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October 9, 2012

Via E-Mail

Amanda Stevens
U.S. Environmental Protection Agency
ENERGY STAR Appliance Program
appliances@energystar.gov

Re: ENERGY STAR Program Requirements Product Specification for
Residential Refrigerators and Freezers, Eligibility Criteria, Draft 3, Version 5.0

Dear Ms. Stevens:

On behalf of the Association of Home Appliance Manufacturers (AHAM), I would like to provide our comments on the ENERGY STAR Program Requirements Product Specification for Residential Refrigerators and Freezers, Eligibility Criteria, Draft 3, Version 5.0.

AHAM represents manufacturers of major, portable and floor care home appliances, and suppliers to the industry. AHAM's membership includes over 150 companies throughout the world. In the U.S., AHAM members employ tens of thousands of people and produce more than 95% of the household appliances shipped for sale. The factory shipment value of these products is more than \$30 billion annually. The home appliance industry, through its products and innovation, is essential to U.S. consumer lifestyle, health, safety and convenience. Through its technology, employees and productivity, the industry contributes significantly to U.S. jobs and economic security. Home appliances also are a success story in terms of energy efficiency and environmental protection. New appliances often represent the most effective choice a consumer can make to reduce home energy use and costs.

AHAM supports EPA and the Department of Energy (DOE) in their efforts to provide incentives to manufacturers, retailers, and consumers for continual energy efficiency improvement, as long as product performance can be maintained for the consumer. AHAM thanks EPA for abandoning the formerly proposed hyperbolic tangent approach and, instead, proposing a percent above the DOE standards approach based on DOE's product classes. We appreciate that EPA heard our concerns and has proposed revisions to address them. EPA has, however, proposed to treat built-in product classes differently and AHAM strongly believes that the ten percent should, instead, be applied uniformly across all product classes and should not alter the results of DOE's lengthy and exhaustive analysis. In addition, EPA has proposed to include minimum qualification criteria for connectivity in order to qualify for the five percent allowance that AHAM does not support due to its restriction on innovation and favoring a specific design configuration.

I. Qualification Criteria

A. Energy Use Criteria

i. *Built-In Product Classes*

EPA proposed qualification levels for built-in product classes that are 13 percent above the 2014 DOE standards. The level for all other product classes is ten percent above the 2014 DOE standards. AHAM opposes EPA's deviation from DOE's conclusions regarding built-in product classes.

As AHAM has previously commented, DOE, through its lengthy, thorough, and long-existing rulemaking process for appliance efficiency standards, has established separate product classes and standards for good reasons. And DOE's regulations implement Congressional intent. DOE's standards are and should be the foundation for the ENERGY STAR program. EPA cannot use an approach that would vary from the approach DOE takes to regulating covered products. To do so ignores the extensive analysis DOE has done to formulate standards for those products which includes a careful balancing of energy savings, consumer choice, product functionality, and manufacturer burden per the National Appliance Energy Conservation Act of 1987 (NAECA). EPA's reliance on the fact that the ENERGY STAR program is "voluntary"—a claim that becomes less viable as the program becomes more successful, and a claim about which Congress has signaled its reservations when it enacted 42 U.S.C. § 6294a(c)(7) in 2005—does not permit this departure. In that enactment, Congress declared that, while voluntary, the program's purpose is to promote "products . . . that meet the highest *energy conservation standards*." 42 U.S.C. § 6294a(a) (emphasis added).

In DOE's recent final rule setting new refrigerator and freezer energy efficiency standards for 2014, DOE recognized the unique consumer utility provided by built-in products, as well as these products' additional technical challenges to achieve continuing increases in energy efficiency. Built-in refrigeration products have inherent functional differences from conventional free-standing products. These lead to lower efficiency, or higher energy consumption, for built-ins with comparable insulation, refrigeration system components, and structural characteristics as their free-standing counterparts. Unlike EPA's proposal in Draft 2 which recognized DOE's analysis, EPA's Draft 3 proposal to treat built-ins differently from all other product classes in terms of the percentage more efficient than the DOE standard ignores DOE's analysis and undercuts the allowances DOE made for built-in product classes. There should be only one government analysis, not two, and it is DOE's that must control.

EPA claims that applying the same "ten percent and above" the federal standard to built-in product classes as to other product classes would represent "backsliding" from the existing ENERGY STAR specification for side-by-side built-in products. AHAM disagrees. AHAM negotiated new standards levels for 2014 with a broad representation of stakeholders, and DOE has implemented the levels in that agreement through rulemaking. These negotiations were based on percentage increases in stringency because the revised test procedures were not yet completed. DOE, based on detailed analysis and notice and comment rulemaking, determined the standards equations that represent these percentage increases in stringency by product class.

EPA also uses percentages to represent increases in stringency (e.g., the current specification requires 20 percent above the federal standards in order to qualify for the ENERGY STAR). The new test procedure for refrigerator-freezers, which needs to be used for the Version 5.0 specification, increases the total certified energy use by 84 kWh per year to incorporate icemaker energy use and another approximately 14 percent (though it varies by product and control system and could be anywhere from about 11 to 17 percent) due to various test procedure revisions, making these percentage increases in efficiency actually greater than today's based purely on kWh per year. Nevertheless, attempting to compare pre-2014 test procedure values to post-2014 test procedure values in an exact way is extremely complex and imprecise. But AHAM sees no evidence that there would be "backsliding." Even if there could be, the way to address it is not by applying more stringent levels to all built-in product classes.

Not only is EPA's approach with regard to built-in product classes problematic in theory, but the data do not support it. **According to AHAM's most recent data, there are currently no built-in side-by-sides or bottom mounts that would meet the proposed levels. In fact, there are none that would meet anything beyond ten percent above the 2014 standards.** If for no other reason than this, EPA should apply the "ten percent and above" criteria evenly across all product classes, including built-in product classes.

ii. *Icemaking Product Classes*

As EPA is aware, the DOE standards in 2014 will incorporate a uniform adder for icemaking of 84 kWh per year. We note that because that additional energy use is not measured, but is a constant adder that all icemaking products must include, there is no ability to improve certified energy use by decreasing the energy use of the icemaker. Thus, in order to meet the proposed qualification criteria, improvements in energy efficiency will have to be achieved through changes to the non-icemaking portions of the product, which will make the "ten percent and above" the federal standard requirement more stringent for icemaking product classes—in practice this will mean that the ENERGY STAR level for icemaking product classes is 11-14 percent above the federal standard.

In addition, icemaker ready/"kitable" models present a challenge that, because icemaking energy was not previously accounted for by the test procedure, has not yet been addressed. An icemaker ready/"kitable" model is one that is equipped with the option to install an automatic icemaker. Such models are generally assigned one model number, and it is unknown whether any particular unit will have an icemaker installed or not. The icemaker could be added at different points in the retail chain, or not at all. For example, the icemaker could be added, if at all: 1) before leaving the manufacturer's distribution center; 2) by the retailer at the point of sale; or 3) by the consumer after purchasing the refrigerator-freezer. This makes it difficult to know how to treat such a model. DOE's final standards rule requires manufacturers to certify energy use both with and without the ice maker (adder). But it is unclear how EPA's proposal would treat icemaker ready/kitable models. Because, as explained above, manufacturers will not be able to improve upon the energy use of the icemaker in order to meet the ENERGY STAR levels, AHAM proposes, that for icemaker ready/kitable models, EPA provide that the qualification criteria be based on the energy use without the icemaker. To do otherwise will penalize those models.

B. Significant Digits and Rounding

EPA revised the significant digits and rounding requirements to cite the applicable sections of the Code of Federal Regulations, Appendix A to Subpart B of Part 430 and 10 C.F.R. 430.23. AHAM supports that revision.

EPA also proposed to require that the “Maximum Annual Energy Consumption specification limit, as determined by Equation 1 shall be rounded off to the nearest kWh per year. If the equation calculation is exactly halfway between the nearest two kWh per year values, the Maximum Annual Energy Consumption shall be rounded down to the lower of these values.” AHAM opposes this addition because what “exactly half way” means is confusing. Instead, it would be enough to indicate that the Maximum Annual Energy Consumption specification limit, as determined by Equation 1 shall be rounded off to the nearest kWh per year. That is consistent with DOE’s approach—no further language is necessary.

It is illegal for manufacturers to make energy representations based on anything other than DOE’s applicable test procedures and regulations. Accordingly, as we have commented previously, EPA need only state that qualification for ENERGY STAR must be based on the values reported to DOE in the manufacturer’s certification report and appearing on the FTC EnergyGuide label. That approach will not only provide clarity and consistency for regulated parties, but also for consumers who will see the same values on the EnergyGuide label and ENERGY STAR Qualified Product List. If EPA believes that clarification on significant digits and rounding are required, it should address that concern with DOE, and DOE should issue guidance if it determines guidance is necessary after consulting with stakeholders. EPA cannot unilaterally clarify DOE’s regulations through an ENERGY STAR specification. Stating anything in addition to DOE’s regulations may, intentionally or unintentionally, change the meaning of those regulations, which are the foundation of the ENERGY STAR specifications.

II. **Connected Product Criteria**

AHAM supports the National Institute of Standards and Technology’s (NIST) position that development of new technologies and equipment be based on the use of open standards for all communication protocols related to Smart Grid. An internet-based solution, for example, combines open communication standards with near-universal acceptance both in the United States and globally. The Internet can provide robust and secure data transfer and demand response messaging, while adapting to evolving needs and capabilities in the future.

AHAM fully supports this vision. Consumers should receive valuable and understandable information about their energy use and costs, thus enabling them to make intelligent and informed choices about how and when to use energy. With this knowledge, consumers will be empowered to use energy more efficiently and to save money on electricity.

However, EPA proposes in the specification that an internet based solution utilizing a cloud based technology with open standards would not be sufficient to meet the needs of interoperability with immediate benefits to the consumer. EPA proposes in Section 4A an

additional minimum communications requirement that is capable of receiving and directly responding to open standards-based energy related commands on the consumer's premises.

AHAM does not support the minimum requirement as proposed in the specification. The emphasis provided in the regulation "on the consumer's premises" restricts innovation for manufacturers and favors a particular design configuration. For example, if a design configuration utilizes WiFi with open standards, this infers an IP address which is not relevant to a physical location. Utility signals can be sent directly to an IP address utilizing SEP2.0 and whether that IP address is on the appliance or in the cloud is not discernible by the utility—the commands are the same. Therefore, utilities would not incur increased costs or complexity and would not have to interface with a manufacturer's cloud based solution. This example design configuration will meet all the requirements of the specification and therefore should be sufficient to meet all the connected product criteria and qualify for a 5% allowance without any additional requirements.

III. Effective Date

EPA proposed an effective date of March 1, 2014. AHAM opposes that effective date and, instead, proposes an effective date of September 15, 2014, to align with the compliance date for DOE's revised standards.

As we have previously commented, the magnitude of the change to the standards and test procedure in 2014 is the biggest it has been since energy labeling began. The work is not just on the part of manufacturers, but trade partners as well. The required change is very difficult to accomplish during the peak buying season, which is the summer months (roughly April through September, but it may vary) because of production schedules and promotions, as well as other factors. The fact that the transition will occur during this period (September 2014), only further increases the magnitude of the change.

In an attempt to minimize unnecessary and costly duplicative requirements, AHAM requested permission from DOE to allow for the option of testing and rating models under the new test procedures and standards beginning on or after January 1, 2014. As EPA knows, DOE issued guidance that will permit such early compliance with the standards and revised test procedure (without a date limitation). There will also be coordination required with the Federal Trade Commission (FTC) regarding labeling, and though AHAM has made a transitional labeling proposal to FTC, FTC must engage in a rulemaking in order to make the requested changes. Thus, we cannot be certain as to whether FTC will permit early compliance, and if it does, what the date will be. If FTC does not permit early compliance labeling, then manufacturers will not be able to comply early with the standards because they would not be able to label early-compliant products correctly. By extension, manufacturers also could not qualify for the ENERGY STAR by March 1, 2014, because to do so they would need to comply early with the amended standard using the amended test procedure. EPA should not set an effective date prior to the mandatory compliance date, September 15, 2014, in light of this uncertainty. To do so will create significant uncertainty for stakeholders in an already complex regulatory climate. Instead, EPA should mitigate the burden on manufacturers by aligning the ENERGY STAR effective date with that of DOE's amended standards for refrigerator-freezers. This is especially

true given that there is little benefit to consumers or the environment that will result from an effective date six months prior to the mandatory compliance date.

AHAM appreciates the opportunity to submit comments on the ENERGY STAR Residential Refrigerators and Freezers Draft 3, Version 5.0 Specification and would be glad to further discuss these matters.

Best Regards,

A handwritten signature in cursive script that reads "Jennifer Cleary".

Jennifer Cleary
Director, Regulatory Affairs