

## ENERGY STAR Water Heaters Draft 1 Version 3.3 Comment Matrix

Topic	Stakeholder Comment Summary	EPA Response
Overall specification	Three commenters expressed their General support for Draft 1 and the effort to incorporate connected criteria into the Water Heaters ENERGY STAR Specification. Two commenters expressed concern that the Draft 1 proposal was overly prescriptive.	EPA appreciates these comments and the general interest in adding optional connected criteria to the specification. EPA believes this will allow additional recognition and incentives for products that offer connected and demand response functionality. EPA generally favors criteria that allow innovation. On the other hand, these capabilities create greater value if they are consistent. EPA has balanced these factors in the proposed criteria by specifying performance.
Connected product identification	One stakeholder stated that including literature or labels indicating that a product met connected criteria would be burdensome, and as these are not typically purchased directly by consumers it would not be worthwhile.	Identification as "connected" would primarily be through product listing on energystar.gov, as EPA is not proposing any labeling changes. The only informational requirement is to inform consumers of what is needed to access connected capability.
Scope of the connected criteria recognition	Four commenters recommended the inclusion of Electric Resistance Water Heaters (ERWHs) under a Connected label, stating that these products are an important resource to integrate renewable energy generation with the grid. Three of these encouraged the creation of a new recognition program for demand response products.	EPA does not intend to recognize ERWHs with the connected recognition as this does not align with the ENERGY STAR program's purpose of driving energy efficiency. However, EPA and DOE are striving to make the test method for Evaluation of Demand Response in Water Heater Products applicable for ERWHs and usable to verify demand response performance in these products and it will be available to the market for others' use.
Communication module	One stakeholder requested that the communications module does not need to be sold or packaged with the water heater unit.	EPA will allow separate controllers to be certified with a water heater product, but only the combination of that water heater with that controller will be recognized. Multiple controllers may be certified with the same water heater, at the discretion of the Partner.
Additional features to be recognized in the QPL	One stakeholder requested that time of use scheduling and relative price signal support be included as searchable QPL fields so that consumers can identify or filter by these features from the product finder.	EPA intends to include these as fields on the certified product list to easily identify these products.
Price signal processing	One stakeholder recommended that price signals and the water heater controls associated should be allowed to be handled in the cloud.	EPA is allowing products with an OpenADR implementation that occurs in the cloud and would allow pricing signals to be processed in this cloud architecture as well.
User alerts	One stakeholder requested clarification on the user alerts and where a secondary communication link would be needed.	The user alerts section can be met by providing messages that are communicated on the product or controller, or through a communication link (e.g., an app or messaging portal) to the consumer. Considering that the alerts may be shown on the product, in this version of the criteria EPA does not believe any communication link other than that for DR is necessary. With either means of communication the unit must be able to communicate at least two types of messages relevant to optimizing energy consumption or efficiency.
Energy reporting requirement	One stakeholder expressed concern over the energy reporting requirement, stating that communicating this energy use to consumers may create confusion.	At this time, the energy reporting requirements can be achieved through the required messaging through the DRMS. EPA eventually intends to have this information available for use by a home energy management system (HEMS). EPA looks forward to continuing the discussion of how best to use energy data to inform consumers and enable automatic energy management.
Recovery efficiency guidance	One stakeholder reported that they could not find the guidance from DOE instructing to determine the recovery efficiency as specified in Section 11.2 of ASHRAE 118.2	There is no active guidance from DOE on using section 11.2 of ASHRAE 118.2 to determine the recovery efficiency. The note in the draft specification under Table 6 has existed since version 2.0 and was applicable for testing to the EF test procedure only. The EF test procedure has been replaced with DOE's current consumer water heater test procedure for UEF and the guidance is no longer necessary or applicable.
Version 4.0	Two stakeholders commented that EPA should consider raising the UEF criteria in the a future Version 4 Specification. One stakeholder submitted comments requesting the revision or elimination of the First Hour Rating (FHR) requirements for storage products.	EPA appreciates this feedback and plans to revise this specification to further identify the top performing products in 2020 or 2021. The use of FHR will be evaluated and EPA is considering alignment with the draw pattern categories as defined in the Federal test method for Water Heaters.