



Natural Resources
Canada

Ressources naturelles
Canada

November 26, 2007

Mr. Richard H. Karney
US Department of Energy
1000 Independence Avenue, SW
Washington, DE 20585-0121

Dear Mr. Karney:

Comments on the ENERGY STAR Water Heaters Draft Criteria

On behalf of Natural Resources Canada (NRCan), we would like to thank you once again for the opportunity to comment on the proposed ENERGY STAR specification for water heaters.

NRCan continues to support the US Department of Energy's efforts to develop an ENERGY STAR specification addressing residential water heating. Because water heating is the second biggest energy use in a Canadian household, the Office of Energy Efficiency at NRCan sees the development of a framework to establish meaningful higher efficiency levels for domestic water heating as a priority. NRCan's end-use vision with respect to domestic water heating is to see a dramatic shift in the availability of higher efficiency water heating technology, either through an increase in the market penetration of condensing technology, or through the increased availability and affordability of other water heating technology solutions.

Our previous comments to you identified that we had major concerns with your proposal to include gas storage water heaters in the specification. We still believe that including low efficiency 0.62 EF water heaters would be inappropriate for ENERGY STAR, as it could potentially diminish the credibility of the ENERGY STAR symbol since it would not provide significant energy savings to the consumer. Small increases in efficiency would be better achieved with in-store information and utility procurement programs.

In addition, a proposed increase in the minimum energy efficiency standard for water heating is being planned for the short term, and as a result minimal efficiency increases are likely to be met or overtaken by energy efficiency regulations.

We would however support the inclusion of higher EF levels in the medium term. The latest ENERGY STAR proposal with 0.65 EF for storage tank water heaters for a limited 3 year period has merit. We agree that manufacturers, distributors, and contractors of storage water heaters should be engaged in the ENERGY STAR program. Three years allows time for product development and the strict three year period sets the timetable for higher efficiency near-condensing and condensing storage water heaters (as shown to be feasible in the SEGWHAI project).

As previously stated, NRCan is willing to work with other stakeholders to make improvements to the test methods.

Whole house gas tankless water heaters should be included, given the growth in market share and significant efficiency difference as compared to conventional gas storage water heaters. NRCan has tested a number of tankless water heaters and agree that 0.82 EF is the appropriate efficiency level.

As we previously commented, electric tankless water heaters should not be considered because of the added electrical load, reduced flow rates in comparison to gas water heaters and the requirement for a larger electricity service for most installations.

With regard to heat pump water heaters, after reviewing information on up and coming products and determining their potential and availability for North America, we feel that there is value to supporting this technology at the level proposed. Although the number being sold is still relatively small, recent technical development, particularly in Japan, gives some indication that sales of HPWH could increase.

NRCan continues to support the inclusion of solar water heating into the ENERGY STAR specification.

In summary, we believe that the new ENERGY STAR specification for water heating should reflect the original goals of the program – identify products where large gains in energy efficiency and greenhouse gas emissions can be cost-effectively realised; and can play an influential role to expand the market for these products.

Regards,

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