Dear Ms. Daken:

On behalf of Bradford White Corporation (BWC), I would like to express our appreciation for the opportunity to comment on the ENERGY STAR Draft 1 Version 3.3 Residential Water Heater Specification. Please find our comments below.

In general, BWC is concerned with a number of the proposed changes in the subject draft specification, and we question whether it is appropriate at this time to add a significant number of items that are optional. It begs the question, “how will adding these requirements help the supply chain to stock, sell, and install these products?”

**Definitions**

For any external communication module required to enable a product to be connected, we recommend that this doesn’t have to be included on or shipped with the water heater. This alleviates adding cost to a product that is heavily dependent on incentives to encourage sales of heat pump water heaters (HPWH). In Figure 1, Note 1 is referenced, yet we do not see this note contained in the draft specification. We request EPA to provide clarification on what this note includes.

In the Demand Response (DR) definition, BWC seeks clarification on what is driving the inclusion of gas products. We’re not aware of any gas DR programs, which makes us question the inclusion of gas in this specification, at this time.
**Connected Product Criteria**

In the User Alerts section, it refers to a secondary communications link. BWC seeks clarification on what forms EPA sees this communications link taking.

While we can see the appeal to providing Energy Reporting, BWC is concerned with the supply of this information to consumers. This will lead to customer complaints to manufacturers, because the energy usage will not match the FTC Energy Guide.

The specification calls out two different DR communication protocols, CTA-2045A and OpenADR 2.0. We strongly recommend that the specification is revised to reference that an open communication protocol is used, rather than being overly prescriptive and inhibiting the ability to innovate. With connected appliances still being fairly new, it is not clear if the two aforementioned protocols will be appropriate long term.

We are concerned if a consumer does have the ability to override events when a certain life situation requires it (e.g. house guests staying over the weekend), which will ultimately lead to customers thinking there is something wrong with the product.

For the required messaging, BWC recommends that is consistent with already existing DR specifications/protocols.

In a note, it is stated that “gas instantaneous water heaters are not good targets for load shifting, and as such DR criteria are not required for these products to be recognized as connected.” While we agree with the first part of the statement, this is another reason why gas should be excluded from this part of the draft specification.

For General Curtailment, it refers to reducing energy consumption throughout the duration of the request. It is not clear how much the energy consumption needs to be reduced by. And, it begs the question, “what if a product is not able to modulate?”

When in Load Up, BWC seeks clarification on how long a water heater would be required to be in this mode. And, regarding setpoint adjustment, it states, “adjust product thermostat setpoint up or down if safe to do so.” We would like clarification on how a utility would know if it is safe to adjust the setpoint. This could introduce potential product liability issues.

BWC is concerned about displaying the Connected Water Heater Product (CWHP) requirements at the point of purchase and prominently in the product literature. It is important to note that many water heaters are not sold in a retail setting, and therefore, their packaging is not geared for consumers. And, with these requirements being optional, we do not see the value in including this information with the product. Rather, we’d recommend this information be included with any additional components or modules that allow the product to be connected.
Testing Requirements
We feel it is premature to add connected criteria to this specification until a number of items are worked through, especially the test procedure.

BWC seeks clarification on the note related to recovery efficiency. We cannot find a reference on DOE’s website or in the Federal Register where a manufacturer is permitted to use section 11.2 of ASHRAE 118.2 when a thermostatically controlled water heater does not initiate and complete a recovery cycle prior to the start of the second draw of the Simulated Use Test (SUT).

Conclusion
BWC strongly recommends that this optional criteria is not included in the finalized specification, as highlighted by the numerous items, above, that are unclear and due to the technology still being developed.

Bradford White Corporation thanks you for this opportunity to comment on the ENERGY STAR Draft 1 Version 3.3 Residential Water Heater Specification.

Respectfully Submitted,

Bradford White Corporation

Eric Truskoski
Director of Government and Regulatory Affairs

Cc: B. Carnevale; M. Taylor; B. Hill; L. Prader; C. Sanborn; J. Robertson; K. Doyle; B. Wolfer;