February 16, 2022

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

Via electronic mail: cfs@energystar.gov

Subject: ENERGY STAR Commercial Refrigerators and Freezers Final Draft Specification 5.0 Submission Comments (Due February 16, 2022)

Dear Ms. Crk,

The Air-Conditioning, Heating, and Refrigeration Institute (AHRI), on behalf of our member companies, submits these comments on the draft specification published on January 19, 2022, for a new ENERGY STAR Commercial Refrigerators and Freezers Final Draft Specification 5.0.

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 Draft Specification 5.0 for Commercial Refrigeration Equipment. AHRI and its members are available for further discussion if EPA has follow-up questions during the remainder of the development process.

AHRI appreciates the effort EPA has taken to review current DOE requirements and product categories and to seek meaningful stakeholder input prior to drafting the specifications. AHRI would like to reiterate that AHRI and its members support Energy Star revisions and suggests that any revisions harmonize with federal regulations, product classes, and test procedures whenever possible.

**Scope expansions**

AHRI thanks EPA for considering industry feedback and excluding buffet tables, preparation tables walk-in coolers, blast chillers and freezers, horizontal open
equipment, vertical open equipment, semi-vertical open equipment, remote condensing equipment, ice cream freezers, and equipment rated at the lowest application product temperature at this time. We especially appreciate the EPA and Energy Star program understanding the complexity of remote condensing units and focusing on self-contained equipment for the final draft version of the 5.0 specification. The inclusion of any of these additional product categories would not only require a separate analysis but potentially considered for a complete separate equipment and energy class based on the product differences. AHRI will continue to work with EPA and DOE to include these in industry testing and rating standards where appropriate.

AHRI values EPA's desire to expand the ENERGY STAR program and add more product families. However, AHRI still strongly disagrees with the inclusion of chef bases and griddle stands. As stated in our previous comments, no completed industry analysis has been provided to illustrate the effects of ambient temperatures and hot surface loads which are vastly different for these applications than other commercial refrigeration units. without a thorough established data set, using industry accepted test procedure at proper conditions that represent usage and design of a product family, makes the proposed standard levels highly questionable. This also sets a concerning precedent for EPA to add future product families, without providing sufficient baseline test data to establish suitably representative energy standards. EPA should allow DOE, with input from interested parties, to develop and implement acceptable test procedures, and provide opportunity for testing sufficient quantity of representative products, before creating new ENERGY STAR categories. AHRI encourages EPA to work with ASHRAE SSPC 72 and DOE to incorporate these units within the supported industry method of test after appropriate analysis is completed.

**Definitions and Table 1**

Within the included definitions EPA lists closed and open equipment with determining factors such as open, closed, vertical or horizontal. None of these provide clarity on drawers and whether they equate to door within the definition. DOE defines a door as ‘a movable panel that separates the interior volume of a unit of commercial refrigeration equipment from the ambient environment and is designed to facilitate access to the refrigerated space for the purpose of loading and unloading product. This includes hinged doors, sliding doors, and drawers. This does not include night curtains.’ AHRI members have concluded that EPA would also mean drawer is included in these categories. In Table 1 under Chef Bases, Doors or Drawers are listed. For consistency’s sake and to avoid confusion, AHRI suggests that EPA add drawers to the definition for door and remove the reference to drawers from the chef base section of the table. The current language could be interpreted to only include drawers in the chef base category and not the vertical and horizontal portions above.
**Method of Test**

AHRI would like to continue to suggest that EPA work with DOE on the timing of the release of the CRE 5.0 Specification. DOE has recently released RFIs for CRE test procedures and efficiency standards. If DOE continues with proposed changes and revisions, it may behoove EPA to await these final rules before releasing the new specification. Alignment with DOE method of testing requirements and efficiency levels should always be considered a top priority. ASHRAE 72 is currently in discussion with DOE consultants regarding the definition of doors and drawers. The ASHRAE 72 MOT may be updated to adequately outline the loading of drawers to ensure repeatable and accurate testing. These revisions should be included by DOE and then EPA to remain consistent in testing methods. As previously mentioned, AHRI has concerns with extrapolating the ASHRAE 72 MOT to chef bases and griddle stands without further assessment. AHRI members are not completely against using this test procedure if it is deemed appropriate, but analysis of the ambient conditions and additional hot surface load must be completed and evaluated by industry first. If EPA includes these units and then DOE determines a different path to be more appropriate, this would be detrimental to the industry and cause undue burden to manufacturers who begin testing and reporting.

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

Respectfully,

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