

November 26, 2007

Mr. Richard Karney and  
Mr. Josh Butzbaugh  
US Department of Energy  
Energy Efficiency and Renewable Energy Division  
1000 Independence Avenue, SW  
Washington, DC 20585

**Re: ENERGY STAR Residential Water Heaters – Your Request for Comments**

Dear Mr. Karney and Mr. Butzbaugh:

FirstEnergy recognizes the importance of the DOE/EPA efforts to develop Energy Star criteria for residential water heaters. Your efforts to bring Energy Star certification to all residential water heaters (electric and gas) will help to improve energy efficiency in homes across the nation.

FirstEnergy is a member of the Electric Power Research Institute (EPRI), supporting programs and projects in the Energy Efficiency area. In particular, EPRI's Energy Efficiency Initiative is also focused on developing, testing and commercializing smart and efficient electrical appliances, devices and systems. FirstEnergy is among 42 electric utility companies that have funded the Initiative this year, promoting smart and efficient end-use equipment within our service territories.

We believe that electric resistance storage water heaters should be included in the Energy Star designation and endorse the comments previously provided by EPRI as summarized below:

- Electric resistance storage water heaters have close to 50% of the US market share. Out of this, the share of the high-efficiency (0.95 EF) heaters is very low; in fact, the 0.95 EF water heaters are not available in several parts of the country. By designating such heaters as Energy Star, consumer demand will accelerate the availability of such heaters in most areas of the country.
- For a nominal additional equipment cost and no additional installation cost, a 0.95 EF electric resistance storage water heater saves 257 kWh per year over a 0.90 water heater. If 20% of the 0.90 EF water heaters were replaced by 0.95 EF heaters, the country would save >250 million kWh per year. This is a low-hanging fruit for the rapid implementation of energy-efficient water heaters!
- Mass introduction of such high-efficiency heaters would encourage manufacturers to provide additional value-added accessories, such as "smart" controllers on water heaters.

For these reasons, we believe that the most practical means to save energy with electric water heating is to encourage the use of 0.95 EF electric resistance water heaters through an Energy Star designation. This is justified by the very low incremental cost, the potential for rapid and large market penetration, and the potential for value-added accessories. We believe this will lead to the potential for national energy savings and peak electric demand reduction.

If you have any questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in blue ink that reads "Eileen M. Buzzelli". The signature is written in a cursive style with a large, looping initial "E".

SBB:cjl