March 15, 2006

Ms. Gwen Duff,
ICF Consulting
1725 Eye Street NW, Suite 1000
Washington, DC 20006

Dear Ms. Duff:

Re: Comments from Natural Resources Canada on Proposed New Direction for ENERGY STAR for Programmable Thermostats:

Natural Resources Canada would like to thank you for the opportunity to comment on the proposed changes to the ENERGY STAR directions for programmable thermostats.

In 2001, the Government of Canada signed an agreement with the US Environmental Protection Agency (US EPA) and the US Department of Energy (US DOE) to administer the ENERGY STAR Program in Canada.

Since this is very much of an integrated marketplace, the qualifying levels and technical specifications for the ENERGY STAR qualified products promoted in Canada are typically harmonized with those of the United States. Care is taken to ensure that the ENERGY STAR technical specifications and levels are in step with Canadian standards and activities, as well as the climate conditions of this country.

Manufacturers and distributors of energy using equipment consider that the integrated nature of the American and Canadian ENERGY STAR initiatives is very important and provides a very coordinated approach for marketing and distributing products in both countries. Consequently, any substantial changes to the qualifying criteria to the ENERGY STAR program in the U.S. would have a significant impact in this country.

With respect to your proposal to amend the programmable thermostat - Canada fully supports the importance of educating consumers on the energy saving benefits of installing and using the set back features of a programmable thermostat. Your proposal states that it is the user behaviour and use of the set back features that result in greater energy savings, and not necessarily the unit itself. At this time, NRCan is not aware of any field studies carried out or underway in Canada on the impact of energy use related to user behaviour with programmable thermostats.

NRCan has co-funded a study in test houses where data demonstrated that the use of programmable thermostats has an impact on equipment energy use, however, these test houses did not test for changes in energy use due to user intervention. *("The Effects of Thermostat Setting on Seasonal Energy Consumption at the CCHT Research Facility", February 14, 2005.)*

Additionally, preliminary data coming out of an NRCan national survey undertaken in 2003 - the *2003 Survey of Household Energy Use* (SHEU-03) shows a marked increase in the number of

households with programmable thermostats compared to earlier SHEU surveys. SHEU-03 also found that a significant number of households equipped with a programmable thermostat did not have it programmed during 2003. Results of this survey, which should be available in the Spring 2006 will provide a good backdrop to an information and awareness campaign, especially to current owners of thermostats.

Regarding the proposal to withdraw the technical specification in favour of a marketing campaign, based on comments received during a short period of consultation with Canadian stakeholders, we are recommending that the technical criteria *not* be withdrawn, and that further field studies be reviewed or undertaken.

It is the position of NRCan and of Hydro Québec that the technical specification for programmable thermostats be expanded to include non-programmable, electronic units *(hardwired, low-voltage or integrated units)*, designed for individual room applications, such as those used with baseboard resistence heating, and that the technical specification differentiate units based on stricter performance and quality criteria related to: droop, swing and precision of temperature display.

Many electric and gas utilities in Canada have put significant effort in marketing ENERGY STAR qualified programmable thermostats to their customers, as part of their demand side management activities and have encouraged their client base to program the units accordingly.

Putting the qualifying criteria *on hold* rather than removing it, will provide additional time for NRCan and utility stakeholders to collect and review new data that could potentially validate a greater push towards more stringent performance criteria for the equipment that may generate additional energy savings together with a marketing campaign to engage citizens and promote the energy saving and comfort benefits of correctly programming a thermostat.

Thank you for your consideration of our comments.

Best Regards,

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Natural Resources Canada
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cc: Katherine Delves
Renata Mortazavi