

June 20, 2022



Abigail Daken
U.S. Environmental Protection Agency
William Jefferson Clinton Building
1200 Pennsylvania Avenue, NW
Washington, DC 20460

RE: ENERGY STAR® Final Draft Version 5.0 Specification for Water Heaters

Dear Ms. Daken:

Thank you for allowing the Northwest Energy Efficiency Alliance (NEEA) the opportunity to comment on Final Draft Version 5.0 of the ENERGY STAR® Residential Water Heater Specification released June 1, 2022.

NEEA is a non-profit organization working to encourage the development and adoption of energy-efficient products, practices, and services. Funded by the regional utilities, NEEA is a collaboration of 140 utilities and efficiency organizations working together to advance energy efficiency in the Northwest on behalf of more than 13 million consumers. This unique partnership has helped make the Northwest region a national leader in energy efficiency.

NEEA sees highly efficient gas water heating technologies as a critical component of holistic long-term decarbonization strategies. ENERGY STAR® plays an influential role in continuing to recognize the value of efficient product development and adoption, regardless of fuel.

By lowering its proposed Uniform Energy Factor (UEF) level for gas storage water heaters from a heat pump-equivalent level to a high efficiency condensing-equivalent level, EPA is missing a crucial opportunity to drive commercialization of efficient gas technology that can provide significant, cost-effective energy savings. In 2009, the ENERGY STAR® Residential Water Heater Specification V1 set a path towards a technology that had not yet entered the market – electric heat pump water heaters. This strategy worked, and within a short time all major manufacturers had qualified products available. We encourage EPA to do the same with gas technology.

NEEA has been working with multiple technology developers and major manufacturers to accelerate commercialization of gas heat pump water heaters (GHPWH) that will meet the previously proposed performance level of UEF >1¹. To align with the market's transition to GHPWH, NEEA recommends EPA revert to its previous draft requirement of a UEF >1 for gas storage water heaters or consider a tiered standard including this level of performance as a stretch goal.

NEEA has set the groundwork for this path in our gas Advanced Water Heating Specification², which we encourage EPA to leverage. By reinforcing this path for GHPWH, EPA can transform the gas storage water heater market to heat-pump levels of performance.

1 <https://www.gti.energy/enhancing-efficiency-in-space-conditioning-and-water-heating/>

2 <https://neea.org/img/documents/Natural-Gas-Advanced-Water-Heating-Specification.pdf>

NEEA has a minor comment for the electric section on the Connected Products Criteria of the proposed version 5.0 ENERGY STAR® Residential Water Heaters Specification. NEEA recommends ENERGY STAR® drop the “or” in line 305. NEEA believes that the “or” creates ambiguity and confusion in the marketplace and makes it more challenging for utilities to build programs for this needed flexible load. AHRI 1430 is establishing CTA-2045-B as the standard of choice; we recommend ENERGY STAR® align with the standard chosen by utilities and industry. NEEA has found no appliances with loads less than 5kW that use OpenADR, and water heaters are no exception. Flexible loads such as water heaters are necessary for the future of our distributed energy resources (DERs), especially given their key roles in the integration of increasing levels of renewable energy. Findings are in the BPA, PGE, NEEA Water heater study from 2018³.

NEEA applauds ENERGY STAR’s® participation in the development of an AHRI 1430 standard. We ask that ENERGY STAR® align fully with this standard without introducing confusion or distractions. NEEA’s [Advanced Water Heating Specification 8.0](#) requires CTA2045 for Tier 3 and higher. The more closely NEEA and ENERGY STAR® align on this standard, the more extensive the benefits to the product category.

NEEA Supports ENERGY STAR’s® test methods and approaches for the different modes for connectivity.

Please contact Noe Contreras (Gas) and Geoff Wickes (Electric and Connectivity) at NEEA (contact information below) with questions about our comments and suggestions.

Sincerely,



Noe Contreras

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³ <https://www.publicpower.org/periodical/article/bpa-report-details-potential-water-heaters-dr-tools>