

Summary and Response to Stakeholder Comments Received on the  
ENERGY STAR Program Draft 2 Version 7.0 Clothes Washer Specification

REF NO.	Topic	Comment Summary	ENERGY STAR Response
1	Definitions	EPA should use the DOE definition as written in the regulatory text and keep "other commercial applications." EPA's definitions shouldn't differ from those in the regulatory text as any variation from DOE's approach creates confusion for stakeholders and consumers. Instead, EPA should look to address this matter in the specification's scope section.	In Draft 2, EPA proposed a change to the Commercial Clothes Washer definition in response to stakeholder feedback indicating larger washer-dryer extractors used in commercial facilities, i.e., hospitals, should not be eligible for ENERGY STAR under the current specification. EPA continued to believe that amending the definition to remove "other commercial applications" is the most straightforward way to clarify what is covered in the specification and has retained the proposed Draft 2 definition in the final draft.
2	Definitions	The definition for Basic Model is missing the word "all" to start the definition.	EPA has corrected the Basic Model definition in the final draft.
3	Scope	Stakeholder is unaware of any analysis on the impact to consumers or on energy savings from extending ENERGY STAR to larger commercial clothes washer units. ENERGY STAR needs to provide this data for stakeholders review on whether it is appropriate to extend eligibility to commercial clothes washers not currently covered.	EPA is not proposing to expand the scope of commercial clothes washers covered through the Version 7.0 specification development process. As part of the Version 6.0 specification finalized in May 2012, EPA modified the commercial clothes washer definition to avoid excluding high-efficiency models that had narrowly exceeded the 3.5/4.0 cu-ft. cutoff. This decision, supported by several stakeholders, was also based on the consideration that larger washers may enable consumers to wash larger loads and reduce the number of load washed--leading to further energy and cost savings.
4	Scope	Stakeholder opposes the 6.0 cu-ft. capacity limit on residential clothes washers. Although DOE mandated a capacity limit for commercial clothes washers, there is no such limit for residential washers. Manufacturers that wish to sell a 7.0 cu-ft. residential washer will be required to obtain a waiver from DOE. EPA has not provided any data for departing from DOE's standard making process.	The Draft 2 Version 7.0 proposal, consistent with the current ENERGY STAR Clothes Washer Version 6.1 specification, excluded clothes washers larger than 6.0 cubic feet. In consultation with DOE, EPA pursued this change through the Version 6.1 specification revision in order to provide a consistent size limit for both commercial and residential washers and after considering that the test procedure allows for testing of units up to 6.0 cubic feet. EPA is aware that manufacturers could choose to submit a waiver if they seek to bring a larger washer to market. However at this time, EPA is unaware of any practical impacts of the 6.0 cu-ft. maximum capacity limit on ENERGY STAR residential clothes washers and notes there are real-world appliance size limitations associated with installation of very large units in residential environments. The final draft retains the consistent 6.0 cubic foot capacity limit.

Summary and Response to Stakeholder Comments Received on the  
ENERGY STAR Program Draft 2 Version 7.0 Clothes Washer Specification

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5	Energy Savings	EPA should consider publishing estimated energy savings embedded in water savings. The amount of energy needed to deliver and heat potable water and to treat wastewater is significant. Addressing the embedded energy impacts of ENERGY STAR requirements is a great first step to raising awareness on this larger issue.	EPA appreciates this suggestion and recognizes the energy requirements associated with delivering water to end-consumers can be significant.
6	Qualification Criteria	Supports the Draft 2 Version 7.0 energy and water efficiency criteria and encourages EPA to continue engaging manufacturers to identify forthcoming technology improvements and likely market trends to help anticipate how efficiency will change in the coming years. If there is a strong indication that efficiency will improve at a rapid rate, EPA might consider including more stringent standards in Version 7.0.	In general, stakeholders supported the Draft 2 proposal and in light of this EPA has made only minor changes in the final draft which are discussed in more detail in a notebox in the specification. EPA will review this specification again in 3 years or when market share reaches 35%, to ensure that the specification is keeping pace with changing market conditions and technological advancements, and so that the program can continue to effectively differentiate, for consumers, the most energy efficient products available in the marketplace.
7	Qualification Criteria	Stakeholders support the inclusion of a 5 percent energy allowance consistent with the "Joint Petition to ENERGY STAR to Adopt Joint Stakeholder Agreement as it Relates to Smart Appliances" from industry, efficiency advocates, and environmental groups. The allowance is intended to serve as an incentive to help jump start the market for clothes washers with smart grid functionality.	EPA retained the five percent functional adder for ENERGY STAR clothes washers with connected functionality in the final draft, as an incentive for new functionality that provides consumer value through energy savings and convenience features. This functionality may also provide future benefits to the electric grid and additional consumer savings once the supporting infrastructure is built. This temporary incentive is designed to help 'jump start' the market.
8	Qualification Criteria	Certain stakeholders oppose the 5 percent energy allowance. The integration of demand response technology should occur without sacrificing energy efficiency. ENERGY STAR should take care to incentivize manufacturers that integrate both connected technologies and efficiency into their products, not one or the other. If the allowance is maintained there should be a definite sun-setting clause.	

Summary and Response to Stakeholder Comments Received on the ENERGY STAR Program Draft 2 Version 7.0 Clothes Washer Specification

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9	Qualification Criteria	EPA needs to use DOE's product class determinations and DOE has not identified a separate product class for units between 1.6 and 2.5 cu-ft. The ENERGY STAR program should not be used to push products from the market, which would occur if the levels EPA proposes for units larger than 2.5 cu-ft. are used across all units. Rather than identify a separate product class, EPA should work with manufacturers to evaluate criteria for front-loading washers that allow smaller units to qualify.	EPA received stakeholder comments with different views on the proposal to have a separate product class for smaller clothes washers (2.5 cubic feet and smaller). Consistent with stakeholders who supported the proposal, EPA believes it is important to continue to recognize highly efficient smaller clothes washers due to the unique value they provide to consumers who have greater space constraints. To this end, EPA selected a performance level based on the latest available data that recognizes the most energy and water efficient washers, in this size category, currently available. In general, EPA looks to leverage product classes created by DOE for the minimum standards program as long as it makes practical sense to do so in the ENERGY STAR program. In this case, subjecting smaller clothes washers to the same ENERGY STAR requirements as larger washers would limit selection for consumers requiring the smaller size, since smaller clothes washers are not achieving the same levels of efficiency as many larger models.
10	Qualification Criteria	Multiple stakeholders supported separate efficiency requirements for small clothes washers. In addition, incorporating only one criteria, regardless of configuration, is supported. Consumers looking for a small washer will be able to quickly identify the most efficient products in this area.	
11	Qualification Criteria	Stakeholders support expressing the Version 7.0 requirements using the IMEF and IWF metrics because it harmonizes the specification with Appendix J2 and the standards that will be in effect when the proposed Version 7.0 specification becomes effective.	EPA has retained the new metrics (IMEF and IWF) in the final draft.
12	Qualification Criteria	Stakeholder supports EPA's proposal to separate product categories and levels for top- and front-loading clothes washers but believes that EPA did not need to re-consider an issue that DOE has already decided considering that the DOE standards provide the foundation for the ENERGY STAR program.	After considering stakeholder feedback received, EPA has retained the separate product classes in the final draft. EPA has noted more recent information shared by stakeholders indicates that some top load clothes washers now on the market have similar cycle length as front load washers. Despite this, EPA has retained separate product classes after observing the latest market data indicates consumer preference for top loaders remains high in the U.S., with top load washers accounting for nearly 2/3 of sales in 2012. Separate requirements for front and top loading clothes washers provide the program with the ability to both continue to recognize a selection of
13	Qualification Criteria	Separating top-loading and front-loading product categories is not warranted for residential washers. Both top-loaders and front-loaders do not have distinguishable features and both designs can achieve similar energy and water efficiency performance. Cycle time should not be used as justification to separate product categories.	

Summary and Response to Stakeholder Comments Received on the ENERGY STAR Program Draft 2 Version 7.0 Clothes Washer Specification

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14	Qualification Criteria	<p>Based on analysis of Consumer Reports washing machine ratings, it is not clear that a separation of product categories based on cycle time is justified. While the top rated top-loaders have a shorter cycle time than the top rated front-loaders, there are many front-loaders with comparable cycle times to top-loaders. There are a range of cycle times for each configuration and the product with the longest cycle time is a top-loader. EPA should consider the range of cycle times for models that meet the current and proposed ENERGY STAR criteria and determine whether a single product class would significantly limit consumer choice of machines with average or less-than-average cycle times.</p>	<p>program with the ability to both continue to recognize a selection of highly efficient top loader clothes washers, while also defining front load clothes washer criteria that can better recognize and reflect the efficiency performance of front loaders that are available today. EPA will develop new savings messaging for consumers that reflects this approach, in support of the Version 7.0. EPA notes that while DOE definitions and product classes are quite commonly used in an ENERGY STAR specification, there are times when modifications may be considered and adopted to ensure the specification requirements are achieving the ENERGY STAR program's guiding principles. In such cases, EPA will seek comment through a stakeholder process.</p>
15	Analysis	<p>EPA should utilize that data from DOE that is recent enough to be relevant. EPA's payback analysis for front-load clothes washers appears to be too short. DOE estimated that the payback would be between 5.2 and 9.2 years, which is much higher than the 0-3 years estimate provided in the analysis. EPA should seek to understand the difference and either update its analysis, with an explanation to stakeholders, or inform stakeholders of the reason.</p>	<p>Consistent with ENERGY STAR program principles, EPA seeks to establish performance levels that deliver significant energy savings without unreasonable added cost for the consumer. Where there is an expectation of added cost, the Agency explores whether there are likely to be consumer options such that the payback period (resulting from reduced energy costs) for the ENERGY STAR model versus a comparable standard model is reasonable, generally within 3-5 years. To complete this assessment, EPA focuses on identifying and comparing a small selection of like-models (standard model vs. one that meets ENERGY STAR criteria), with the goal of isolating the incremental cost due to the efficiency improvement and ensuring this incremental cost can be recouped via energy savings in a reasonable period of time.</p>

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ENERGY STAR Program Draft 2 Version 7.0 Clothes Washer Specification

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16	Cleaning and Rinse Performance	<p>Although performance is not a concern for the criteria proposed in Version 7.0, developing a cleaning and rinsing test is supported. The development and eventual incorporation of a performance test will give consumers confidence that efficiency gains are not achieved at the expense of washer performance thereby protecting the ENERGY STAR brand.</p> <p>At that point where performance metrics are incorporated, EPA should require that manufacturers of all models eligible for the ENERGY STAR label report their test results. Allowing manufacturers to avoid this reporting requirement through earlier certification would put other manufacturers at a disadvantage and could obscure poorly performing models carrying the ENERGY STAR label.</p>	<p>EPA appreciates this feedback and has retained the cleaning and rinse performance reporting requirement in the final draft and plans to integrated additional detail (e.g., metrics for values to be reported) once the test procedure is available. Once a cleaning test is available, EPA will work with stakeholders to integrate additional detail on the reporting requirements into the specification for ENERGY STAR certified models.</p>
17	Cleaning and Rinse Test Method	<p>The approach outlined by DOE in the Preliminary Approach, which would require two tests to determine energy/water and cleaning/rinsing, is strongly opposed. Although DOE has done everything possible to link energy and water consumption to performance using the existing test procedures, the test is simply not viable. With one test requiring detergent and the other not requiring detergent it would be easy to circumvent the test procedure. In addition, requiring two tests increases the test burden on manufacturers. The test procedure is also missing a mechanical action criteria, which, if included, would increase the test burden on manufacturers further. Finally, reconciling these substantive issues will take years to overcome.</p> <p>AHAM is already working on a test procedure that solves all of these issues and therefore DOE is encouraged to stop work on the Preliminary Approach and allow AHAM the opportunity to complete its test procedure.</p>	<p>DOE intends to consider the linkage between energy/water consumption and cleaning/rinsing performance in its development of a test method for cleaning/rinsing performance, as well as the potential for circumvention if the measurements are performed separately.</p>

Summary and Response to Stakeholder Comments Received on the  
ENERGY STAR Program Draft 2 Version 7.0 Clothes Washer Specification

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18	Cleaning and Rinse Test Method	AHAM HLW-1 is a comprehensive standard test procedure that should be used for all residential clothes washers. It will give the most accurate measurements for energy, water, wash performance, rinse performance and fabric wear performance. Modifying the DOE Appendix J2 test procedure is not supported.	DOE's development of a cleaning and rinsing performance test procedure will need to be harmonized with the current (Appendix J1) and future (Appendix J2) Federal test procedures for measuring energy and water use, which form the basis of the current and amended standards. DOE looks forward to working with industry on the development of the cleaning and rinsing test procedure that is consistent with the Federal test methods.
19	Cleaning and Rinse Test Method	Rather than cutting and pasting definitions that are the same as HLW-1, DOE should simply cite the relevant definition.	DOE will consider simplifying the language of its proposed test method by citing the relevant definitions of HLW-1.
20	Cleaning and Rinse Test Method	<p>The laboratory conditions should be the same as those in Appendix J2, including the electrical supply, ambient air temperature, humidity, and water supply, hardness, pressure, and temperature. Even though the two tests will not be conducted at the same time, laboratories will likely set up their labs to meet the ENERGY STAR requirements which would effectively change the DOE test procedure. Further consideration should be given as to what is used for clothes dryers as these may be tested in the same labs.</p> <p>DOE proposed to specify water hardness requirements. The absence of water hardness requirements in the test procedure could be a significant source of variation and therefore DOE should amend Appendix J2 so that the DOE test procedure is not improperly amended via an ENERGY STAR test procedure.</p>	DOE agrees that laboratory test conditions should be harmonized to the extent possible.
21	Cleaning and Rinse Test Method	It is not believed to be possible to perform the washing and rinsing test in a single test cycle. During the development of HLW-1, this approach was considered, but was rejected as unworkable.	DOE will further investigate the feasibility of performing both the washing and rinsing tests in a single test, with the goal of reducing manufacturer test burden.

Summary and Response to Stakeholder Comments Received on the  
ENERGY STAR Program Draft 2 Version 7.0 Clothes Washer Specification

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22	Cleaning and Rinse Test Method	DOE noted that if the DOE test cloths are used in the ENERGY STAR test procedure, extensive testing would be undertaken to develop folding and loading requirements that would produce repeatable and reproducible test results. This is another reason that the HLW-1 test cloth should be used. In addition, test cloth loading can add a source of variability and DOE is requested to address this issue in Appendix J2.	Any changes impact the Federal test method for energy and water use (e.g., Appendix J2) would need to be considered in a future DOE test procedure rulemaking.
23	Cleaning and Rinse Test Method	A set of open meetings with AHAM, manufacturers, DOE, and relevant consultants is proposed to jointly progress the concept and detail of a cleaning and rinsing test procedure.	DOE welcomes a discussion with industry on the technical details of AHAM's clothes washer test procedure development.
24	Cleaning and Rinse Test Method	<p>The HLW-1 test method should be used as a starting point for the clean/rinse test method and it should be harmonized with the existing DOE energy and water efficiency test procedure. DOE and EPA should be thoughtful of how to achieve harmonization. In particular, EPA and DOE should consider the following:</p> <ul style="list-style-type: none"> <li>- Performance metric should be intuitive with higher scores representing better performance.</li> <li>- Defining a new test load that incorporates a representative fabric selection and garment design.</li> <li>- Since loading can impact energy efficiency, explicit loading protocols should be considered.</li> <li>- Performing the clean/rinse tests at the most common temperature settings.</li> <li>- Consider establishing top and bottom bounds of likely clean/rinse performance.</li> <li>- Consider developing a weighted score that represents the average performance that will be achieved given typical washer use patterns.</li> </ul> <p>A more recent version of this rinsing performance test will soon be available and it is that version that should be used.</p>	DOE will take each of these points under consideration during further development of a cleaning and rinsing test method.

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ENERGY STAR Program Draft 2 Version 7.0 Clothes Washer Specification

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25	Cleaning and Rinse Test Method	At this time, it is unknown if it is appropriate to use average or maximum load sizes in measuring cleaning and rinsing performance. As part of its test procedure development, AHAM is looking at this very issue and encourages DOE to allow that process to complete.	DOE welcomes any data that interested parties would like to share about load size with respect to the cleaning and rinsing performance.
26	Cleaning and Rinse Test Method	The fact that if the DOE energy test cloth is used for the base load, new base load determination requirements would need to be developed is another reason that if DOE proceeds with the Preliminary Approach it should use the HLW-1 test cloth. This test load is well proven, has been used extensively in Europe, and is easily obtained.	DOE will consider this feedback during development of the test procedure for cleaning and rinsing performance.
27	Cleaning and Rinse Test Method	The current method of using the supplier's calibration data is the best method. Having each laboratory measure its own calibration data would significantly increase test burden for each laboratory.	DOE will consider this feedback regarding which calibration data to specify in the test method.
28	Cleaning and Rinse Test Method	Three replications of the test required for each wash and rinse temperature combination is consistent with HLW-1's requirements.	DOE agrees that requiring three replications in its cleaning/rinsing test method is consistent with HLW-1 requirements.
29	Cleaning and Rinse Test Method	DOE proposed that the weighing equipment be in accordance with HLW-1 rather than Appendix J2 to obtain more accurate results. Specifying greater accuracy may produce more accurate and repeatable results, but if DOE changes the accuracy requirement in the ENERGY STAR test procedure, it should propose similar requirements in Appendix J2 so that the DOE test procedure is not improperly amended by an ENERGY STAR test procedure.	DOE will further consider the issue of weighing equipment accuracy, including harmonization with the current requirements of Appendix J2.
30	Cleaning and Rinse Test Method	The current Appendix J2 Energy Test Cycle definition covers the Test Cycle choice much better than Appendix J1. Some manufacturers have abused this by recommending very obscure cycles, which would never be used by a consumer. How these test cycles are merged with the Appendix J2 test cycles will need to be discussed.	DOE will further consider the selection of test cycles for cleaning and rinsing testing. DOE agrees that test cycles should be harmonized with Appendix J2 test cycles to the maximum extent possible.



Summary and Response to Stakeholder Comments Received on the  
ENERGY STAR Program Draft 2 Version 7.0 Clothes Washer Specification

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31	Cleaning and Rinse Test Method	It is unknown if including only the cold wash/cold rinse and warm wash/warm rinse is an appropriate tradeoff between minimizing test burden and maintaining test conditions that are representative of those in Appendix J2. This is another reason that DOE should wait for the AHAM test method development to complete.	DOE welcomes further discussion on the issues of wash/rinse temperatures. DOE will consider any data that interested parties can share on this topic.
32	Cleaning and Rinse Test Method	The appropriate amount of detergent to use if DOE test clothes are required needs further study. There is no data as of yet on the appropriate amount of detergent. It is possible that the amount of detergent could be the same as that used for preconditioning or that the amount would not need to change from that used in HLW-1.	DOE will further investigate an appropriate amount of detergent to use, should the cleaning and rinsing test procedure require DOE test cloth as the base load material.
33	Cleaning and Rinse Test Method	Further study is required to determine whether and what weighted-average age requirements should be applied to base loads consisting of DOE test cloths. Considerable control of the age of the test load should also be considered as it has been found necessary by the Europeans.	DOE will consider the weighted-average age requirements, should the cleaning and rinsing test procedure require DOE test cloth as the base load material.
34	Cleaning and Rinse Test Method	Considerable, and likely long-term, study will be required to determine the impact of test substrate choice on performance test results for soil/stain removal and rinsing effectiveness, including the effects of fabric type and size and shape of base load articles.	DOE agrees with AHAM that further study would be required to determine the impact of test substrate choice on performance test results.
35	Cleaning and Rinse Test Method	Further study is required to determine whether the presence of synthetic material in the base load would necessitate differences in test methodology.	DOE will further investigate the effect of base load material on test results, should the cleaning and rinsing test procedure require DOE test cloth as the base load material.
36	Cleaning and Rinse Test Method	Energy test cloth issues are already a concern to manufacturers and therefore increasing the amount of test cloth that would need to be obtained would be a significant concern. Test burden will also increase if it is more difficult to obtain the test cloth. Finally, only a small number of entities can correlate the test cloth lots. Therefore, increasing test cloth lot changes would significantly increase burden and cost on those entities.	DOE will further consider the issue of test cloth supply and burden.

Summary and Response to Stakeholder Comments Received on the  
ENERGY STAR Program Draft 2 Version 7.0 Clothes Washer Specification

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37	Cleaning and Rinse Test Method	Due to the test cloth supply issues and the associated burden, it is unclear if the AHAM base load material or DOE energy test cloth would present a higher cost and burden.	DOE will further consider the issue of test cloth supply and burden.
38	Cleaning and Rinse Test Method	HLW-1 provides specific instructions for folding, loading, and test strip attachment. The same criteria would need to be evaluated for the DOE energy test cloth, which would require testing.	DOE will further investigate folding, loading, and test strip attachment requirements, should the cleaning and rinsing test procedure require DOE test cloth as the base load material.
39	Cleaning and Rinse Test Method	The mechanical action part of the test should not be removed. Doing so makes the test results less meaningful. Mechanical action is a key measure and a counterbalance to cleaning and rinse performance requirements.	EPA will consider adding mechanical action criteria as part of a cleaning and rinsing test method.
40	Cleaning and Rinse Test Method	AHAM HLW-1 should replace the Appendix J2 test procedure once it is completed.	DOE's development of a cleaning and rinsing performance test procedure will need to be harmonized with the current (Appendix J1) and future (Appendix J2) Federal test procedures for measuring energy and water use, which form the basis of the current and amended standards. DOE looks forward to working with industry on the development of the cleaning and rinsing test procedure that is consistent with the Federal test methods.
41	Test Requirements	The updated reference in Table 5 to Appendix J2 is supported. DOE noted that it plans to develop a test method to validate demand response capabilities. A procedure is being drafted by AHAM and DOE will be provided with an update as to the progress of that proposed test procedure in the coming weeks.	DOE welcomes additional information regarding validation of demand response capabilities.
42	Test Requirements	Stakeholder comments that the DOE DR test method must precisely define DR signals. Stakeholder testing has revealed that appliance responses from different manufacturers are based on different components of standardized DR signals. Costs of managing a utility DR program would increase significantly in the absence of such definitions.	
43	Significant Digits and Rounding	EPA proposed that all "calculations shall be carried out as specified in Appendix J1 to Subpart B of Part 430..." This appears to be a typo and should be deleted.	The references to the Appendix J1 test procedure have been removed in the final draft.

Summary and Response to Stakeholder Comments Received on the  
ENERGY STAR Program Draft 2 Version 7.0 Clothes Washer Specification

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44	Connected Criteria	<p>Several stakeholders did not support cloud based systems as the sole means of connection. Ensuring that a utility can connect directly with the appliance will help to achieve the intended benefits of the connected credit. Other stakeholders shared greater detail on a number of concerns with a product that only enables cloud-based interconnection, citing a number of issues including: limits flexibility &amp; consumer choice; may permanently couple a product to a single cloud service; creates a potential weak link; and excludes customers without broadband.</p>	<p>Currently, a range of connected approaches are being explored in the nascent connected appliance market. Accordingly, EPA believes it is ultimately in the consumer's interest for the market to be free to test a range of options, constrained only by the consumer-oriented objectives the ENERGY STAR program is seeking to advance. In this final draft, consistent with the recently finalized Refrigerator and Freezer Version 5.0 specification, EPA continues to indicate a preference for products that enable on-premises open standards connectivity, while allowing alternate approaches to comply. EPA further intends to monitor the connected appliance market, including uptake of appliances with connected functionality by consumers and utilities, and may consider subsequent criteria revisions to further encourage realization of energy and cost savings associated with smart grid interconnection.</p> <p>EPA encourages stakeholders to share findings and data associated with their market monitoring activities to help inform refinement of connected product criteria.</p>
45	Connected Criteria	<p>Stakeholders support inclusion of operational status requirements in connected criteria in order to help inform utility demand response programs, but one stakeholder requests clarification as to the level of reporting detail needed by utilities.</p>	<p>EPA has not received stakeholder feedback on more specific operational status reporting criteria. EPA notes that the section 4.F.1 criteria sets minimum criteria. Manufacturers are encouraged to work with utilities to identify more specific needs for operational status reporting. EPA may consider added specificity in the future, if warranted</p>

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46	Connected Criteria	Stakeholder comments that the rolling 24-hour limitation is unnecessary for clothes washers and should be removed. For cycle-based appliances, each cycle is an independent. Thus, demand response minimum responses should not be based on time. Stakeholder recommends removal of Sections 4.G.1.c. and 4.G.2.c.	Consistent with criteria proposed in the Draft 2 Version 1.0 clothes dryers specification, in this final draft, EPA is proposing that clothes washers with connected functionality be capable of providing a minimum of one Delay Appliance Load response per operational cycle. Consumers would be able to override, as desired. Some stakeholders were also concerned that consumers would be inconvenienced from being asked to delay load too frequently, but suggested three times per 24-hours as acceptable. Therefore, in addition to requiring the product be able to delay load at least once per cycle, the revised criteria do not require clothes washers to be able to delay load more than three times in a 24 hour period. EPA's intention is to balance potential grid benefits of reducing and deferring load through more flexible operation, with the need to continue to offer a good consumer experience (e.g., avoid overly long and unexpected delays).
47	Connected Criteria	EPA should remove the phrase "during this time period" to provide clarification that the product will reduce its average power draw by 50% over any 10 minute period when compared to the DOE test condition baseline.	Stakeholders raised new considerations over how to define and test this capability. In response, EPA and DOE are evaluating options for defining a clothes washer TALR capability and associated testing considerations. EPA has added a placeholder in the final draft and plans to engage with stakeholders in 2014 to finalize the TALR criteria.
48	Effective Date	The March 7, 2015 specification effective date is supported. The change in effective date to March 7, 2015 will serve to mitigate burden on manufacturers and reduce confusion for consumers due to the standard transition.	

Summary and Response to Stakeholder Comments Received on the  
ENERGY STAR Program Draft 2 Version 7.0 Clothes Washer Specification

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49	Effective Date	EPA should consider an earlier effective date than March 7, 2015. According to ENERGY STAR data, the market share of ENERGY STAR clothes washers had reached 60 percent in 2011 and the total number of washers on the ENERGY STAR certified product list increased by over 20% from 2011 to 2012. If Version 7.0 is not enacted until 2015, the market penetration for ENERGY STAR clothes washers will have been greater than 50% for a four year period, which will reduce the effectiveness of the ENERGY STAR mark.	EPA has retained the March 7, 2015 effective date for the Version 7.0 specification in order to synchronize with the new DOE standard.
50	Integrated Washer and Dryer Performance	EPA should lay the foundation for future specifications to address combined energy and water performance of washers and dryers as an integrated system as opposed to two unique products with no interaction.	Based on feedback from the industry, EPA understands that the "attachment rate" (washer and drying being purchased together), is typically is between 30-60%. EPA is currently working with DOE to develop a new savings calculation methodology to assess the efficiency of a pair. This method would use test data already collected through the individual DOE clothes washer and clothes dryer tests. EPA and DOE are planning to share a proposed methodology with stakeholders for review and comment.