Ladies and Gentlemen:

The current Version 5.0 ENERGY STAR Refrigerator and Freezer Specification maintains a 5% allowance towards the energy use criteria for products with “connected” functionality features, despite concerns expressed previously by some stakeholders. Having studied the “Comment Response Summary” provided by EPA and the notes in Version 5.0, I question whether the stated intent of offering such an allowance – to jump-start the market for refrigerators and freezers with “connected” functionality – is best achieved through the ENERGY STAR program and, in particular, via the proposed allowance in the calculation of maximum annual energy consumption.

In addition to the views offered previously by BSH Home Appliances Corporation (9 August 2011), Consumers Union (10 August 2011) and the California IOUs (12 August 2011) opposing such an allowance, which I fully support, I would like to make several comments on EPA’s response and decision to maintain the 5% allowance towards the energy use criteria for products with “connected” functionality features:

• The 5% allowance approach rewards manufacturers producing marginally efficient appliances with the ENERGY STAR label; it does not create any incentive for manufacturers to integrate connected functionality into their more efficient models. This approach sends the wrong signals to the market. Announcing the “connected” requirements, identifying those models that voluntarily comply initially and setting a schedule for making them mandatory to qualify for the ENERGY STAR label would be a more effective approach to achieve widespread adoption of “connected” functionality and would not create perverse incentives that undermine market transformation efforts.

• The ENERGY STAR label is understood by consumers as the government’s determination of which appliances are more efficient than others. Connected functionality does not make a given appliance technology inherently more efficient. It is therefore misleading that some refrigerators with a given base average energy consumption will be labelled ENERGY STAR, while others will not.

• EPA cites a “consumer value proposition associated with a connected appliance that can interface with an energy management system”, but this value remains purely hypothetical for the vast majority of consumers. ENERGY STAR is a national program, but most consumers do not even have access to smart grid infrastructure, let alone electricity pricing or incentives that would enable them to benefit from “connected” functionality. In San Francisco (where I live), for example, I have a smart meter installed by PG&E, but I am not eligible to participate in the “SmartRate” residential critical peak pricing program, because my electricity use is too low. In such cases, consumers would be better off buying a standard appliance with a base AEC <5% above the ENERGY STAR limit that does not have connectivity features and therefore does not qualify for ENERGY STAR than a “connected” ENERGY STAR appliance that only makes the cutoff because of the 5% allowance. This undermines the trust that consumers have in ENERGY STAR to help them make wise purchasing decisions.

• One of the key guiding principles for establishing ENERGY STAR specifications is that “product energy consumption and performance can be measured and verified with testing”. Whereas the base average energy consumption value can be measured and verified with testing, testing cannot measure and verify the value of the “connected” functional adder. On the contrary, adopting a default 5% allowance on appliance annual energy consumption is not a methodologically sound way of accounting for potential impacts of smart appliance functionality on the change in energy demand, which is indirect (at best) and complex, as pointed out by the California IOUs.
Highlighting products with “connected” functionality on the ENERGY STAR Qualified Product List, as EPA intends to do in any case, would assist consumers, rebate programs and other interested stakeholders to identify these products, without raising the above concerns.

Instead of adopting a more or less arbitrary and clearly distortionary 5% allowance, the EPA should aim to raise the bar for all appliances that qualify for the ENERGY STAR – and plan to make “connected” functionality a prerequisite on a reasonable timeframe. This is the same approach that EPA intends to take with respect to low-GWP foam blowing agents.

Sincerely,

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