



March 17, 2015

TO: Members, Subcommittee on Energy and Power

FROM: Committee Majority Staff

RE: Hearing entitled “H.R. 906, a Bill to Modify the Efficiency Standards for Grid-Enabled Water Heaters”

I. INTRODUCTION

On Thursday, March 19, 2015, at 10:00 a.m. in 2322 Rayburn House Office Building, the Subcommittee on Energy and Power will hold a hearing entitled “H.R. 906, a Bill to Modify the Efficiency Standards for Grid-Enabled Water Heaters.” H.R. 906 was introduced on February 11, 2015, by Rep. Whitfield (R-KY), along with Rep. Welch (D-VT), Rep. Latta (R-OH), Rep. Loeb sack (D-IA), Rep. Cramer (R-ND), and Rep. Doyle (D-PA).

II. WITNESSES

- Gary Connett, Director, Member Services and Demand-Side Management, Great River Energy;
- Steven Koep, Utility Sales Manager, Vaughn Thermal Corporation, Vaughn Electric Water Heaters;
- Steven Nadel, Executive Director, American Council for an Energy-Efficient Economy; and,
- Robin Roy, Director, Building Energy Efficiency and Clean Energy Strategy, Natural Resources Defense Council

III. BACKGROUND

On March 22, 2010, the Department of Energy (DOE) issued a new energy efficiency standard, pursuant to the Energy Policy and Conservation Act (EPCA), requiring nearly 200 percent efficiency for large capacity electric resistance water heaters. This standard applies to water heaters manufactured starting in April 2015. The new standard would, in effect, prohibit the manufacture of electric resistance water heaters of 55 gallons or larger capacity in favor of heat pump technology for water heaters of 55 gallons or larger capacity. Such heat pump water heaters are not compatible with certain utility thermal energy storage and demand response programs (*i.e.*, programs that enable customers to reduce or shift their power use during peak demand periods).

H.R. 906 permits the continued manufacture of electric resistance water heaters above 75 gallons for use in thermal energy storage and demand response programs. To prevent water heaters produced for this purpose from being diverted to unauthorized use, the bill requires a specified label, an activation key to be used by the utility operating a demand response program, and annual reporting requirements for manufacturers and utilities.

IV. SECTION-BY-SECTION

Section 1: Grid-Enabled Water Heaters

Section 1 amends the EPCA to provide additional energy conservation standards applicable to grid-enabled water heaters for use as part of an electric thermal storage or demand response program. Specifically, section 1:

- Requires annual reports from: (1) manufacturers of such water heaters regarding the quantity of the products shipped each year, and (2) utilities and other demand response and thermal storage program operators regarding the quantity of products activated for their programs.
- Requires the Secretary of Energy to publish analyses of data collected from such reports and to establish procedures to prevent product diversion if sales of the products exceed by at least 15 percent the quantity activated for use in the demand response and thermal storage programs annually.
- Maintains the standards and publication procedures established by this Act until the Secretary determines that: (1) such water heaters do not require a separate efficiency requirement, or (2) procedures to prevent product diversion for non-program purposes would not be adequate to prevent such product diversion.
- Requires the Secretary to consider the impact of EPCA electric water heater standards on thermal storage and demand response programs, including on energy savings, electric bills, peak load reduction, electric reliability, integration of renewable resources, and the environment.
- Directs the Secretary to require the water heaters be equipped with communication capability to enable the grid-enabled water heaters to participate in ancillary services programs if the technology is available, practical, and cost-effective.
- Makes it unlawful for any person to:
 - activate an activation lock for a grid-enabled water heater with knowledge that it is not used as part of a demand response program;
 - distribute an activation key for such a water heater with knowledge that it will be used to activate a heater that is not used as part of such program;
 - enable such water heater to operate at its designed specification and capabilities with knowledge that it is not used as part of such program; or
 - knowingly remove or render illegible the label of such water heater.

V. ISSUES

The following issues may be examined at the hearing:

- The DOE energy efficiency standard affecting large capacity electric resistance water heaters; and
- The implications of the standard on thermal energy storage and demand response programs.

VI. STAFF CONTACTS

If you have any questions regarding this hearing, please contact Patrick Currier of the Committee staff at (202) 225-2927.