

Appliance Standards Awareness Project
American Council for an Energy-Efficient Economy
National Consumer Law Center, on behalf of its low-income clients
Natural Resources Defense Council

January 10, 2024

Ms. Julia Hegarty
U.S. Department of Energy
Office of Energy Efficiency and Renewable Energy
Building Technologies Office, EE-5B
1000 Independence Avenue SW
Washington, DC 20585

RE: Docket Number EERE–2017–BT–STD–0019/RIN 1904–AD91: Supplemental Notice of Proposed Rulemaking for Energy Conservation Standards for Consumer Water Heaters

Dear Ms. Hegarty:

This letter constitutes the comments of the Appliance Standards Awareness Project (ASAP), American Council for an Energy-Efficient Economy (ACEEE), National Consumer Law Center, on behalf of its low-income clients (NCLC), and Natural Resources Defense Council (NRDC) on the supplemental notice of proposed rulemaking (SNOPR) for energy conservation standards for consumer water heaters. 88 Fed. Reg. 89330 (December 27, 2023). We appreciate the opportunity to provide input to the Department.

In general, we support the proposals outlined in the SNOPR and believe they will help minimize workarounds that could undermine the potential energy savings from the notice of proposed rulemaking (NOPR) for consumer water heaters. In particular, we agree with DOE’s tentative determination to classify circulating water heaters as storage-type water heaters. However, we encourage DOE to consider clarifying that all circulating water heaters would be constituted as storage-type water heaters. We also support DOE’s tentative determination that gas-fired circulating water heaters would not provide the same utility as gas-fired instantaneous water heaters. Furthermore, we agree that DOE’s analysis results that were presented in the July 2023 NOPR remain representative of the potential savings from the proposed rule.

We support DOE’s tentative determination that it is appropriate to classify circulating water heaters as storage-type water heaters. In the July 2023 NOPR, DOE proposed separate product classes and efficiency standards for circulating water heaters.¹ However, we agree with DOE’s

¹ 88 Fed. Reg. 49077 (July 28, 2023).

determination in the SNOPR that circulating water heaters provide the same consumer utility as storage-type water heaters and that there are no performance-related features that would necessitate establishing a separate product class for circulating water heaters. Furthermore, we agree with DOE and other commenters that a circulating water heater system, including one with a recirculation loop, can essentially be simplified to a water heater system plus a separate storage tank. As DOE notes in the SNOPR, this is evident from the June 2023 test procedure final rule for water heaters, which requires circulating water heaters to be paired with a storage tank for testing – representative of how these products would be used in the field.² Thus, we believe it is appropriate to classify circulating water heaters as storage-type water heaters and be represented in the applicable storage water heater product classes. This would mean that the new and amended storage-type water heater standards that were proposed in the July 2023 NOPR would be applicable to circulating water heaters.

We encourage DOE to consider clarifying the proposed definition for circulating water heaters. In the SNOPR, DOE proposed to revise the definition of “circulating water heater” to designate these products as storage-type.³ Specifically, DOE’s proposed revised definition would state that “paired with a separate storage tank, a circulating water heater constitutes a storage-type water heater.” DOE notes in the SNOPR that it would be appropriate to simplify all circulating water heaters – including products designed to work with recirculation loops and not tanks specifically – to essentially a water heater plus a separate storage tank.⁴ In order to avoid any potential confusion, we encourage DOE to consider clarifying that all circulating water heaters would be constituted as storage-type water heaters (regardless of whether they are ultimately paired with a separate storage tank or with a recirculation loop).

We agree with DOE’s tentative determination that gas-fired circulating water heaters do not provide the same consumer utility as gas-fired instantaneous water heaters. As DOE notes in the SNOPR, gas-fired instantaneous water heaters provide a unique utility to consumers by meeting a continuous demand for hot water, up to the maximum flow rate.⁵ These products utilize a flow-activated control scheme and larger burners that allow them to meet the demand for hot water without the need for a recirculation pump and a separate stored volume of water. Circulating water heaters are not able to offer the same continuous supply of hot water since they are thermostatically activated and rely on a recirculation pump and a separate stored volume of hot water. In addition, gas-fired instantaneous water heaters are able to provide higher flow rates of hot water due to their larger burners. Thus, we agree that gas-fired circulating water heaters do not provide the same consumer utility as gas-fired instantaneous water heaters.

² 88 Fed. Reg. 89333.

³ 88 Fed. Reg. 89335.

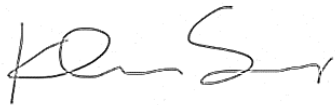
⁴ 88 Fed. Reg. 89332.

⁵ 88 Fed. Reg. 89334.

We agree that the analysis results presented in the July 2023 NOPR remain representative for all water heater types evaluated. In the SNOPR, DOE notes that while there are currently no consumer circulating water heaters available on the market, they would likely have similar cost and use profiles as electric and gas-fired storage water heaters.⁶ Additionally, since there are currently no shipments of these products, we agree with DOE's determination that the life-cycle cost analysis results, national impact analysis results, and any other downstream analysis results would remain unchanged with the proposed amended definition for circulating water heaters.

Thank you for considering these comments.

Sincerely,



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⁶ 88 Fed. Reg. 89335.