



November 11, 2021

Abigail Daken  
Office of Air and Radiation  
U.S. Environmental Protection Agency  
Washington, DC 20460

Topic: Draft 1, Version 5.0 ENERGY STAR® Specification for Residential Water Heaters

Dear Ms. Daken:

Southern California Edison (SCE) appreciates this opportunity to provide the following comments on Draft 1 of the proposed revised ENERGY STAR specification for residential gas storage water heaters (GSWH) and gas tankless water heaters (GTWH). We support EPA’s commitment to decarbonization, and while we applaud EPA’s proposal to significantly increase the performance requirements for GSWH, we reiterate our recommendation that EPA sunset product recognition for GSWH unless significantly more efficient, cost-effective gas technologies become available on the GSWH market.

**1. SCE reiterates our recommendation that EPA sunset the ENERGY STAR label for the GSWH product category.**

In March 2021, the California Investor Owned Utilities (CA IOUs), including SCE, recommended that “if EPA is not willing to increase the Uniform Energy Factor (UEF) requirements for all new [gas water heaters], it should sunset the ENERGY STAR residential water heaters label for [GSWHs] until significantly more efficient, cost-effective gas technologies become available on the residential water heater market.”<sup>1</sup> To this point, no such products have been introduced to the market, and EPA notes that no products currently meet the proposed Version 5.0 performance requirements for GSWH.

In 2008, when the label was first announced for residential water heaters, the Department of Energy (DOE) noted, “ENERGY STAR should act as a driver of the market and is willing to give manufacturers additional time to develop high-performance gas storage water heaters that are better equipped to meet consumer needs. Gas storage technology has a considerable amount of room to improve its energy savings potential.”<sup>2</sup> In 2008, EPA set a deadline for residential water heaters to meet revised ENERGY STAR performance requirements. At that time the revised ENERGY STAR requirements allowed manufacturers two years to develop products to meet the higher efficiency requirements. Now nearly thirteen years later the dominant GSWH technology

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<sup>1</sup> CA IOUs, Final Draft Version 4.0 ENERGY STAR Specification and Final Draft Test Method to Validate Demand Response for Residential Water Heaters, March 2021. Comment link: [https://www.energystar.gov/sites/default/files/CA%20IOUs%20Comments\\_6.pdf](https://www.energystar.gov/sites/default/files/CA%20IOUs%20Comments_6.pdf)

<sup>2</sup> [ENERGY STAR Residential Water Heaters: Final Criteria Analysis](#)

remains largely unchanged, with most ENERGY STAR labeled GSWH failing to provide significantly improved energy savings and emissions reductions.

As the sponsors of large energy efficiency programs, the CA IOUs place high value on the ENERGY STAR brand. As described on the program website, the ENERGY STAR brand promise relies on the following guiding principles:

- Product categories must contribute significant energy savings nationwide.
- Certified products must deliver the features and performance demanded by consumers, in addition to increased energy efficiency.
- If the certified product costs more than a conventional, less-efficient counterpart, purchasers will recover their investment in increased energy efficiency through utility bill savings within a reasonable period of time.
- Energy efficiency can be achieved through broadly available, non-proprietary technologies offered by more than one manufacturer.
- Product energy consumption and performance can be measured and verified with testing.
- Labeling would effectively differentiate products and be visible for purchasers.<sup>3</sup>

The GSWH industry has not met ENERGY STAR's brand promise challenge for GSWH, and SCE, in line with the CA IOUs' previous comment, respectfully requests that EPA sunset the GSWH category to protect the brand.

SCE further requests that EPA also sunset the GTWH category, instead of adopting a lower UEF than that of GSWHs. Traditionally, EPA's ENERGY STAR UEF (or EF) specifications for GTWHs have been higher than those of GSWHs. The EPA's current proposal, however, does not reflect this tradition and products available in the market by setting a lower UEF for GTWHs. Therefore, SCE respectfully requests that EPA sunset both the GSWH and GTWH categories from ENERGY STAR listings.

## **2. SCE strongly recommends that EPA adopt a minimum UEF of 1.3 for all gas-fired water heaters, if EPA decides not to sunset the GSWH or GTWH categories at this time.**

The state of California is pursuing an ambitious strategy for rapid decarbonization to combat climate change. Water heating accounts for 48 percent of residential natural gas consumption,<sup>4</sup> and 90 percent of California homes currently use GSWH. SCE suggests that GTWH be subject to the same rationale as GSWH, and that EPA should sharply increase the minimum energy efficiency requirements. Furthermore, if the categories are not sunset, we agree with the comments provided by the Natural Resources Defense Council and recommend that EPA require both GSWH and GTWH to achieve a UEF of 1.3 or better in order to carry the ENERGY STAR label.

These recommendations are in alignment with the climate change policies of the state of California and with various energy efficiency and climate initiatives occurring in other regions of the U.S. that encourage the adoption of zero-emission appliances, vehicles, and electrification of buildings. As EPA noted during the webinar, ultimately the ENERGY STAR label should offer consumers significant environmental benefits. Given the disparity in greenhouse gas impacts for GTWHs and GSWH compared to efficient electric products, SCE recommends that EPA adopt a UEF of 1.3 or higher performance requirements for GTWH. If there are no EPA qualified

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<sup>3</sup> <https://www.energystar.gov/products/how-product-earns-energy-star-label>

<sup>4</sup> 2019 California Residential Appliance Saturation Study (RASS) CEC-200-2021-005

products in the market within two years, SCE agrees with other CA IOUs' recommendation of sunsetting the ENERGY STAR category for GTWH.

In conclusion, we would like to reiterate our support for EPA's commitment to decarbonization for residential water heaters and request that EPA sunset the GSWH and GTWH categories at this time. We thank EPA for the opportunity to be involved in this process.

Sincerely,

A handwritten signature in cursive script, reading "Karen Klepack". The signature is written in black ink and features a long, sweeping horizontal flourish at the end.

Karen Klepack  
Senior Manager, Building Electrification and Codes & Standards  
Southern California Edison