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September 22, 2021

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

Via electronic mail: cfs@energystar.gov

Subject: ENERGY STAR Commercial Refrigeration Equipment (CRE) Draft Specification 5.0 Submission Comments (Due September 22, 2021)

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 draft specification published on August 11, 2021, 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 Draft Specification 5.0 for Commercial Refrigeration Equipment. AHRI looks forward to working with Environmental Protection Agency (EPA) and Department of Energy (DOE) during the remainder of the development process for 5.0 CRE 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.

Definitions

EPA is proposing to expand the definitions for service over counter and chef bases as well as modify the definitions for convertible temperature equipment and preparation or buffet tables. AHRI does not have comments on the convertible temperature definition at this time. AHRI members agree with the inclusion of service over counter definitions and applications as these align with current industry test methods and DOE regulations. While AHRI does not see immediate issue with the definitions for preparation or buffet tables, before these units are included in rating requirements and efficiency levels, they should be harmonized with industry standard and DOE requirements. As mentioned in the comment response to the December discussion guide, there are a number of industry groups currently reviewing these applications and definitions. The definition of chef bases and griddle units needs to be more thoroughly explored to determine whether there are defining characteristics other than the hot surface and to identify whether storage compartments are integral to the energy consumption and load profile.

Scope expansions

For chef bases and griddle stands, AHRI still strongly disagrees with the inclusion of chef bases and griddle stands. While these units may be tested in a similar fashion to commercial refrigeration units covered by DOE and Energy Star today, the applications they are installed in are subject to quite different conditions and use. Ambient temperatures and hot surface loads are vastly different than the current DOE test procedure. If it is determined that these have minimal impact on performance, the ASHRAE 72 methodology may be appropriate, but a full analysis of whether ambient conditions or additional heat loads should be considered must be completed during the method of test development. AHRI agrees that under no circumstance should this equipment fall into any of the existing equipment classes. This must be done with industry consensus at the standard and DOE level before being integrated into the Energy Star program. It is inappropriate for these units to be included in the EPA program without inclusion in a standardized method of test and DOE regulations. This is especially pertinent as DOE has recently received numerous comments on the inclusion of these products in response to the CRE TP RFI. AHRI will continue to work with DOE and EPA to include these units in a suitable manner.

Energy Efficiency

EPA's proposal to set new Maximum Daily Energy Efficiency (MDEC) requirements for VCS.SC.M and VCS.SC.L seems reasonable. In reviewing the data shared during the webinar, AHRI members noted a few considerations for

EPA. The data should be reviewed to verify that outliers were excluded and that units that are in the DOE Compliance Certification Database more than once are not double counted. Some submissions for brand names or multiple models in the same basic family can result in repeated data entries. Since DOE submissions are done on a yearly basis, EPA should also confirm that the data used shows the most recent values. This yearly submission can act as a database cleanup and rectify errors or repeat entries identified over time.

Reporting Requirements

AHRI is supportive of the inclusion of refrigerant type in reporting requirements. As EPA noted, this information is required by UL to be on many product nameplates today and is already reported in a number of situations. In transitioning to requiring the submission of refrigerant type, EPA should identify a path for units under the 4.0 CRE specification to comply over time under their grandfathered model status. This transition should not incur additional burden to the OEMs with an immediate requirement for models grandfathered in.

Method of Test

AHRI suggests 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. As mentioned above, 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 would like to raise one additional point that was not mentioned in the draft specification but was raised on the webinar. The industry supply chain has suffered major disruptions over the past two years and lead times are still well beyond expected timeframes. Between the COVID-19 pandemic, port and transportation bottlenecks and continually increasing tariffs and regulations on materials and components, it will take some time for the industry to fully recover. AHRI asks that EPA keep this in consideration

when determining the path to compliance and timeline for any updated requirements in the CRE Energy Star program.

In conclusion, AHRI is supportive of EPA's proposal other than for chef bases and griddle stands. AHRI would also like to see careful consideration of the timing of these revisions to align with DOE updates to pending regulations for commercial refrigeration equipment. As always, AHRI is willing to work with DOE and EPA to review test procedure or standard updates and incorporate changes were appropriate.

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

Respectfully,

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

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