REF NO.	Topic	Subtopic	Stakeholder Comment	DOE Response
1	Unit Under Test (UUT) Preparation	Definition of half chassis population for blade systems	The stakeholder commented that there is no rigorous definition for what it means to have a half-populated chassis. The stakeholder recommends basing the population of the chassis on the number of available Single-wide blade server slots that are occupied.	DOE agrees with this comment and has modified section 5.2.D) of the ENERGY STAR Test Method for Computer Servers (Rev. Mar-2013) (Final Test Method) to base the chassis population on the number of available Single-wide Blade Server slots that are occupied.
2	UUT Preparation	Half chassis population of blade systems	The stakeholder recommended changing the language to round the number of blades by ±1 to fill the base power domain. For a blade chassis having asymmetrical power domains (6/8 blade power domain split) the language as present in draft final test method would require that the system be tested in full chassis configuration.	DOE agrees with the comment that the language in section 5.2 D) of the ENERGY STAR Final Draft Test Method for Computer Servers (Rev. Jan-2013) (Final Draft Test Method) requires additional modification to provide guidance on how to populate a Blade Chassis which has asymmetrical power domains. DOE has updated section 5.2 D) of the Final Test Method which now requires that a Blade Chassis having multiple power domains be tested by choosing the number of power domains that are closest to filling half of the Blade Chassis. In the case where there are two choices that are equally close to filling half of the blade Chassis, the domain or combination of domains which utilize a higher number of Blade Servers shall be chosen.
3	General Comment		The stakeholder recommended that the terms ac and dc be consistent in their capitalization in the specification, test method and the power and performance data sheet.	DOE has updated the Final Test Method and related documents to use consistent capitalization for ac and dc.
4	Test Setup	Input Power	The stakeholder commented that 400 V ac, 50 Hz should be included as it is a common three phase voltage standard in Europe.	DOE agrees with the stakeholder's first comment and has included 400 V ac in Tables 1 and 2 of the Final Test Method.
5	Test Setup	Input Power	The stakeholder commented that the test method should reflect that 208 V ac in the U.S is common for 2 phase connected servers.	DOE understands that the 208 V ac supply voltage is derived from the difference between any two phases of a standard three-phase source. However, the test method does not intend to specify how the UUT may use the three phase voltage (e.g. if it only connects to two legs). As such, DOE has made no updates to the Final Test Method.
6	Test Setup	Input Power	The stakeholder commented that both 115 V ac and 230 V ac should be noted for both single-output and multi-output power sourcing units (PSU).	DOE agrees with this comment, and has updated Tables 1 and 2 of the Final Test Method to include 115 V ac and 230 V ac for both single and multi-output Power Sourcing Units (PSU).
7	Test Setup	Measurement accuracy for temperature sensor	The stakeholder commented that the temperature sensor accuracy of ± 0.5oC needs to be increased to ± 2oC to be consistent with test accuracy expectations in the Final Draft of the ENERGY STAR Eligibility Criteria for Computer Servers. This will enable the testers to use a server's internal thermal sensor, as required in Section 5.1.1, to capture temperature data if appropriate.	Section 5.1.1 of the Final Draft Eligibility Criteria for Computer Servers outlines requirements for certain features and functionalities which must be present in the UUT. One such requirement is the mandatory inclusion of an internal thermal sensor with an accuracy of ± 2oC. This accuracy only refers to the required internal thermal sensor feature for ENERGY STAR qualification and has no relation to the accuracy of the measurement equipment used during testing. The requirement for measurement equipment accuracy is intentionally more stringent than the requirement for a server's internal thermal sensors. In addition, the accuracy requirements of the temperature sensor in the Final Draft Test Method are consistent with the requirements specified in SERT Design Document 1.0.0. Therefore, DOE has not changed the temperature sensor accuracy requirement in the Final Test Method.
8	Test Setup	Power Analyzer	The stakeholder confirmed if Idle State testing is not done using SERT. The stakeholder also wanted to clarify that if SERT is not used for Idle State testing , must the power analyzer and temperature sensor be one of those listed in the SERT Power Measurement and Set up Guide ?	Although SERT is not required for the manual Idle State testing, the power analyzer and the temperature sensor used for testing Servers shall be chosen from the list of power and temperature measuring devices as specified in the SERT Design Document in order to have consistent results. Using the same power and temperature measuring requirements will provide common grounds for comparing different products in addition to aiding DOE in correlating the data obtained from SERT and the manual Idle State testing.
9	Test Conduct	Test Configuration	The stakeholder commented that the Test Method is confusing because section 5.1 is entitled Active State Efficiency Test Configuration but also discusses Idle measurements as in 5.1 B). The stakeholder also commented that if section 5.1 is intended for both Active and Idle testing then the title of 5.1 should have reflects that it applies to both Active and Idle testing. To avoid confusion there should be two separate sections, one for Idle State Test Configuration and one for Active State Test Configuration.	We appreciate this comment and agree that the Test Method would be benefited by updating the title of Section 5.1. In the Final Test Method Section 5.1 is entitled to "Test Configuration" to reduce ambiguity. All steps specified in Section 5.1 of the Final Test Method shall be followed prior to any testing being performed on the UUT.
10	Test Conduct	I/o and Network Connection	In section 5.1 J) of the test method, it says the UUT shall be set up with minimal I/O add-in cards. Doesn't this conflict with the definitions for Product Family Configurations, e.g. where the greatest number of installed I/O devices is required, and for Eligibility Criteria section 3.6.1 vii. where a greater number of available I/O devices installed would result in a greater allowance for PADDL i ?	The intent here was to ensure that the Server offers at least one Ethernet port for the purpose of testing. The test method does not intend to restrict the number of installed I/O devices in the server. DOE has deleted this requirement in the Final Test Method.

11	Test Conduct	Network Connectivity	I/O and network connection expectations should reflect the Server Efficiency Rating Tool's (SERT) test conditions and resolve any conflicts in test configurations as specified in lines 111-120. For example, the requirement to connect to an Ethernet connection with its highest speed and power management enabled could be problematic if the configuration has only one port that would be in-use under the SERT test conditions.	Section 1.2 of the SERT User Guide requires that the Controller System and the UUT be connected via an Ethernet connection, and that both the Controller System and the UUT are capable of communicating through this connection. The Ethernet connection could be established over the switch; however, DOE believes this may not be clear in the current language. As such, DOE has modified section 5.2 F) of the Final Test Method to indicate that the Controller System shall be connected to the same live Ethernet network switch as the UUT. Both the UUT and controller shall be configured to communicate via the network.
12	Test Procedure	Idle State Testing	The stakeholder commented that the qualification criteria between SERT and ENERGY STAR need to be consistent. The stakeholder recommends that the SERT test methodology be used for generating the required idle power measurement. In addition, the stakeholder recommends that SERT testing requirements make accommodations for those products that need longer Idle test periods to properly amortize the energy use associated with the burst based maintenance cycle.	The Idle limits set by the Final Draft Eligibility Criteria for qualification of Computer Severs were based on data obtained from the manual Idle State test as defined in section 6.1 of the Final Draft Test Method. DOE believes that the SERT Idle test cannot be used as-is, since DOE and EPA lack sufficient Idle State power data from SERT to correlate it with the data obtained from the manual Idle State testing. However, the Version 2.0 Program Requirements for Computer Servers require that each server's Idle power be tested and reported using both SERT and the manual Idle State test. This will allow DOE and EPA to correlate the two idle tests and decide on a path forward in future versions of the ENERGY STAR Computer Servers Program.
13	Test Procedure	Idle State Testing	The stakeholder wanted to confirm if Idle state testing is done in the as-shipped condition unless otherwise stated in the requirements.	Yes – Idle State testing shall be done in the as-shipped condition unless otherwise stated in the requirements of the Final Test Method.
14	Test Procedure	Idle State Testing	The stakeholder wanted to clarify the for Idle State testing, instead of accumulating power values for 30 minutes and then obtaining the average W based on the power readings, is it acceptable to alternatively accumulate energy (Wh) over the 30 minutes and then convert Wh to power (W) ?	No – Section 6.1 of the Final Draft Test Method requires that for Idle State testing of Computer Servers, the power values (W) be accumulated for 30 minutes and the average (arithmetic mean) over the 30 minutes be reported. Additionally, SERT requires that the power measurements be logged.
15	Test Reporting Template		The stakeholder commented that the test reporting template should correlate to the Power Performance Data Sheet (PPDS), reflect the terms used and reporting requirements delineated in the specification, and collect product family data on a single form that collects all the supporting product classifications and data listed in the specification. The groupings should be similar to the PPDS and support the product family separation and blade chassis descriptions.	DOE agrees with this comment and has modified the test reporting template to reflect the terms used in the Power and Performance Data Sheet.