UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460



OFFICE OF AIR AND RADIATION

May 19, 2017

Dear ENERGY STAR® Automatic Commercial Ice Maker Partner or Other Interested Party:

The U.S. Environmental Protection Agency (EPA) is pleased to inform you that the Version 3.0 ENERGY STAR Automatic Commercial Ice Maker specification has been finalized. The effective date for this specification is January 28, 2018. Your valuable feedback and input throughout the development process has been critical to this Version 3.0 specification. EPA would like to thank the many stakeholders who contributed feedback that helped inform this specification revision process.

The Automatic Commercial Ice Maker (ACIM) product category was introduced to the ENERGY STAR Program nearly 10 years ago. For the last decade, partners have ensured that ENERGY STAR ACIMs provide significant savings to purchasers. In addition to energy and water savings, ACIMs that certify to the Version 3.0 requirements may also offer additional climate benefits through the use of Low-Global Warming Potential (GWP) refrigerants. Furthermore, some ACIMs may include connected functionality, and those products have the potential to change the way end-users interact with products by offering tools (e.g., communication link) to better understand and manage their energy use. The new Version 3.0 performance requirements for ACIMs offer end users energy savings ranging from 8 – 20%, depending on size and type. This translates to about \$10 – \$85 per year, or \$100 – \$850 over their lifetime when compared to a conventional new model. If all ACIMs sold in the United States were ENERGY STAR certified, the energy cost savings would grow to nearly \$325 million each year and nearly 5 billion pounds of annual greenhouse gas emissions would be prevented, equivalent to the emissions from over 460,000 vehicles.

Overview of the Version 3.0 Specification

The following changes are reflected in the ENERGY STAR ACIM Final Version 3.0 specification:

Batch, Remote Condensing Units

 EPA made a minor adjustment to the Applicable Ice Harvest Rate Range for batchtype Remote Compressors (RCUs) to align with the Code of Federal Regulations (CFR) §431.136. This also resulted in a slight modification to the Energy Use threshold for products greater than 988 lbs of ice/24 hrs.

Connected Functionality

In response to stakeholder requests, EPA has extended the capabilities description
from a 250 to a 500-word limit to allow manufacturers to list any capabilities that would
support locational demand response. EPA notes that a description of the
configurations of demand response service and automatic over-ride information should
be included in the capabilities summary. In addition, EPA encourages partners to
include information about connected and demand response functionality in owner

instruction manuals including steps for selecting and configuring demand response events, and how to manually and automatically override demand response events.

Additional Comments

The Final Draft indicated that open-standards based interconnection is preferred, but not required for connected functionality recognition. EPA received a comment recommending the Agency require open communication standards for *the Optional Connected Functionality in Automatic Commercial Ice Makers* criteria. The optional connected functionality criteria allow three potential grid communication paths to the device: directly via open standards, directly via API/Interface Specification, and indirectly via service/software bridge. EPA encourages manufacturers to design products that make use of open standards, and believes that products will move towards open standards or open API control as the technology and controllers become more common in the ACIM sector. However, the Agency recognizes that additional options may be useful to manufacturers looking to adapt products to meet the needs of the connected functionality criteria in the interim.

While the Agency also received strong support for the proposed Final Draft levels from numerous stakeholders, one stakeholder requested EPA consider re-evaluating the Final Draft levels based on concerns that product availability for select ACIM types is limited. EPA shares the commenter's desire to recognize a variety of product designs as ENERGY STAR, and to ensure qualifying products meet the varying needs of operators. EPA believes the certification criteria strike an appropriate balance between the need to ensure customer energy savings and reasonable payback. EPA understands that additional highly-efficient products can be expected to enter the market in 2018, and anticipates that these requirements will allow the ENERGY STAR to differentiate top energy performing models in the marketplace at that time. Therefore, no additional modifications to the Energy Use levels have been incorporated into the Final Version 3.0 specification.

All Version 3.0 specification development materials are available on EPA's ENERGY STAR website at www.energystar.gov/RevisedSpecs (click on the Automatic Commercial Ice Maker "Version 3.0 is in development" link).

The effective date for this specification is January 28, 2018, aligning for partner ease with the compliance date for the forthcoming Federal standard.

Transition Timeline and Next Steps

EPA shares its partners desire for a smooth transition from one ENERGY STAR specification version to the next with the objective of meeting end user expectations that ENERGY STAR labeled products fully meet the latest requirements in effect upon their date of manufacture. With this in mind, EPA has established the following timeline:

- Effective immediately, brand owners may elect to have their Certification Body (CB) certify their eligible products to the Version 3.0 requirements.
- On October 13, 2017, CBs will be asked to stop certifying new product submittals to the existing ENERGY STAR Version 2.0 specification requirements. Note, however, that existing certifications to Version 2.0 will remain valid for the purposes of ENERGY STAR qualification through January 27, 2018.
- As of January 28, 2018, any product manufactured and labeled as ENERGY STAR
 must meet Version 3.0 requirements. At this time, all certifications of products to the
 Version 2.0 specification will be invalid for purposes of ENERGY STAR qualification
 and CBs will only submit product models certified to Version 3.0 to EPA.

Third-Party Certification

All new products must be certified by an EPA-recognized CB before being labeled and marketed as ENERGY STAR certified. Upon satisfactory completion of all certification requirements, a CB will notify the Partner that the product is ENERGY STAR certified and will submit certified product data to EPA for listing on the ENERGY STAR website. For more information on the Third-party Certification program please visit www.energystar.gov/3rdpartycert. Currently qualified models that are not certified to Version 3.0 will be removed from the ENERGY STAR Product Finder on January 28, 2018.

Please note that ENERGY STAR partnership as a manufacturer is limited to organizations that own and/or license a brand name under which they sell eligible products in the United States and/or Canada. Partnership is not available to original equipment manufacturers (OEMs) that do not sell directly to end users. OEMs may certify products on behalf of the ENERGY STAR brand owners/licensees; however, the brand owner must be the ENERGY STAR partner associated directly with the certified product models, since only partners are authorized to use the ENERGY STAR certification mark.

On behalf of EPA, I appreciate your participation in the revision of this specification and look forward to working with each of you as you certify and promote your energy-efficient equipment. Please feel free to contact me at (202) 564-2984 and Hesla.Kirsten@epa.gov or Adam Spitz, ICF International, at (916) 231-7685 and Adam.Spitz@icfi.com with any questions or comments regarding this specification. For test method questions, please contact Ashley Armstrong at ashley.armstrong@ee.doe.gov.

Sincerely,

Kirsten Hesla, Product Manager

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ENERGY STAR Commercial Food Service