



Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402-2801

November 26, 2007

Mr. Richard Karney
U.S. Department of Energy
ENERGY STAR Program
1000 Independence Avenue, N.W.
Washington, DC 20585-0121

Dear Mr. Karney:

The Tennessee Valley Authority (TVA) appreciates the opportunity to submit comments regarding the Second Draft Criteria for ENERGY STAR Residential Water Heaters that was published on October 26, 2007.

TVA is the nation's largest public power company, with 33,000 megawatts of dependable generating capacity. The 8.7 million residents of the Tennessee Valley receive TVA power through 158 locally owned distributors. Many TVA-served distributors are combination electric/gas utilities and provide efficiency services for both fuel types.

TVA's Strategic Plan approved by the TVA Board of Directors on May 31, 2007, calls for TVA to work with others to strive to be a leader in energy-efficiency improvements and peak demand reduction over the next five years. TVA believes that improving energy efficiency and reducing peak demand are significant actions that help slow demand growth in a cost-effective manner while addressing air pollution and global climate change.

The ENERGY STAR program is a highly successful public-private partnership, and an ENERGY STAR water heater program will be a valuable tool for raising energy efficiency awareness among consumers.

DOE states in the ENERGY STAR Residential Water heaters: Second Draft Criteria and Proposal... "Improving energy efficiency of electric resistance water heaters in the residential market is limited... A savings of 4.8% is not significant and does not offer meaningful differentiation in accordance with the ENERGY STAR guiding principles. Given current and potential energy savings, electric resistance water heating technology is nearly maximized and not under consideration for ENERGY STAR."

Mr. Richard Karney
Page 2
November 26, 2007

While the savings percentages above may be true, water heating is the third largest energy end use in homes, and thus, these savings add up to very significant amounts when translated into kilowatt-hours and dollars. For example, a best-in-class 0.95 EF electric-resistance storage water heater saves nearly 257 kWh/year and \$321 in its lifetime over a 0.904 EF water heater. For the individual consumer, this option provides a two-year payback without any Federal tax incentives, a truly market driven approach.

Using the same analysis criteria as was used for other technologies in the proposal, if just 10 percent of the nation's 4.8 million electric storage water heater shipments were the best-in-class storage water heaters with an Energy Factor of 0.95 instead of conventional models with an Energy Factor at the current federal standard, the aggregate energy savings would amount to nearly 123.4 million kWh/per year.

In summary, we request that DOE remove the proposed exclusion of conventional electric storage water heaters from the ENERGY STAR water heater labeling program. Given the current market saturation of electric storage water heaters, the overall market dynamics with respect to limited fuel availability and/or the cost for fuel switching; most existing electric storage water heater customers will remain electric. ENERGY STAR should take advantage of this market dynamic and savings opportunity through ENERGY STAR labeling to promote the best-in-class electric storage water heater technologies.

We also fully support the ENERGY STAR direction of looking for new high-performance electric water heating technologies such the heat pump water heater and the solar assisted water heater. While current market saturations are not great and there is limited availability of these technologies, raising the awareness should help to drive these markets.

TVA looks forward to working with DOE in the development of this ENERGY STAR label for all water heating technologies. Should you have questions, please call me at 423-751-7392.

Sincerely,

A handwritten signature in black ink, appearing to read "John O. Richardson, Jr.", written in a cursive style.

John O. Richardson, Jr.
Senior Specialist - Energy Use
TVA Research & Technology Applications