

April 24th, 2017
Via Electronic Mail



Abigail Daken
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue NW
Washington, DC, 20460

Re: Comments for the Residential Water Heater draft 3.1

Abigail,

Thank you for allowing us the opportunity to comment on the Draft Version 3.1 Residential Water Heater Specification released March 27, 2017.

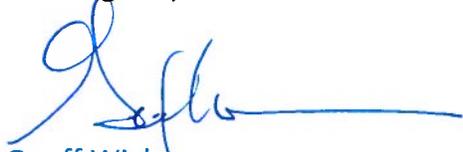
The Northwest Energy Efficiency Alliance is a non-profit organization working to encourage the development and adoption of energy-efficient products and services. The Northwest's utilities, public benefits administrators, state governments, public interest groups and efficiency industry representatives support NEEA. This unique partnership has helped make the Northwest region a national leader in energy efficiency.

The purpose of this letter is to provide some additional input to the draft specification.

1. NEEA **strongly suggests** that EPA include specific language at the end of line 237: "ENERGY STAR is strongly considering requiring CTA 2045." Utilities and manufacturers all need to be on the same page and a strong standard that everyone agrees on will move water heating market quickly to a valuable resource for electric utilities and grid efficiencies. The conversations that NEEA is having with manufactures indicate that a universal standard will ease the implementation and increase uptake.
2. NEEA **strongly supports** the idea of alarms on electric water heaters. We encourage EPA to change the language on line 87 to read: "An audible alarm or both an audible alarm and push notification (e.g. email, text, ...)." The rationale is that water heaters often last longer than the original purchaser of the product occupies the residence or the network they were connected to when initially installed. For instance, if the original homeowner sets up a water heater with notification in a cloud to cloud connection and then moves away, the orphaned water heater is no longer notifying the new owner. Further, water heaters are appliances that most people neglect as long as they work, so if the house data network is changed, it follows that reconfiguring the water heaters settings may not always happen rendering the push notification inoperable. The audible alarm avoids both of these problems and therefore should be the first preferred notification method with push notifications following second.

3. NEEA **strongly supports** revising line 89 to read: "...indicating the water heater is likely to stop functioning at its rated performance level within 4 weeks." NEEA is most concerned with electric heat pump water heater compressor failure and having resistance heat operate forever with no one the wiser. The line 89 edit would get at that problem. Alternatively, EPA could add a sub-requirement for the critical fault alarm specifically for heat pump water heaters addressing the compressor.
4. NEEA **strongly supports** the UEF criteria levels set for certified electric water heaters (lines 321-362). Specific to electric heat pump water heaters, our lab testing shows the levels arrived at by the EPA through the mathematical conversion are appropriate. Additionally, given the relative small number of basic products in the electric heat pump water heater category, NEEA knows that the overwhelming majority of the market significantly exceeds the proposed levels.
5. NEEA **recommends and supports** EPA to consider increasing performance in electric heat pump water heater requirements moving forward. Most products on the market today far exceed threshold levels. NEEA understands this might need to be addressed in the next major change in the specification. NEEA is observing the lower performing products being removed from the market. Most manufactures are moving to higher performance models.

Best Regards,



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