.2.C)3)c)iii) of the Draft 3 Test Method for servers to state that power supplies and cooling fans used for chassis function and redundancy for populated power	Redundancy can vary based on a customer's needs, and for some models, there may not be a "standard offering". Additionally, redundant components may be ordered separately for some systems. In light of this, DOE has changed the language regarding redundancy. Section 5.2.C).3).c).iii) of the Final Draft ENERGY STAR Test Method for Computer Servers (Rev. Dec-2012) now requires that all blade server redundant power supplies be configured as per manufacturer recommendations.
11	Summary	Test Method	Active State	The manufacturer specific workload should be replaced with SERT. In addition, the ENERGY STAR Test Method for Servers should be made consistent with SERT with references to the SERT Design Document and SERT Run and Reporting tools in the test	DOE agrees with this comment. Section 4 of the Final Draft ENERGY STAR Test Method for Computer Servers (Rev. Dec-2012) has been harmonized with sections 4.1, 4.2 and 4.3 of the SERT Design Document Release Candidate 1 (RC1). Note that these documents are for SERT's Release Candidate and they may modified with the final release of SERT.
12	Summary	Test Method	Idle State	measurement. Some of their server offerings perform memory maintenance activities for up to 3 minutes. Depending on where	Reporting the lowest of the three 5 minute idle measurements will not capture the power consumption of the server during the intermittent maintenance cycles initiated by the server. Thus, the reported values may underrepresent the long run average of this server in the idle state.
13	Summary	Test	Idle State	lowest of the three measurements reported as the idle power use of the SUT. They believe that this method will enable identification and removal of power impacts on idle mode of operation driven by intermittent maintenance activities such as	DOE's approach includes the effect of the maintenance cycles to provide a representative power measurement. As such, DOE has increased the idle power measurement period from 5 minutes to 30 minutes. A longer idle measurement period will average out the increased power consumption caused by the maintenance cycle.