

February 3, 2016

Howe Corporation respectfully requests consideration of the following comments and questions on the ENERGY STAR Program Requirements, Product Specification for Automatic Commercial Ice Makers, Eligibility Criteria, Draft 1: Version 3.0.

Energy Use (kWh/100 lbs ice) - Page 4 Line 186 and Data Plots

Howe Corporation is confident that the proposed energy performance standards in ENERGY STAR Draft 1 Version 3.0 Automatic Commercial Ice Maker Specification are, or soon will be, achievable as proposed. Preliminary testing using emerging technology, as well as ACIM design improvements, indicate that the reduced energy and lower water consumption levels can be attained. The ENERGY STAR program assists end users wishing to identify and implement these products and technologies to save energy and reduce their environmental impact.

Potable Water Use (gal/100 lbs. ice) - Page 4 Line 186

The proposed maximum potable water usage (15 gal water/100 lbs. of actual ice production) equates to roughly 25 pounds of allowable waste water per 100 pounds of ice produced. In order to encourage greater water conservation, the limit of 15 gal/100 lbs. of actual ice production should be lowered. A lower limit would be in alignment with overall mission of the ENERGY STAR program.

Use of Low GWP Refrigerants - Page 5 Line 222

ENERGY STAR Draft 1 Version 3.0 Automatic Commercial Ice Maker proposed standards, lines 222-224 read "...more climate-friendly refrigerant and refrigeration systems can improve the energy efficiency of a product by approximately 5-10% or better...". We are unsure which refrigerant or refrigerants to which the document refers, as some of the lower GWP refrigerants have a lower refrigeration capacity compared to R-404a. The reduced capacity can be confirmed, not only with our own internal testing data, but also with compressor and condensing unit capacity ratings produced by the manufacturers of those components. This lower refrigeration capacity results in higher energy consumption per 100 lbs. of ice production when using some low GWP refrigerants.

Water Quality - Page 5 Line 248

Water treatment needs vary considerably depending upon site-specific water conditions. Some examples of these conditions include water hardness, microorganism levels, temperature, pressure, municipal water treatments among others. In response to the question in Line 248, each end user defines the water quality at each site as to recommend a specific and appropriate water treatment or filter for their application. It is worth noting that many end users employ whole-site water treatment

systems. By requiring or even recommending ACIM-specific water treatment, end-users risk exceeding the needed treatment, or in some cases, negating the original water treatment strategy. We have further information on installations where duplicate and conflicting water treatment and filtration was installed and photos of the damage that resulted. Please contact us if you additional questions.

Recognizing Connected Functionality - Page 6 Line 290

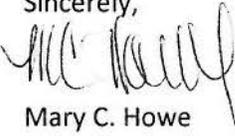
Please define the term “recognition” as it pertains to the Connected Functionality portion of ENERGY STAR Draft 1 Version 3.0.

Effective Date - Page 8 Line 359

Continuous efforts to reduce energy and water consumption inevitably result in design and manufacturing improvements. Considering many manufacturers will require major design changes to meet ENERGY STAR Draft 1 Version 3.0 Automatic Commercial Ice Maker proposed performance standards, the deadline of January 1st, 2018 does not permit ample time for the inclusion of these design and manufacturing changes. The required testing of qualifying products incorporating these changes will exceed the availability of already overtaxed testing facilities. The deadline should be extended to allow adequate time for testing and certifying eligible equipment.

Additionally, the required physical testing of the equipment is very expensive and difficult for small manufacturers. All effort should be made to reduce the number of times each model must be tested. It would be helpful for ENERGYSTAR to accept equipment that has met the new ENERGY STAR requirements using the new DOE test procedures even if the testing occurred prior to the Effective date of the new specification.

If you have any questions or require further information, please contact us at your convenience.

Sincerely,

Mary C. Howe
President
Howe Corporation