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March 15, 2021

Tanja Crk
Product Manager
ENERGY STAR Commercial Food Service
1200 Pennsylvania Ave, NW
Washington, DC 20460

Via electronic mail: cfs@energystar.gov and Crk.Tanja@epa.gov

Subject: ENERGY STAR Commercial Refrigeration Equipment (CRE) Specification 5.0 Discussion Guide Submission AHRI Comments

Dear Ms. Crk,

These comments are submitted by the Air-Conditioning, Heating, and Refrigeration Institute (AHRI), on behalf of our member companies, to comment on the discussion guide published in December 2020 for a new ENERGY STAR CRE Specification 5.0, specifically related to revisions to the energy efficiency criteria of the specification and the proposed scope expansion of the ENERGY STAR certification program.

AHRI is the trade association representing manufacturers of heating, cooling, water heating, and commercial refrigeration equipment. More than 300 members strong, AHRI is an advocate for the industry and develops standards for and certifies the performance of many of the products manufactured by our members. In North America, the annual output of the HVACR and water heating industry is worth more than \$44 billion. In the United States alone, the HVACR and water heating industry supports 1.3 million jobs and \$256 billion in economic activity annually.

We are grateful for the opportunity to provide comments on the ENERGY STAR CRE Specification 5.0 Discussion Guide for Commercial Refrigeration Equipment. AHRI looks forward to working with the Environmental Protection Agency (EPA) and Department of Energy (DOE) during the remainder of the development process for 5.0 specifications.

AHRI appreciates the effort EPA has taken to review current DOE requirements and product categories and to fully seek stakeholder input prior to drafting the specifications. AHRI supports ENERGY STAR revisions and suggests that any revisions harmonize with federal regulations product classes and test procedures whenever possible.

ENERGY STAR Specification Scope Expansion Consideration

EPA expressed interest in expanding the ENERGY STAR certification program scope for commercial refrigeration equipment to include additional product categories covered by DOE, new product categories not currently covered by DOE, as well as remote display cases. AHRI believes that DOE is working on the next round of rulemakings and EPA should work with DOE to incorporate any additional product categories in the federal regulations and test procedures before encompassing them in the ENERGY STAR Certification Programs. Collaboration between federal programs is extremely critical to industry consistency and harmonization of test procedures for accurate product efficiency ratings.

Based on feedback from our member manufacturers, AHRI believes that the usage of refrigeration racks and condensing units are determined by application-specific factors, and that there are no significant model characteristics that differentiate between whether the system should be used with a rack condensing system or a dedicated remote condensing unit. Because remote units are dependent on the constraints of the installation space, manufacturers are not always involved in those decisions. Distributors typically work with customers to install equipment based on space and capacity considerations. Typically, it is not known if a customer will use a remote condensing unit as opposed to a refrigeration rack system until the installation space and logistics are provided by a customer. Therefore, most remote units are not specifically designed for condenser rack or dedicated condensing units, they are commonly designed to accommodate both condenser applications.

Remote display cases are overwhelmingly 'build to order' pieces of equipment. The product is customized and includes design characteristics based on the customer's needs. The end-user's space size and capacity constraints are the main driving factors when installing a remote multi-rack or a dedicated remote condensing unit, regardless of any non-standard characteristics. VCT.RC.M, VCT.RC.L, and SOC.RC.M units typically will use a rack condenser system more often than a dedicated RCU, simply based on space constraints with typical install applications. Energy-saving characteristics are available (i.e., LED lights, night curtains, etc.) but are not standard for installation in these units.

AHRI believes that the VCT.RC.M, VCT.RC.L, and SOC.RC.M equipment classes should not be considered for the CRE 5.0 specification at this time. AHRI is recommending that EPA harmonize methods of testing with DOE. DOE should be opening the next round of federal test procedures and energy efficiency rulemaking on CRE products shortly. New updates to these units' efficiency levels should be completed at the DOE level before considering them for addition into the ENERGY STAR certification program.

Test Method Discussion for Three Potential New Product Categories

EPA indicated that additional product categories are being considered for inclusion in the CRE ENERGY STAR Certification Program. These categories are: refrigerated preparation and buffet tables; chef bases/griddle stands; and blast chillers/freezers. None of the mentioned products have a test method adopted by DOE. AHRI believes that EPA should not include product types which are not yet included in DOE's energy efficiency rulemaking on commercial refrigerators and freezers. Any additions at this point should come from what is already regulated and has a defined federal test method within the Code of Federal Regulations (CFR). Once DOE sets a baseline for testing and efficiency for these products, ENERGY STAR would then have a consistent testing and rating method to consider for the certification program at EPA. Therefore, AHRI recommends that EPA delay adding the new product categories mentioned in this paragraph until DOE adopts appropriate efficiency levels for them.

EPA asked what the typical use schedule and anticipated lifetime are for these categories of commercial refrigeration equipment product types. Use and lifetime vary by equipment type and installation but AHRI members recommend a typical use schedule of 12 hours a day for 7 days a week for refrigerated preparation and buffet tables; chef bases/griddle stands; and blast chillers/freezers. The anticipated lifetime for these units is 8-12 years.

EPA posed several questions regarding the test procedure of new products proposed in in ENERGY STAR Discussion Guide (refrigerated preparation and buffet tables; chef bases/griddle stands; and, blast chillers/freezers). Noting a consistent theme in EPA's questions, AHRI recommends that EPA wait until DOE evaluates or adopts new test procedures for products classes such as refrigerated preparation and buffet tables; chef bases/griddle stands; and, blast chillers/freezers in its upcoming rulemaking before adding them to the scope of its ENERGY STAR certification program.

Energy Savings Education for Open Cases

Although ENERGY STAR is not proposing adding open cases to the specification 5.0, there are several energy-saving appurtenance questions included in the discussion guide. AHRI provides the following general comments to these questions. In most refrigeration applications, the use of energy saving features or add-ons is highly dependent on the operating hours, ambient conditions, and layout of refrigeration systems within the store. OEMs provide these options with the equipment upon install if the store layout or use window allow them to cause additional energy savings while remaining cost effective. In some cases, the appurtenances can also be retrofitted in the use or location of product changes over time.

The discussion guide specifically asked about night curtains, open cases and certain equipment classes. Night curtains are available but are not standard with open cases.

Typically, night curtains are used in smaller stores with lower operating hours. Night curtains are not commonly used in HZO, but appear when necessary or requested with SVO and VOP equipment classes.

COVID- 19 has decreased the need for 24/7 operating hours at many locations. This has also increased the demand and use for night curtains or other energy saving options that would not be employed when product was accessible 24/7. This is an added expense that was not previously utilized for stores with long operating hours that may now become more relevant. Store conditions and layout are also drastically impactful to the use of night curtains, 'aerofoil', air curtains or other energy saving appurtenances. These equipment characteristics can be both requested based on application install or used in retrofit situations. They are not standard additions to basic models.

AHRI appreciates the opportunity to provide these comments. Should you have any questions regarding this submission, please do not hesitate to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Lauren MacGowens". The signature is written in black ink on a light-colored background.

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