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DOCKET: EERE-2017-BT-STD-0022**

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Re: NAFEM Comments On – Energy Conservation Program: Energy, Conservation Standards for Automatic Commercial Ice Makers, Notice of Proposed Rulemaking; Dkt. EERE-2017-BT-STD-0022 (88 Fed. Reg. 30508; May 11, 2023)

Dear Ms. Hegarty and Ms. Koernig:

The North American Association of Food Equipment Manufacturers (NAFEM) submits the following comments on the Department of Energy's (DOE) Energy Conservation Program: Energy, Conservation Standards for Automatic Commercial Ice Makers, Notice of Proposed Rulemaking; Dkt. EERE-2017-BT-STD-0022 (88 Fed. Reg. 30508; May 11, 2023) (NOPR).¹ The NOPR sets forth DOE's proposal to amend and establish energy conservation standards for automatic commercial ice makers (ACIM). Set forth below we outline the interests of NAFEM and then NAFEM's comments specific to the NOPR for DOE's consideration.

¹ NAFEM supports the Air-Conditioning, Heating, and Refrigeration Institute's (AHRI) and Association of Home Appliance Manufacturers' (AHAM) comments on this NOPR, joins the same, and incorporates them by reference as if fully set forth herein, except that NAFEM does not support, join, or incorporate AHAM's Section VII ("AHAM Supports The Amended Definition for Refrigerated Storage Automatic Commercial Ice Makers"). To avoid duplication, NAFEM, AHRI, and AHAM will comment on separate concerns with the NOPR.

I. INTERESTS OF NAFEM

NAFEM is a trade association of more than 500 commercial foodservice equipment and supply manufacturers – a \$14.9 billion industry. These businesses, their employees, and the products they manufacture, support the food away from home market – which includes more than one million locations in the U.S. and countless more around the world. NAFEM supports, and its members actively seek, opportunities to engage with DOE in the regulatory process to assure certainty and clarity to its regulated members that manufacture equipment relied upon by our society to safely provide food away from home.

NAFEM regularly participates with DOE in energy conservation standards rulemakings. NAFEM members include manufacturers of ACIM that are the subject of this proposed rule, and NAFEM has a direct interest in this matter. NAFEM previously submitted comments in this docket as to the Preliminary Technical Support Document and request for comment for Conservation Standards for Automatic Commercial Ice Makers (87 Fed. Reg. 17,025; March 25, 2022) (Preliminary TSD).

II. NAFEM’S COMMENTS FOR DOE’S CONSIDERATION

NAFEM provides the following comments and hopes that DOE will entertain ongoing dialogue on these critical ACIM issues. NAFEM has previously raised several of these issues in connection with its comments to the Preliminary TSD. Because of the flaws identified below, NAFEM respectfully requests that DOE issue a no-new-standard standard or otherwise suspend this rulemaking until it provides the data and technical support necessary to evaluate the information in the TSD and the models used in this NOPR.

A. NAFEM’S MEMBERS ARE UNABLE TO EVALUATE DOE’S ESTIMATES THAT DOE BASED ON MANUFACTURER INTERVIEWS

DOE’s inputs and analysis substantially rests on purported interviews with manufacturers. *See, e.g., id.* at 30526 (“DOE asked manufacturers in confidential interviews about the ACIM equipment manufacturer landscape”); 30535 (“DOE conducted the analysis using both physical teardowns and catalog teardowns as well as feedback from manufacturers during interviews.”); 30537 (“DOE interviewed manufacturers accounting for approximately 69 percent of covered ACIM shipments and 57 percent of low-capacity shipments.”).

As DOE acknowledged, NAFEM identified that the Preliminary TSD’s “cost-efficiency curves were developed, at least in part, based on 2015 costs that were adjusted to 2020 dollars,” but that it would be more appropriate to use “actual costs in 2022” to provide “a more sound analysis and would reflect the current economic situation of rising inflation and part shortage that has affected part costs.” *Id.* at 30535. In response, DOE stated that it: (i) “updated its cost assumptions in this NOPR based on **feedback provided by manufacturers** in response to the March 2022 Preliminary Analysis and during **manufacturer interviews**”; and (ii) “updated its costs based on manufacturer feedback and based on 2022 prices for materials and components.” *Id.* at 30535-30536 (emphasis added).

Furthermore, as DOE acknowledged, NAFEM and others commented that “the analysis in the March 2022 Preliminary Analysis shows only a minimal increase for changing from non-flammable refrigerant to flammable refrigerant, and that the analysis should consider increased cost for spark-resistant components, cost for agency testing to approve use of new refrigerants, and costs associated with changing production areas to accommodate flammable refrigerant safety requirements.” *Id.* at 30536. In response, “DOE updated its motor cost assumptions in this NOPR based on **feedback provided by manufacturers** in response to the March 2022 Preliminary Analysis and during manufacturer interviews.” *Id.* (emphasis added). And “DOE seeks comment on the method for estimating manufacturing production costs.” *Id.*

It is thus clear that DOE has apparently collected information from manufacturers for the Preliminary TSD, and then adjusted that information in some fashion to arrive at the data underpinning the NOPR as purportedly reflected in the current TSD. Here, DOE provided four documents on the above-captioned docket that appear to reflect DOE’s support material for the NOPR.² Critically, however, none of these records provide interview sheets memorializing the interviews that DOE or its agents purportedly conducted, even on a confidential, “masked” basis where appropriate. Thus, to the extent that a manufacturer was interviewed for the TSD and/or the NOPR, even that same manufacturer has no ability to confirm that its own data was accurately collected, categorized, or transcribed.

NAFEM therefore has legitimate concerns about the representativeness of data that DOE is purportedly using here in support of this NOPR. Under the Administrative Procedure Act, “the agency **must examine the relevant data** and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made.” *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (emphasis added).

Because DOE has not supplied **any** of the interview memoranda or component parts of the analysis on which it now seeks to regulate entities subject to this NOPR, NAFEM and its membership, and all those likewise potentially subject to the NOPR, have no meaningful ability to assess and comment on the data used, as well as the veracity, applicability, reliability, or representativeness of the same. NAFEM respectfully requests that DOE suspend this rulemaking until it provides the data and technical support necessary to evaluate the information in the TSD and the models used in this NOPR.

B. DOE’S ANALYSIS INCLUDES PORTABLE LOW-CAPACITY ACIMs THAT ARE NOT USED IN COMMERCIAL SETTINGS AND THUS SHOULD BE REMOVED FROM THIS NOPR

As explained below, DOE’s analysis and proposed efficiency levels for automatic **commercial** ice makers are being driven by products that have no commercial purpose: portable ice makers, *i.e.*, those ice makers which are not connected to a facility’s water supply and must be manually refilled to continue operating. NAFEM respectfully requests that DOE remove portable ice makers from this NOPR because they are neither “commercial” nor are

² They are: (1) EERE-2017-BT-STD-0022-0032 (TSD); (2) EERE-2017-BT-STD-0022-0033 (National Impacts Analysis (NIA)); (3) EERE-2017-BT-STD-0022-0034 (Life-Cycle Cost (LCC) Analysis); and (4) EERE-2017-BT-STD-0022-0035 (Government Regulatory Impact Model (GRIM)).

they “automatic,” as this rulemaking is so designated, which may be more appropriately considered in a non-commercial rulemaking.

NAFEM previously requested “that DOE provide examples of existing models available in the marketplace that DOE has determined would fall into the two new proposed categories, as it is important for other information in the March 2022 Preliminary TSD, such as test procedures and shipments.” 88 Fed. Reg. 30508, 30524.

In response, DOE stated that it “has reviewed the low-capacity ACIM market and found that manufacturers specifically market certain, low-capacity automatic commercial ice makers for commercial use and/or using commercial air and water ambient rating conditions (i.e., 90 °F air temperature and 70 °F water temperature, which are the same air and water ambient rating conditions used in DOE’s test procedures for automatic commercial ice makers currently prescribed at 10 CFR 431.134), and distributors sell low-capacity automatic commercial ice makers for commercial use, including automatic commercial ice makers from the proposed low-capacity ACIM equipment classes.”³ DOE concluded that “notwithstanding that low-capacity automatic commercial ice makers may also be distributed in commerce for personal use or consumption by individuals, low-capacity automatic commercial ice makers meet the definition of ‘industrial equipment’ and therefore are covered under the EPCA definition of ‘covered equipment.’” *Id.* at 30525.

These generalities overlook the fact that there is a clear distinction between low-capacity ice makers that may be deployed in commercial settings (which may be appropriate for this rulemaking) and low-capacity ice makers for which there is no rationale for any business, restaurant, hotel, or other commercial entity, to use in the normal course of business (which should not be included in this rulemaking).

Specifically, portable ice makers are not connected to a facility’s water supply and must be manually refilled. Many of them do not have harvest rates higher than 50 lbs/24 hr. Portable ice makers, which must be manually refilled and produce less than 50 lbs of ice over 24 hours, plainly could not meet the needs of a hotel, a school, or even most restaurants. Because portable ice makers lack the capacity to meet these commercial needs, and because a commercial establishment would not likely purchase an ice maker that required constant staff care to refill the water supply, NAFEM’s membership sells these products into residential, and not commercial, channels.

The effect of this mismatch here is tremendous. DOE’s data indicates that 52% of the units used in its shipment analysis come from portable units. (See TSD Table 9.3.2.) Therefore, DOE’s analysis, justifications of the same, and proposed efficiency levels for

³ In support of these assertions, DOE identified certain low-capacity ACIMs: Scotsman “CU0415 - 50 lb Self-Contained Ice Machine”; Scotsman “CU50 - 50lb Cube Ice Machine”; Hoshizaki “AM-50BAJ-(AD)DS Self-Contained Cuber with Built-In Storage Bin”; Hoshizaki “IM-50BAA-Q Sphere Ice Machine Built-In Storage Bin”; Manitowoc “NEO® 65/80 Undercounter Ice Machines”; Ice-O-Matic “UCG060A Gourmet Series Undercounter”; Summit “Built-In 50 lb. Clear Icemaker”; Danby “DIM2500WDB Countertop Cube Ice Machine w/ 2 lb Storage - Scoop, 120v”; and several ice machines sold by KaTom Restaurant Supply, Inc., Ckitchen, WEBstaurant Store, LLC, and Staples, Inc.

automatic **commercial** ice makers are being driven by products that have no commercial purpose. NAFEM respectfully requests that DOE remove portable ice makers from this NOPR, which may be more appropriately considered in a non-commercial rulemaking. Because portable ice makers are analytically driving DOE's justification for this NOPR, NAFEM believes that once they are removed, DOE will be justified in issuing a "no-new-standard" standard.

C. DOE'S DEFINITION OF "REFRIGERATED STORAGE AUTOMATIC COMMERCIAL ICE MAKER" WOULD INCLUDE PRODUCTS THAT ARE NOT USED IN COMMERCIAL SETTINGS AND THUS SHOULD BE REMOVED FROM THIS NOPR

NAFEM requests that DOE remove "refrigerated storage automatic commercial ice makers" from this NOPR, for the reasons identified below, which may be more appropriately considered in a non-commercial rulemaking. DOE has proposed to amend the definition of "refrigerated storage automatic commercial ice makers" to the following: "an automatic commercial ice maker that has a refrigeration system that actively refrigerates the self-contained ice storage bin and for which there is no internal storage space other than the ice storage bin that holds the produced ice." *Id.* at 30526.

However, in practice, manufacturers of commercial ice makers do not "actively refrigerate" the storage space because of a phenomenon called "ice bridging." That is, the "bridge" on ice is the frozen portion that connects each cube to another as they freeze on the "ice grid." Ice machines have sensors that detect when the ice has fully frozen. The distance between the ice grid and the sensor determines the height and thickness of the ice produced. Moving the sensor further away from the grid creates thicker ice, while moving it closer creates thinner ice. Making the ice too thin can cause it to shatter before it can be used, while too thick of a bridge can produce sheets of ice that will not break apart.

This latter issue is relatedly why manufacturers do not include active refrigeration of storage containers in their automatic commercial ice machines. Although it may be counterintuitive, some "melt" in the storage bin is a feature because it prevents the ice from being able to freeze to itself. In a fast-paced commercial setting, requiring staff to continually break up the ice (*i.e.*, an ice block) in the storage container is not desirable.

In contrast, active refrigeration of ice storage is reserved for pre-packaged bags of ice, which one would find in grocery or convenience stores. By their nature, the ice is separated with plastic or other materials, which do not freeze anywhere near the temperatures for the storage of ice, and thus there is little possibility of the ice "blocking." The only instance that NAFEM membership is aware of an ice machine being paired with active refrigeration is a machine that both makes the ice on-site and separates it into pre-packaged bags of ice (instead of obtaining it from a vendor), which are, again, sold to individual consumers typically at grocery or convenience stores. These have no commercial purpose.

Accordingly, NAFEM respectfully requests that DOE remove ice makers featuring active refrigeration from this NOPR, which may be more appropriately considered in a non-commercial rulemaking.

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NAFEM looks forward to continuing to engage with DOE. Please contact the undersigned if NAFEM can provide any additional insight or assistance regarding the comments of this letter.

Respectfully submitted,

A handwritten signature in black ink that reads "Charlie Souhrada". The signature is written in a cursive, flowing style.

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