

REF No.	Topic	Comment	EPA and DOE Responses
1	Definitions	Opposes inclusion of the "or gas" language in the Combination All-in-One Washer-Dryer definition. Not aware of any products meeting the proposed definition that use gas as a heat source. If such products enter the market, they should then be studied and a determination made as to whether they should be eligible for ENERGY STAR. Until then, no determination can appropriately be made as there is no data upon which to base eligibility criteria.	While EPA is not aware of any combination W/Ds with gas as a heat source, EPA also does not believe this lack of product is a reason to exclude these from the scope of the definition. The intent of this specification effort is to develop requirements for combination W/Ds to ensure ENERGY STAR label addresses whole-product performance. Thus, the definition has been developed to cover all products that provide consumers with the ability to both wash a load and the option to dry a load (irrespective of its heat source). EPA would consider data on gas combination W/D product drying performance when it becomes available in order to further consider whether separate requirements are necessary for this class of products.
2	Definitions	EPA's definition for "combined energy factor" (CEF) is not identical to DOE's definition. EPA should cite the relevant section in the DOE test procedure - 10 C.F.R 430, Subpart B, Appendix D1, section 4.8.	Since performance requirements for combo W/Ds are being deferred in Draft 2 (see response #7), the draft specification no longer includes a definition for CEF. However, DOE has re-reviewed Section 4.8 of the DOE clothes dryer test procedure (10 CFR 430, subpart B, appendix D1) and has determined that the definition should be modified to state that CEF "...is calculated as the clothes dryer test load weight in pounds divided by the sum of "active mode" per-cycle energy use and "inactive mode" and "off mode" per-cycle energy use in kWh." DOE believes this definition is consistent with the DOE test procedure.
3	Crosswalk of Levels in 2015	EPA should provide detailed information on how it will address the transition to the new clothes dryer and clothes washer standard levels and test procedures in 2015. EPA should ensure that there is no change in the stringency of its eligibility criteria when those changes are made. Instead of doing a revision in a couple of years, EPA should now provide a "crosswalk" from the eligibility criteria that will be in place prior to 2015 and those that will be in place after the transition.	EPA is planning to review and potentially revise the criteria for residential clothes washers in 2012. When these criteria are revised, EPA will consult with DOE on developing and proposing a "crosswalk" for ENERGY STAR requirements in 2015. Currently, DOE does not have a "crosswalk" available to translate clothes washer levels to the new clothes washer test procedure.
4	Test Procedure	Stakeholder expresses concerns with the current DOE test procedure for clothes dryers, which does not account for the effectiveness of automatic termination controls. Units with automatic termination controls could shut down 5-15 minutes after detecting clothes were dry, while electromechanically controlled dryers needed up to 50 minutes before shutting down.	DOE recently published a request for information notice (76 FR 50145) to initiate a test procedure rulemaking to further investigate the effects of automatic cycle termination on the energy efficiency for clothes dryers and to request information, data, and comments regarding methods for more accurately measuring the effects of automatic cycle termination. EPA will coordinate with DOE to incorporate further changes, as applicable, when an amended clothes dryer test procedure is finalized.
5	Test Procedure	The flow rate of water during the water fill portion of the washing cycle is significantly different than the water used during the drying portion of the cycle. Current flow meters may not have the accuracy to meet the accuracy needs at both of these flow rates; new equipment may be needed for conducting this type of testing.	DOE recognizes that the water flow rates during the drying cycle may have significantly lower flow rates than the washing cycle. DOE will investigate acceptable levels of accuracy for flow rate measurement devices to determine if changes to the measurement equipment accuracy requirements are warranted. As noted in comment response #7, EPA has deferred establishing requirements for combination W/Ds. DOE believes this new timeline will also provide time for further consideration of measurement equipment requirements for the test procedure.

6	Harmonization with DOE Standards Program	Stakeholder reiterates the importance of maintaining harmonization with DOE at all times for definitions. EPA must have substantial reasons for varying from DOE regulations and if EPA varies from any DOE requirement, stakeholder requests that EPA provide its reasons for doing so and give stakeholders the opportunity to comment.	EPA appreciates this comment and has aligned this ENERGY STAR specification with applicable DOE definitions and requirements where possible. As part of its stakeholder processes to revise specifications, for cases where where different definitions may better support the ENERGY STAR program's goals, EPA, after consultation with DOE, would propose those definitions with supporting rationale and seek input from stakeholders.
7	Proposed Criteria	Stakeholder objects to the adoption of Draft 1 Version 6.0 specification as it pertains to combination all-in-one washer-dryers (combination W/Ds) on the grounds that the specification combination W/Ds should not use the DOE dryer test procedure and because the specification fails to account for a significant portion of the water use of a combination W/D. Recommends EPA separate proposals for combination W/Ds from pending revisions for commercial clothes washers.	EPA appreciates the feedback. In the Draft 2, EPA has deferred establishing requirements for combination W/D as recommended by stakeholders, so that EPA can further assess the feasibility of establishing a minimum requirement for water consumption. EPA plans to re-visit combination W/Ds when the criteria for residential clothes washers are reviewed for revision later this year. This new timeline will also provide time for further test procedure revisions, recommended by a number of stakeholders, to be further considered by DOE.
8	Proposed Criteria	Opposes the use of CEF as the measure for ENERGY STAR eligibility prior to DOE mandating it as part of the federal standard. Proposes that energy factor (EF) be used as the measure. If EPA adopts that proposal, they should cite 10 C.F.R. 430, Subpart B, Appendix D1, section 4.7.	In the Draft 2, EPA has deferred establishing levels for combination W/Ds (see comment response #7). However, EPA believes CEF is the more appropriate metric for assessing clothes dryer performance since it better addresses whole product performance (e.g., energy use in drying cycle, as well as any energy use in off- or standby-mode, if any) and because there is an established DOE test procedure available for determining CEF.
9	Proposed Criteria	EPA did not present any data to show how it selected the proposed levels for modified energy factor (MEF), water factor (WF), or CEF. EPA also did not consider whether any energy could potentially be double counted by testing one product with two test procedures. Requests that EPA provide that data in the next specification draft so that stakeholders can review and comment. Also requests that EPA provide a thorough explanation and data on how it selected the criteria levels for CEF and how it determined that CEF is the appropriate measure for qualification criteria. How does EPA justify that requirement prior to DOE's standard going into effect? Upon what data did EPA base its determination?	EPA received a limited data set of combination W/D model performance, mirroring the fact these products constitute a very small fraction of the residential laundry market in the U.S. (Shipment data suggests annual sales of combination W/Ds are <5,000). EPA received data from several manufacturers, one of whom requested their data not be shared publicly; therefore, EPA did not share individual model performance data when proposing levels in Draft 1. Also, DOE tested 2 combination W/D models in support of the recent clothes dryer energy conservation standards final rule (76 FR 22454). EF and CEF data for those models is presented in Chapter 5 of the Technical Support Document for that rulemaking, which is available on DOE's website. When EPA re-consideres performance requirements for combo W/Ds in 2012, the Agency's aim will be to build a larger data set that would enable us to share individual data points with stakeholders.
10	Proposed Criteria	Did EPA considered the fact that CEF includes standby power? If so, how was standby power accounted for in the proposed criteria level? Did EPA account for the fact that Appendix D1 will represent an increase in measured energy over the current test procedure? If so, how?	In its September 2010 notice to stakeholders, EPA specified an interim test procedure for combination W/D that utilized Appendix J1 (DOE clothes washer test) and Appendix D1 (amended DOE clothes dryer test, subsequently finalized in January 2011). The combination W/D test data that EPA subsequently received from several appliance manufacturers was expressed in terms of CEF and included measurements for standby power as specified in Appendix D. As a result, the Draft 1 proposal did consider combination W/D standby power.
11	Proposed Criteria	EPA should set separate criteria for vented and ventless combination all-in-one washer-dryers. DOE set its federal standards separately for vented and ventless products and EPA should follow the same approach.	EPA based its proposed levels on test data received from manufacturers that indicated that vented and ventless combination W/D models have similar drying energy performance. Therefore, EPA proposed a single level that would address both venting configurations. EPA would further consider the need for separate product classes if additional data is provided that supports different classes.

12	Proposed Criteria	The specification fails to account for a significant portion of water use used during the dryer mode of unvented units. Additional data need to be collected; this should be done before an ENERGY STAR specification is adopted, rather than after.	As discussed in comment response #7, EPA has deferred establishing performance requirements for combination W/Ds. In the interim, EPA is seeking additional data and information on the water consumption of combination W/Ds that can inform how the ENERGY STAR program addresses water consumption of combination W/D's drying cycle.
13	Reporting Requirement	Does not oppose the water consumption reporting requirement but does request that EPA more specifically state that water usage is to be measured during the measurement of CEF under the DOE test procedure.	EPA appreciates this feedback and plans to incorporate additional clarity in the future specification revision.
14	Reporting Requirement	DOE may change the specification for water supply pressure in Appendix J2 for clothes washer. If that change is made in the final test procedure, the additional criteria for the reporting requirement would also need to change at the same time Appendix J2 becomes effective.	EPA appreciates this information and will coordinate with DOE to incorporate further changes, as applicable, when the ammended DOE clothes washer test procedure is finalized.
15	Process	EPA indicated on the October 21, 2011 webinar that its intended next step was to issue a draft final specification for comment unless comments on the first draft specification required a second draft. Stakeholder requests that EPA issue a second draft rather than a draft final. There are too many unanswered questions and stakeholder review of data yet to be provided is required before this specification is ready for a draft final version.	Given the comments received on Draft 1, EPA plans to provide an additional draft specification for review and input from stakeholders, before finalizing requirements for combination W/Ds. In the near term, EPA is issuing Draft 2 that only establishes a definition for a combination W/D, so it is clear these products are not currently covered by the ENERGY STAR program. As discussed in comment response #7, EPA is deferring further consideration of combination W/D requirements until the residential clothes washer levels are revisited later this year.