ENERGY STAR Water Heaters Draft 2 Version 3.3 Comment Matrix

Topic	Stakeholder Comment Summary	EPA Response
Electric resistance	One commenter recommended including validation testing for electric water heaters to test applicability for these products.	EPA was not able to accommodate additional validation requirements within the Specification for electric resistance water heaters but does believe the updated test method can sufficiently test these products.
Loss of Connectivity	One commenter recommended including a function to stagger immediate recovery of blocks of connected products and functionality, so that after loss of power products would gradually increase recovery power.	EPA is aware that some products may implement features to slowly increase power or randomize a wait period before start-up, but there does not appear to be a consensus on how this would occur on a larger scale. This is not included in the draft Specification, but EPA will continue to monitor different functions available on the market.
Operation after loss of connectivity	One commenter stated that if there was a loss of connectivity where the event is indefinite, the heat pump water heater (HPWH) should default to the local operating immediately to ensure safe and satisfactory operation.	EPA has allowed a maximum time period of thirty minutes for units to revert back to local operating mode for flexibility, however manufacturers are free to design their products to revert to local operating mode immediately if there is a loss of connectivity during an event without a defined time period.
Mixing valve	One commenter requested that ENERGY STAR requires the use of a mixing valve on all water heater installations, including those that offer Advanced Load Up. Another commenter highlighted that there was no way to guarantee a mixing valve will be installed on a unit and expressed concerns about the liability associated with increasing the tank temperature during Advanced Load Up.	The ENERGY STAR program is unable to set a requirement that an installation must have a mixing valve, as the label is for the water heater itself. However, EPA does understand that a unit being used for Advanced Load Up should have a mixing valve installed and requires that Advanced Load Up features must be disabled by default and enabled by an installer. From conversations with manufacturers and utilities, there does seem to be an understanding of the risks associated with Advanced Load Up, and EPA has made this functionality optional.
Current Available Energy Storage Capacity	One commenter raised concerns that providing this information to the consumer may be confusing, and that this data may be inaccurate or difficult to estimate.	EPA acknowledges this concern is a theme that has arisen throughout discussions with utilities and manufacturers. This value is not intended for communication to the consumer, and will not be tested for accuracy, but it is important to utilities that this communication is included as a rough estimate. As programs gain more experience with this data, we can determine if the level of accuracy that manufacturers are able to provide is helpful.

Electric Resistance use during Load Up	One commenter stated that the use of electric resistance elements during a load up event should be left up to the utility, and suggested that the load up language should be revised to allow for electric resistance to be used.	It is EPA's understanding that the utility will not have granular enough information or communication to decide between using electric resistance elements or not. Additionally, EPA does not want to increase costs for the consumer if electric resistance elements come on when they are not needed.
Minimum Load Shift	One commenter expressed support for the levels set for minimum load shift and their alignment with Joint Appendix 13.	EPA appreciates this comment.
Required Demand Response Message Mapping	One commenter expressed support for the inclusion of the required Demand Response Message mapping included in Appendix B	EPA appreciates this comment.
Water Heater Error	One commenter recommended removing the language "recommended use: Failure of heat pump or element." from water heater error message.	EPA clarifies that this operational state message is intended only to communicate the status of the water heater to a DRMS when that status is requested. This status is not used to communicate with a consumer. EPA is recommending this is used to reflect that a CWHP is communicating with a DRMS but is experiencing an error that would prevent it from responding to a DR request as expected. EPA provides the example as a failure with a heat pump or resistive element, as the unit would not experience a loss of connectivity but would not respond to a load up request.