

## Harmful Impacts of DOE's Proposed Energy Conservation Standards for Consumer Water Heaters

### Key Findings

- Water heating is essential to Americans' way of life, and electric resistance water heaters have been demonstrated as important grid management tools for electric cooperatives who use them to lower system peaks, store wind and hydro energy during the night, enhance grid efficiency, and importantly save consumers money.
- DOE's Notice of Proposed Rulemaking (NOPR) to amend the energy conservation standards for consumer water heaters would effectively mandate heat pump water heater (HPWH) usage for electric storage water heaters of the most common sizes Americans install in their homes (40- and 50-gallon units).
- NRECA opposes this one-size-fits-all solution because low- to moderate-income (LMI) consumers living in space-constrained homes will bear disproportionately higher costs for installation, coupled with the higher upfront cost of the HPWH, that will outweigh the energy savings projected by DOE.
- Instead, NRECA urges DOE to craft a standard that *encourages* the shift to electric water heaters at a more reasonable pace that will not result in unintended consequences.

### Background on DOE's Proposed Rule

On July 28, 2023, the U.S. Department of Energy (DOE) published a Notice of Proposed Rulemaking (NOPR) to increase efficiency requirements for consumer water heaters under the Energy Policy and Conservation Act (EPCA). EPCA requires that DOE review efficiency standards for products covered under the statute every six years and either further tighten them or make a determination that no change is required. After failing to meet the timeline dictated by EPCA, DOE was sued and reached a legal settlement agreeing to either publish a final regulation updating the standard or publish a final rule determining that the update is neither technologically feasible nor economically justified by April 30, 2024.

### Electric cooperative consumer-members will be disproportionately impacted by DOE's proposed rule.

We support continued adoption of HPWH across the country where it makes sense. However, if this NOPR is finalized as currently written it will cause undue harm to many LMI consumers nationwide. Many will not be able to afford the higher upfront cost of the HPWH and impractical installations in space-constrained homes, including but not limited to manufactured housing which is especially common in rural areas, mean custom, time-intensive solutions with significantly higher costs than straightforward installations for these same LMI consumers. This issue is of particular importance to NRECA because electric cooperatives serve LMI communities, including 92% (364 of 395) of the persistent poverty counties in the United States.

Consider a four-person household earning \$35,000 per year and the need to install a HPWH. The cost could easily reach \$3,500 including installation costs. That would represent 10% of this household's annual income. This is simply too high a burden for consumers, and as a voice for the 42 million Americans that electric cooperatives serve, we urge DOE to reconsider.

**DOE should make significant changes to the proposal to encourage, rather than require, HPWH adoption to avoid unintended consequences.**

NRECA has serious concerns with multiple aspects of a nearly total shift away from electric resistance water heaters in the sizes most often used nationwide. NRECA has submitted detailed comments urging DOE to fully consider before finalizing this proposal, including:

- Lack of contractor availability, both plumbers and electricians, in rural areas to support HPWH installations at scale;
- High degree of likelihood for consumers to switch to electric tankless water heater options that will be more affordable than HPWH installation in space-constrained homes, creating costly spikes in demand; and,
- Fewer options available to electric cooperatives to use water heaters for load control, given that HPWH technology is not compatible with their demand response programs and will require significant new investment.

In summary, NRECA members are concerned that LMI consumers will disproportionately experience challenging installations and high initial costs if DOE finalizes this proposed standard. NRECA members see the need for a wider range of water heater options for space-constrained installations so that consumers can choose the electric storage option that yields the biggest benefit for their situation.

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