REF NO.	Topic	Subtopic	Comment Summary	Response
1	Specification Process		The stakeholder vigorously opposes the lack of process for changing the test procedure from 10 CFR Part 430, Subpart B, Appendix C to 10 CFR Part 430, Subpart B, Appendix C1 and the removal of the Tier 2 requirements listed in Version 5.0. It is not appropriate for EPA to unilaterally make substantive changes to the ENERGY STAR program. The program is a partnership and stakeholder feedback should be paramount. This lack of transparency highlights the need for the ENERGY STAR program to be administered under a more formal process.	EPA agrees stakeholder feedback is an extremely important part of the ENERGY STAR specification development process. The Agency viewed the test procedure as a necessary administrative update for the ENERGY STAR program to remain consistent with DOE's requirements for the regulatory program and removal of the Tier 2 placeholder as an important administrative update. That said, EPA understands these concerns, has provided more information on EPA's formal specification process and is committed to working closely with stakeholders when smaller, more administrative changes might be necessary.
2	Removal of Placeholder for Tier 2		The stakeholder does not oppose the removal of the Tier 2 levels; however, EPA should seek comment from stakeholders prior to removing eligibility criteria from the specification. In addition, EPA should give stakeholders clarity regarding the projected Version 6.0 Specification development timeline and whether energy and water levels will be adjusted as part of that revision.	EPA launched the Version 6.0 specification process in December 2013 and shared the Draft 1 proposal containing revised energy and water performance requirements in February 2014. Stakeholders will have an opportunity to provide feedback on the Draft 1 proposal and throughout the specification development process. The Version 6.0 specification will become effective 9 months after the specification is finalized; EPA anticipates the effective date will be sometime in 2015.
3	Transition to 10 CFR Part 430, Subpart B, Appendix C1		Although it is necessary to transition to 10 CFR Part 430, Subpart B, Appendix C1 on May 30, 2013, and it is unlikely that a Version 6.0 specification will be done prior to that time, an AHAM petition to DOE regarding the impact of 10 CFR Part 430, Subpart B, Appendix C1 on measured energy is still pending. For this reason, it is not prudent for EPA to consider a revision to the specification without seeking input from stakeholders. If DOE grants the petition, it would then be necessary to consider the impact on measured energy and how that will impact the stringency of the residential dishwasher criteria levels.	EPA viewed the test procedure change as a necessary administrative update for the ENERGY STAR program to remain consistent with DOE's requirements for regulatory program. However, as noted in comment #1, EPA understands the concern and is committed to working closely with stakeholders in these situations. DOE published a response to AHAM's petition on April 10, 2013, denying the request to reconsider the final rule that established the test procedure at 10 CFR Part 430, Subpart B, Appendix C1. 78 FR 21215.
4	Data Collection	Due Date	Requiring data by May 31, 2013 is not enough time for manufacturers to gather the data, especially as the date is a day after the date where manufacturers must comply with new DOE energy and water standards. EPA should allow manufacturers several more months to submit data.	DOE delayed the publication of the Test Method for Determining Residential Dishwasher Cleaning Performance (Rev. Feb-2014) (Test Method) to allow AHAM to complete round robin testing, analyze results, and discuss results with DOE and EPA. Given the timing, EPA's earlier data collection was not successful. As discussed in the latest proposal, EPA has included a proposed cleaning performance reporting requirement in the Version 6.0. Once collected, this data will enable EPA to better understand how cleaning performance varies with energy and water use and provide the necessary information to more fully evaluate cleaning performance, energy and water use concurrently during future specification revisions.
5	Data Collection		It would be helpful for manufacturers to know how the data will be used. Will the data be confidential? Will EPA share the data with stakeholders at all? What is the timeline for development? In addition, it is questionable whether EPA requires the detailed level of data requested. A simpler report form, well-tailored to provide only the necessary data would ease the burden on manufacturers in collecting and providing the data EPA requests.	Considering that test laboratories may have not yet had sufficient experience with this Test Method; for Version 6.0, EPA is proposing to collect and analyze the data, but will not post individual-model cleaning indexes on the ENERGY STAR product list. The Agency could also make an anonymized dataset available to interested stakeholders.

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6	Repeatability and Reproducibility of Test Method		The stakeholder is disappointed that DOE did not conduct a round robin test, will not conduct a training workshop, and wi not create a training video. The repeatability and reproducibility of the proposed test procedure have not been sufficiently tested and there remain sources of variation, such as grader bias, that could be reduced with these measures.	DOE conducted more than 250 test cycles on 12 units at three laboratories. The test units represent a cross-section of the products and features currently available on the market. The data from this testing show that the Test Method is repeatable and reproducible provided that the unit under test (UUT) operates consistently. DOE observed similar results across all three test laboratories for the units, which indicates that the Test Method is reproducible. DOE has concluded that the Test Method provides sufficient instruction to properly conduct the test without the need for additional training materials. At each of the three test laboratories used in the development of this Test Method, the technicians were able to grade consistently using the ANSI/AHAM standard DW-1-2010 grading method without prior training. No grader bias was detected in DOE's testing. DOE also notes that AHAM conducted further testing to assess repeatability and reproducibility at a number of test facilities. After completion of their own round robin testing, AHAM expressed concerns regarding the repeatability and reproducibility of the Test Method. However, DOE noted that the round robin test units in general showed good cleaning performance results at all the round robin test labs, and the test-to-test variability was similar to what DOE observed during its own investigative testing.
7	Test Units		DOE and EPA are encouraged to make it very clear in the draft version 6.0 specification that the units tested for cleaning performance qualification must be the exact same units tested for energy and water qualification. In addition, the units tested for cleaning performance qualification must be tested at the same time and in the same quantity as those tested for energy and water consumption. It is essential that energy and water consumption is linked to cleaning performance.	In the Test Method, DOE has stated explicitly that cleaning performance of soil-sensing dishwashers shall be determined on the same test units during the same cycles as the energy and water consumption tests for ENERGY STAR qualification, while that of non-soil sensing dishwashers shall be evaluated on th same test units immediately following the energy and water consumption tests.
8	Sampling Plan		The stakeholder agrees with the proposed sampling plan, which would be consistent with the sampling plan specified in 10 CFR 429.11 and 429.19. This approach would increase traditional testing burden, but the increased burden would be balanced by a simpler procedure and more accurate results.	In the Draft 1 Version 6.0, Section 5A would allow the DOE residential dishwasher sampling requirements for energy and water testing specified in the CFR to also be used in order to determine a model's per-cycle Cleaning Indexes. Consistent with other product specifications, the specification also provides the option for manufacturers to test, for ENERGY STAR certification purposes, one representative unit based on the definition of a Basic Model.
9	Sampling Plan		The stakeholder agrees that the cleaning indexused to qualify both soil-sensing and non-soil sensing dishwashers be determined in accordance with the requirements specified in 10 CFR 429.19(a)(2)(ii). This would ensure representative qualification scores and minimize false findings of non-compliance.	As noted in response to comment 8, the sampling plan included in the Draft 1, Version 6.0 provides consistency with the DOE regulations by referencing the sampling plan specified in 10 CFR 429.11 and 429.19 for both soil-sensing and non-soil sensing dishwashers.
10	Verification Testing Requirements		The stakeholder agrees that the ENERGY STAR verification testing requirements should be applied to dishwasher cleaning performance.	EPA has proposed to address cleaning performance in Version 6.0 through a reporting requirement, only. Since the proposal does not establish minimum requirements for cleaning performance, verification testing would not be applicable.
11	Verification Testing Requirements	Tolerance	It is difficult to comment on whether the tolerance requirements should be changed until the sources and magnitude of th variation in the test procedure are understood. When those are identified, the stakeholder will provide additional comments as part of the version 6.0 specification development process.	See response to comment 10. DOE and EPA would further consider tolerances if a minimum requirement for cleaning performance is considered in the future.

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12	Verification Testing Requirements		EPA and DOE should clarify whether cleaning performance laboratories will need a specific level of certification in order t perform performance tests for ENERGY STAR. The stakeholder expects certification under ISO 17025 to be sufficient, but seeks clarification.	Laboratories that conduct the testing required for ENERGY STAR certification must gain EPA recognition. For third-party laboratories, recognition requires accreditation to ISO/IEC 17025 with a scope that includes all of the required test procedures (including the cleaning performance Test Method). Manufacturer-owned laboratories without full accreditation may also conduct testing if they establish a supervised or witness testing arrangement with their certification body. In that case, a certification body conducts an assessment similar to 17025 and ensures the laboratory is capable of conducting the required testing. Information on laboratory recognition is available on our webpage here: http://www.energystar.gov/index.cfm?c=third_party_certification.tpc_labs
13	Test Setup	Water Hardness	DOE should continue to specify water hardness in the cleaning performance test procedure. While DOE has noted that the cleaning performance test method water hardness requirements are consistent with the Federal test procedure at 10 CFR Part 430, Subpart B, Appendix C1, which does not specify a requirement, this is a back-door rulemaking for products that manufacturers seek to qualify for ENERGY STAR. The fact that DOE does not have any information on what impact water hardness will have on energy or water consumption is another reason why DOE should have revised 10 CFR Part 430, Subpart B, Appendix C1 to include a requirement when it had the opportunity. It is not appropriate for DOE to use the ENERGY STAR process to set a regulatory requirement at any time, especially when the impact of the change on water and/or energy is unclear. DOE should promptly amend 10 CFR Part 430, Subpart B, Appendix C1 so that the DOE test procedure is not improperly amended via an ENERGY STAR test procedure.	DOE has maintained the water hardness requirement in the Test Method, but there is no regulatory requirement for manufacturers to use a specific water hardness when conducting the DOE test procedure at 10 CFR Part 430, Subpart B, Appendix C1. DOE may consider water hardness in the next DOE test procedure rulemaking.
14	Test Procedure	Loading	DOE should add criteria to address the position of unsoiled and soiled items in relation to empty rack spaces in the test procedure. An open space in front of soiled load items could result in improved water spray to the adjacent soiled surface, provide more favorable cleaning performance, and thus, offer a means of test procedure circumvention.	DOE agrees that the position of soiled items in relation to open spaces may impact cleaning performance. Accordingly, DOE has included a clarification in the Test Method that any test load item adjacent to an open rack space must be unsoiled.
15	Test Procedure	Grading	The stakeholder disagrees that the instructions included in the test method and the referenced ANSI/AHAM DW-1-2010 and IEC standard 60436 Ed. 3.1, 2009-11 test procedures provide a basis for consistent grading. DOE cannot require a test laboratory to use only one technician for grading, but it should cite the note in section 5.1 of ANSI/AHAM DW-1-2010. The main point in the note is that, where more than one technician is used for scoring, test laboratories shall have a plan in place to eliminate bias, thus reducing variation. In addition, it is critical that scoring technicians be experienced (or, to use the IEC language, "competent") in the scoring procedure. DOE does not acknowledge what industry has learned from running these tests every day for more than a decade. It is critically important that the graders and the facility are consistent and that graders are trained and experienced in order to minimize variation in the test procedure.	DOE has concluded that the instructions in the Test Method and referenced ANSI/AHAM DW-1-2010 produce consistent test results. Requirements or recommendations for laboratories to achieve proper test conduct are outside the scope of this program.
16	Test Procedure	Grading	The ANSI/AHAM DW-1-2010 test method is without question the most representative of American consumer behaviors and is the most rigorous and least forgiving on all manufacturers. Every manufacturer benefits from the IEC standard 60436 Ed. 3.1, 2009-11 grading methodology over ANSI/AHAM DW-1-2010 and by using the IEC standard 60436 Ed. 3.1, 2009-11 methodology consumers may be misled. The IEC standard 60436 Ed. 3.1, 2009-11 grading methodology will not satisfy consumer needs and will accelerate compensating consumer behavior, which will negate efficiency benefits.	The cycles and soil loads included in the Test Method are consistent with those specified in the DOE test procedure. Stakeholders commented that these cycles and loads reflect actual consumer behavior. DOE has also updated the Test Method to reference the ANSI/AHAM DW-1-2010 scoring and calculation methodology. DOE, however, does not expect that the IEC standard 60436 Ed. 3.1, 2009-11 grading method would have misled consumers regarding cleaning performance. DOE observed that both grading methods reflected similar relative cleaning performance from unit to unit in the test sample, just on different scales. Stakeholders in general expressed support for the ANSI/AHAM DW-1-2010 grading method, so DOE updated the Test Method accordingly.
17	Test Procedure	Grading	Not only are scores significantly elevated when using IEC standard 60436 Ed. 3.1, 2009-11 grading in comparison to ANSI/AHAM DW-1-2010 grading, but scores are very tightly grouped together with IEC standard 60436 Ed. 3.1, 2009-11 grading. IEC standard 60436 Ed. 3.1, 2009-11 grading can hide true consumer observable performance issues.	See response to comment 16.

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18	Test Procedure	Grading	The fundamental source of variation leading to DOE selecting the IEC standard 60436 Ed. 3.1, 2009-11 grading method has not been identified by DOE. Is there truly less variation from IEC standard 60436 Ed. 3.1, 2009-11 grading, or does the ANSI/AHAM DW-1-2010 grading provide better detection of differences that the customer will actually see? Round robin data is essential towards understanding the source of differences and determining the best way to proceed.	See response to comment 16 regarding the grading method, and comment 6 regarding round robin data.
19	Test Procedure	Grading	The stakeholder continues to believe that it is problematic to mix and match soiling procedures and grading techniques from different test procedures, and that DOE should use the ANSI/AHAM DW-1-2010 grading procedure.	See response to comment 16.
20	Test Procedure	Grading	The stakeholder disagrees with DOE's conclusion that the grading procedure in IEC standard 60436 Ed. 3.1, 2009-11 is more repeatable than that in ANSI/ANSI/AHAM DW-1-2010 and requests that DOE provide the raw test data it used to make that conclusion. The data provided in the webinar are not sufficient. DOE commented that it has already provided more data than is normally presented; however, the stakeholder believes there is no reason why more data cannot be provided to stakeholders. In particular, the stakeholder does not understand the fundamental sources of variation that led to DOE selecting the IEC standard 60436 Ed. 3.1, 2009-11 grading method over the ANSI/AHAM DW-1-2010 method in the proposed test method.	DOE has provided more detailed data from Phase 3 testing at two external laboratories. The data includes the individual item grades for each test cycle as well as each test cycle's energy and water consumption. Additionally, DOE has updated the Test Method to reference the ANSI/AHAM DW-1-2010 scoring methodology.
21	Test Procedure	Cleaning Index	The stakeholder continues to agree that the score should not weight the scores for any soil level over another. The final test method should be edited to clearly express that there is no weighting.	The Test Method maintains the calculation of cleaning index for each individual test cycle. Consistent with this, EPA has proposed that the per-cycle Cleaning Index be reported for each test cycle (heavy, medium and light).