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April 30, 2010

Abigail Daken
U.S. EPA
ENERGY STAR Program
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202-343-9375

Subject: Ingersoll Rand Residential Solutions comments on: Energy Star Program Requirements for Residential Climate Controls, Version 1.0, Partner Commitments, Draft 1[undated]

Dear Ms. Daken:

Ingersoll Rand Residential Solutions, manufacturer of Trane and American Standard residential heating and air conditioning products, appreciates the opportunity to comment on the Environmental Protection Agency's *Energy Star Program Requirements for Residential Climate Controls*. EPA is to be complemented on this effort to revitalize what was the Energy Star Programmable Thermostat program. However, the nation's energy needs might be better served through a more deliberate process of development of the requirements providing an opportunity for full participation of interested parties in the development of the requirements, as contrasted to commenting on a document which the schedule indicates is close to completion.

As described, the control is interpreted as being a major element in the residential side of the Smart Grid in terms of both reporting on and controlling the HVAC system, one of the major electrical loads in the residence. There is reason to question whether the overall Smart Grid requirements and protocols have been adequately settled to warrant an expenditure of several hundred dollars by the residential occupant or owner for a control that may well become obsolete relatively early in its lifetime. The reports of hardware compatibility problems in some of the early projects for remote metering illustrate one reason for this concern.

Since the infrastructure to support and exploit the benefits of communicating controls is not in place yet, it might be prudent to employ a tiered approach with the lower tier being a non-communicating programmable control and the higher tier being a communicating control. This would encourage early adoption by the home owner with benefit to the consumer, the utility and the environment.

Considerably less than 10% of the installed base of thermostats is replaced in any one year. Thus, the lost environmental benefit that might result from a more deliberate interactive process would be very small.



Ingersoll Rand would be eager to work with EPA and other stakeholders in a series of working sessions to refine and finalize the Program Requirements. Recognizing that EPA may be irreversibly committed to the schedule given in the April 19th webinar, Ingersoll Rand offers the attached comments. Although these are rather lengthy, they represent but a fraction of the input we would be able to provide in a face-to-face collaboration.

Sincerely,



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