National Rural Electric Cooperative Association
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FAST FACTS

New Efficiency Standard for Electric Water Heaters

Issue. Electric resistance water heaters allow co-ops to reduce demand for electricity during peak hours by remotely turning them off for short periods with no noticeable impact on water temperatures. These peak periods occur when electricity is produced by the most expensive and least efficient generators. Reducing the peak demand also reduces pollution and fuel use and saving cooperatives' consumer members tens of millions of dollars each year. Through their capacity to store energy like a battery, electric water heaters allow co-ops to integrate renewable energy like wind that occurs at night by heating water when the wind blows and storing it for use during daytime peak hours. The storage also allows cooperatives to defer building new peaking generation and transmission lines. **Over 250 electric cooperatives in 33 states have long had programs (called demand response programs) using electric resistance water heaters that are able to lower system peaks, store wind and hydro energy during the night, enhance grid efficiency, and most importantly save consumers money.**

In the Public Utility Regulatory Policies Act of 1978, the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007, Congress has repeatedly declared the promotion of demand response to be an important federal policy. The Energy Policy Act of 2005 requires FERC to publish reports regarding the expansion of demand response programs in the utility industry. In its February 2011 report, FERC recognized co-ops' continued leadership on demand response. Large capacity electric resistance water heaters are one of co-ops' best tools for meeting this federal goal.

Status:

- On March 22, 2010, DOE issued a new energy standard requiring nearly **200 percent efficiency for large capacity electric water heaters**. This standard, which was higher than expected, applies to water heaters manufactured starting in April 2015**. It threatens our very successful demand response programs.**

- The new standard will require the use of heat pump technology for water heaters of 55 gallons or larger capacity. Heat pump water heaters are not cost-effective for co-ops' demand reduction programs.

- **NRECA has urged DOE to consider (1) a new classification for water heaters used for demand response, or (2) a waiver for water heaters used in these programs** While DOE cannot rescind the 2010 water heater efficiency standard, a new classification or waiver should be issued to allow the continued manufacture of these large-capacity electric resistance water heaters that are capable of being used in demand response programs.

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- **In June 2012, DOE formally asked for more information regarding this issue.** On July 17, 2012, NRECA and more than 100 co-ops submitted responses to DOE focused on the need for a new product class for water heaters used in demand response programs. Of 127 comments DOE received, 120 recommended that DOE adopt a new classification or a waiver for water heaters that are able to provide demand response and only two opposed DOE action.

- **In February 2013, DOE proposed regulations establishing a waiver program, but limited the waivers to one year at a time. A one-year waiver is not enough time to provide the certainty needed for manufacturers to continue making these products, and utilities and their customers to be able to count on them.** At a March public DOE meeting, 20 representatives from co-ops argued that a one-year waiver with limitations is not practical and would effectively end these demand response programs.

NRECA position. NRECA and other stakeholders continue to push DOE to find a workable program that allows co-ops to use electric resistance water heaters in demand response programs that save consumers money. NRECA urges Members of Congress to weigh in with DOE on the need to quickly establish a workable waiver.

for more information:
Julie Barkemeyer, NRECA
703.907.5809
julie.barkemeyer@nreca.coop
http://www.nreca.coop

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