

## **Energy Star 2.0 Feedback**

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### **Page 2**

**Line 54. Energy Star mark must be clearly displayed on front of the product.**

We fully support the Energy Star program and intend to create visibility for the Energy Star mark online, in our manuals, and on our packaging. The co-marketing benefits are clear and we intend to support these objectives. However placing the mark on our product is prohibitively challenging from a space and branding standpoint. We recommend removing the requirement for displaying the logo on the front of the product.

### **Page 8**

**2.C Product packaging must include “Residential Climate Control – This product is designed only for use in homes and other dwellings.”**

We are deeply aligned on the goal to be clear about the intended usage environment for the product: for homes. However, we have two concerns.

- 1) We think that an intelligent Energy Star thermostat will work efficiently and intuitively in many light commercial environments.
- 2) If the EPA feels that differentiation is required, we recommend either a requirement for “clear labeling” or shorter alternative such as “This Energy Star thermostat is rated for home use only.”

### **Page 9**

**3.4 Product will include a low power battery indicator that activates 2 months before critical battery depletion. If batteries are used.**

We recommend changing this to read, “If the product uses non-rechargeable batteries, then the product will include a low power battery indicator that activates 2 months before critical battery depletion.”

### **Page 11 end, to top 12**

**3.14 For Dual Fuel Heat Pump...will use outdoor data to provide automatic cutover to/from the backup heat source based on installer configurable cutover temperatures.**

As this reads any product supporting dual fuel heat pumps will be required to ship with support for outdoor weather. This adds to the complexity and cost of every single unit. We suggest modifying to read, that thermostats supporting dual fuel heat pumps "...will be capable of using outdoor data to provide automatic cutover..."

### **3.15 Shall include humidity display**

We completely that humidity is a critical input to determining optimal energy savings settings. However, we suggest removing the requirement to display this importation. Our concern is that this information is not immediately understood by users, not perceived to be actionable by them and only clutters the user interface. We fear that the result is the product would be less usable and thus the user would be less likely to optimize their actual usage.

## **Page 12**

### **3.19 Shall use the names: "Morning," "Day," "Evening," and "Night."**

We suggest a more flexible alternative that supports both clarity and innovation. "...shall display either times, icons and/or the descriptive names Morning, Day, Evening and Night." An Alternative would be to include the naming in the prescriptive path and alternatives in the performance-based path.

## **Page 13**

### **3.20 A SDK, or Interface Control Document, as appropriate available to...**

We recommend eliminating the requirement for an SDK and change to "an Interface Spec."

## **Page 14**

### **3.23 Product shall be "capable" of accepting "remote control" commands enabling near-real time (roughly 5 seconds) settings changes**

We recommend clarifying by adding "Once the thermostat receives a command to change, it will respond to that command within 1 second."

### **3.27 Shall use commonly available batteries**

We recommend that this requirement be changed to "Product that use non-rechargeable batteries, shall use batteries that are commonly available."

### **3.30 Must have bidirectional communications between thermostat and HVAC equipment.**

As there is no spec currently, we request that products developed under the older spec be grandfathered for 5 years.

We believe this to be appropriate for several reasons

- All 2011 products are at this point deep in their development phase and

could not be easily redirected to meet a spec that has not been issued.

- The product lifecycle is typically 5 years. It is financially prohibitive for a new company to end of life (EOL) a product 1 year after launch.
- Multi-stage systems (we believe a good proxy for bidirectional systems) are very successful in light commercial and commercial environments. However there is currently little penetration of the residential market. We expect bidirectional system adoption to follow a similar path. As this is a specification for residential thermostats, timing for this requirement could be loosened.

## **Finally, we would love some clarifications regarding Page 2**

### **Companies to provide product unit shipment or other market indicators**

*Info is highly confidential. How will the EPA protect?*

*What are alternative indicators?*

*Do we get reports back? When / how often?*

### **What are some “Special Distinction” benefits?**

*What does “additional recognition and/or support” look like?*