



April 21, 2017

Abigail Daken
Environmental Protection Agency
1200 Pennsylvania Ave. NW
Washington, DC 20460

Re: ENERGY STAR® Residential Water Heaters Draft 1 Version 3.1 Specification

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 3.1 Residential Water Heater Specification. Please find our comments below.

BWC appreciates EPA's efforts to allow products to become ENERGY STAR certified in terms of EF or UEF, at least until June 12, 2017. Water heater manufacturers are allowed until December 29, 2017, to convert their existing EF ratings to be in terms of UEF. Due to EPA using the same conversion factors, this, in theory, should not cause any product that met the ENERGY STAR EF (or Thermal Efficiency and Standby Loss) requirements to not be in compliance with the proposed UEF requirements. However, when tested, product may have UEF test results that are lower than the proposed requirements, but it is our understanding that EPA would still allow these to remain ENERGY STAR certified until the next full revision (i.e. 4.0) of the ENERGY STAR specification. Please let us know if our understanding is correct. BWC is concerned with this scenario, especially given at least a few products where we've observed this.

We feel that the draft specification is confusing in how the use of EF and UEF are intertwined throughout the document. While we realize this is necessary to a certain extent, BWC recommends that the specification is split into two parts, one that strictly pertains to EF, as well as Thermal Efficiency and Standby Loss, which can sunset on June 12, 2017, and the other that pertains strictly to UEF. The part pertaining to EF would be left untouched from the previous specification version, except for the opening paragraph. The UEF section would contain the new definitions, requirements, etc.

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BWC does not agree with the introduction of critical fault alarm functionality, even if it is optional at this time. We have concerns with the costs to include this type of functionality on certain types of products. Given our past experiences with this type of technology, we don't believe the market will want to pay for it. If EPA is adamant that it is included, it must be an optional requirement.

When reviewing the proposed requirements, we found a few values that were slightly more stringent than what our calculations showed the conversions should have been. For heat pump water heaters, we believe the First Hour Rating requirement should be 45 gallons. For residential gas storage water heaters with a volume greater than 55 gallons, we believe the minimum UEF for a medium draw pattern product should be 0.77 UEF.

BWC appreciates EPA providing insight on where they intend to go with future ENERGY STAR water heater specifications although there are a few items that we have concerns with. First, it was stated that "the service provided by gas-fired storage and gas-fired instantaneous water heaters is similar enough that consumers, particularly those working with new construction, actively consider which type of water heater purchase." While this is mostly true, there are number of factors that go into what type of water heating technology is chosen besides the "service." And, we still do not feel that a single efficiency level is appropriate for all gas-fired water heaters. Similar to how we commented in regards to critical alarm fault functionality, we are concerned that the introduction of connected requirements, even in the next revision, would be premature. We will provide additional feedback after seeing future revisions.

Bradford White Corporation thanks you for this opportunity to comment on the ENERGY STAR Draft 1 Version 3.1 Residential Water Heater Specification. We have coordinated our comments with AHRI.

Respectfully Submitted,

Bradford White Corporation

Eric Truskoski
Director of Government and Regulatory Affairs

Cc: B. Carnevale; M. Taylor; B. Hill; C. Sanborn; J. Robertson; F. Stanonik;

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