[6450-01-P]

DEPARTMENT OF ENERGY

[Case Number 2020-001; EERE-2020-BT-WAV-0005]

Energy Conservation Program: Decision and Order Granting a Waiver to Hoshizaki America, Inc. from the Department of Energy Automatic Commercial Ice Makers Test Procedure

AGENCY: Office of Energy Efficiency and Renewable Energy, Department of Energy.

ACTION: Notice of decision and order.

SUMMARY: The U.S. Department of Energy ("DOE") gives notice of a Decision and Order (Case Number 2020-001) that grants to Hoshizaki America, Inc. ("Hoshizaki") a waiver from specified portions of the DOE test procedure for determining the energy consumption of specified basic models of automatic commercial ice makers ("ACIM"). Under the Decision and Order, Hoshizaki is required to test and rate the specified ACIM basic models in accordance with the alternate test procedure specified in the Decision and Order.

DATES: The Decision and Order is effective on **[INSERT DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**. The Decision and Order will terminate upon the compliance date of any future amendment to the test procedure for ACIM located in Title 10 of the Code of Federal Regulations ("CFR"), part 431 section 134 that addresses the issues presented in this waiver. At such time, Hoshizaki must use the relevant test procedure for this equipment for any

testing to demonstrate compliance with the applicable standards, and any other representations of energy use.

FOR FURTHER INFORMATION CONTACT:

Ms. Lucy deButts, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Office, EE-5B, 1000 Independence Avenue, SW., Washington, DC, 20585-0121. E-mail: *AS_Waiver_Requests@ee.doe.gov*.

Ms. Sarah Butler, U.S. Department of Energy, Office of the General Counsel, Mail Stop GC-33, Forrestal Building, 1000 Independence Avenue, SW., Washington, DC 20585-0103. Telephone: (202) 586-1777. E-mail: *Sarah.Butler@hq.doe.gov*.

SUPPLEMENTARY INFORMATION:

In accordance with Title 10 of the Code of Federal Regulations (10 CFR 431.401(f)(2)), DOE gives notice of the issuance of its Decision and Order as set forth below. The Decision and Order grants Hoshizaki a waiver from the applicable test procedure at 10 CFR 431.134 for specified basic models of ACIM and provides that Hoshizaki must test and rate such equipment using the alternate test procedure specified in the Decision and Order. Hoshizaki's representations concerning the energy consumption of the specified basic models must be based on testing according to the provisions and restrictions in the alternate test procedure set forth in the Decision and Order, and the representations must fairly disclose the test results. Distributors, retailers, and private labelers are held to the same requirements when making representations regarding the energy consumption of this equipment. (42 U.S.C. 6314(d))

Consistent with 10 CFR 431.401(j), not later than [**INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER***], any manufacturer currently distributing in commerce in the United States equipment employing a technology or characteristic that results in the same need for a waiver from the applicable test procedure must submit a petition for waiver. Manufacturers not currently distributing such equipment in commerce in the United States must petition for and be granted a waiver prior to the distribution in commerce of that equipment in the United States. 10 CFR 431.401(j). Manufacturers may also submit a request for interim waiver pursuant to the requirements of 10 CFR 431.401.

Signing Authority

This document of the Department of Energy was signed on October 22, 2020, by Alexander N. Fitzsimmons, Deputy Assistant Secretary for Energy Efficiency, Energy Efficiency and Renewable Energy, pursuant to delegated authority from the Secretary of Energy. That document with the original signature and date is maintained by DOE. For administrative purposes only, and in compliance with requirements of the Office of the Federal Register, the undersigned DOE Federal Register Liaison Officer has been authorized to sign and submit the document in electronic format for publication, as an official document of the Department of

Energy. This administrative process in no way alters the legal effect of this document upon publication in the *Federal Register*.

Signed in Washington, DC, on October 22, 2020

10/22/2020

X Alexander N. Fitzsimmons

Signed by: ALEXANDER FITZSIMMONS
Alexander N. Fitzsimmons
Deputy Assistant Secretary
for Energy Efficiency
Energy Efficiency and Renewable Energy

Case # 2020-001
Decision and Order

I. Background and Authority

The Energy Policy and Conservation Act, as amended ("EPCA"),[1] authorizes the U.S. Department of Energy ("DOE") to regulate the energy efficiency of a number of consumer products and certain industrial equipment. (42 U.S.C. 6291–6317) Title III, Part C[2] of EPCA established the Energy Conservation Program for Certain Industrial Equipment, which sets forth a variety of provisions designed to improve energy efficiency for certain types of industrial equipment. This equipment includes automatic commercial ice makers ("ACIM"), the focus of this document. (42 U.S.C. 6311(1)(F))

The energy conservation program under EPCA consists essentially of four parts: (1) testing, (2) labeling, (3) Federal energy conservation standards, and (4) certification and enforcement procedures. Relevant provisions of EPCA include definitions (42 U.S.C. 6311), test procedures (42 U.S.C. 6314), labeling provisions (42 U.S.C. 6315), energy conservation standards (42 U.S.C. 6313), and the authority to require information and reports from manufacturers (42 U.S.C. 6316).

The Federal testing requirements consist of test procedures that manufacturers of covered equipment must use as the basis for: (1) certifying to DOE that their equipment complies with the applicable energy conservation standards adopted pursuant to EPCA (42 U.S.C. 6316(a); 42 U.S.C. 6295(s)), and (2) making representations about the efficiency of that equipment (42 U.S.C. 6314(d)). Similarly, DOE must use these test procedures to determine whether the

[1] All references to EPCA in this document refer to the statute as amended through America's Water Infrastructure Act of 2018, Public Law 115-270 (Oct. 23, 2018).
[2] For editorial reasons, upon codification in the U.S. Code, Part C was redesignated as Part A-1.

equipment complies with relevant standards promulgated under EPCA. (42 U.S.C. 6316(a); 42 U.S.C. 6295(s))

Under 42 U.S.C. 6314, EPCA sets forth the criteria and procedures DOE is required to follow when prescribing or amending test procedures for covered equipment. EPCA requires that any test procedures prescribed or amended under this section must be reasonably designed to produce test results which reflect energy efficiency, energy use or estimated annual operating cost of covered equipment during a representative average use cycle and requires that test procedures not be unduly burdensome to conduct. (42 U.S.C. 6314(a)(2)) The test procedure for ACIM is contained at 10 CFR 431.134.

Any interested person may submit a petition for waiver from DOE's test procedure requirements. 10 CFR 431.401(a)(1). DOE will grant a waiver from the test procedure requirements if DOE determines either that the basic model for which the waiver was requested contains a design characteristic that prevents testing of the basic model according to the prescribed test procedures, or that the prescribed test procedures evaluate the basic model in a manner so unrepresentative of its true energy consumption characteristics as to provide materially inaccurate comparative data. 10 CFR 431.401(f)(2). DOE may grant the waiver subject to conditions, including adherence to alternate test procedures. *Id*.

II. Hoshizaki's Petition for Waiver: Assertions and Determinations

By letter dated January 28, 2020, Hoshizaki filed a petition for waiver and a petition for interim waiver from the DOE test procedure applicable to ACIM set forth in 10 CFR 431.134. Hoshizaki additionally responded by email to two DOE requests for technical information on

February 13, 2020 and March 19, 2020.[3] Hoshizaki stated that the issue with the DOE ACIM test procedure is the requirement for the ice bin to be one-half full of ice prior to the test. Specifically, Hoshizaki cited the test condition in section 6.5 of American Society of Heating, Refrigerating and Air-Conditioning Engineers ("ASHRAE") Standard 29-2009, *Method of Testing Automatic Ice Makers* ("ASHRAE Standard 29-2009"), which is incorporated by reference in the DOE ACIM test procedure. See 10 CFR 431.133 and 10 CFR 431.134(b). Section 6.5 of ASHRAE Standard 29-2009 requires in relevant part that "Bins shall be used when testing and shall be filled one-half full with ice." Additionally, the DOE ACIM test procedure requires, through reference to section 7.2.1 of ASHRAE Standard 29-2009, that ice produced during the collection period be "intercepted" from the half-full bin for the purpose of determining the capacity of the unit under test.

In the models for which Hoshizaki requested a waiver, DCM-270BAH and DCM-270BAH-OS, the ice bin is situated above the evaporator and ice is pushed up through the evaporator directly into the bottom of the bin. Therefore, Hoshizaki claimed that an ice bin one-half full of ice prior to the test makes it impossible to accurately test because ice produced during the test cannot be readily distinguished from the ice placed in the bin prior to the test (as compared to units in which the ice is dropped into a bin below the production area – allowing for "intercepting" the ice produced during the test). Hoshizaki requested an alternate test procedure in which testing is started with an empty internal bin and ice is harvested through continuous operation of the unit's dispenser as opposed to collection in the internal bin**.**

[3] See documents in the Docket No. EERE-2020-BT-WAV-0005 available on *http://www.regulations.gov*.

On July 23, 2020, DOE published a notice that announced its receipt of the petition for waiver and granted Hoshizaki an interim waiver. 85 FR 44529 ("Notice of Petition for Waiver"). In the Notice of Petition for Waiver, DOE reviewed Hoshizaki's application for an interim waiver, the alternate test procedure requested by Hoshizaki, specification and parts sheets for the specified basic models, and additional technical correspondence. Based on this review, DOE granted Hoshizaki an interim waiver for its Hoshizaki branded DCM-270BAH and DCM-270BAH-OS ACIM basic models. The alternate test procedure granted to Hoshizaki in the interim waiver provides additional clarification to the alternate test procedure requested by Hoshizaki, but does not change the test setup or conduct requested by Hoshizaki.

By letter dated July 28, 2020, Hoshizaki requested that the interim waiver be extended to include two additional basic models of ACIM, Hoshizaki branded DCM-271BAH and DCM-271BAH-OS, and that these two additional basic models be considered under its petition for waiver.[4] Hoshizaki stated that the two additional basic models employ the same technology as the basic models set forth in the January 28, 2020 petition. DOE has reviewed Hoshizaki's waiver extension request and determined that the basic models identified in Hoshizaki's request incorporate the same design characteristics as those basic models set forth in the January 28, 2020 petition such that the test procedure evaluates those basic models in a manner that is unrepresentative of their energy use. In accordance with 10 CFR 431.401(g), DOE is including these additional basic models in the scope of the waiver granted to Hoshizaki in the Decision and Order.

[4] See Docket No. EERE-2020-BT-WAV-0005 available on *http://www.regulations.gov*.

In the Notice of Petition for Waiver, DOE also solicited comments from interested parties on all aspects of the petition and the specified alternate test procedure. *Id.* DOE received one comment in response to the Notice of Petition of Waiver from the Pacific Gas and Electric Company, San Diego Gas and Electric, and Southern California Edison, collectively referred to herein as the California Investor-Owned Utilities ("CA IOUs").[5] The CA IOUs agreed with the interim waiver approach of testing the specified basic models by bypassing the internal storage bin and collecting ice directly from the dispensing apparatus, which is held open via a bracket, because such testing would not increase power consumption of the unit and would not be anticipated to directly impact capacity, energy consumption, water consumption, and/or ice density. However, the CA IOUs suggested modifying the interim waiver test procedure by requiring that Hoshizaki supply the test laboratory with an ice storage bin and have the bin be one-half filled with ice for testing to more closely match the test requirements for other ACIM. The CA IOUs further recommended that the supplemental ice bin be equipped with its specified lid or be covered as much as possible with an insulating material to simulate the enclosed state of the internal bin in the unit under test. The CA IOUs noted that other ACIM, when tested to the DOE ACIM test procedure, dispense ice into the unit's ice bin, which is one-half filled with ice, to simulate field conditions for the internal rate of ice melt and to stabilize the temperature of the recently produced ice. The CA IOUs also recommended that the Decision and Order waiver be retired once this scenario is incorporated into an updated industry standard and is referenced by the DOE ACIM test procedure. (CA IOUs, No. 6 at pp. 1-2)

[5] The CA IOUs comment can be accessed at: *https://regulations.gov/document/EERE-2020-BT-WAV-0005-0006*

In response to the comment by the CA IOUs, DOE agrees that the suggested approach of collecting the dispensed ice in an external ice bin that is one-half full of ice better represents the ice produced in field conditions and maintains consistency with testing other ACIM according to the DOE test procedure. The ice generated during normal operation of the specified basic models would typically be stored for some period of time in the models' internal storage bins and would melt at a slower rate compared to ice collected and held in an empty container exposed to the ambient test conditions for the duration of the 14.4-minute ice collection period specified in section 7.2 of ASHRAE Standard 29-2009. For continuous ACIM, the melt rate of ice collected during testing affects the measured ice hardness factor, which is the latent heat capacity of the harvested ice. 10 CFR 431.132. This measurement accounts for the presence of any liquid water in ice produced by continuous ACIM and is used to normalize the measured energy consumption to a standardized ice quality. For the basic models at issue in the Hoshizaki petition, collecting ice samples within ice storage bins half full of ice rather than in empty collection containers would allow for determining ice hardness factors that are more representative of ice produced during typical operation. However, because the specific basic models do not have an associated external ice storage bin and because manufacturers are not always involved in performance testing of their basic models, requiring Hoshizaki to provide a specific ice bin for testing would be burdensome and inappropriate for certain types of testing. Therefore, DOE is not specifying a specific external ice storage bin for testing, but is requiring that the specified basic models be tested with the minimum length of conduit that can be used connecting the dispenser to an external ice bin, which must be filled one-half full with ice. This requirement is consistent with the ice bin requirements specified in section 6.5 of ASHRAE Standard 29-2009.

DOE also agrees with the CA IOUs' recommendation regarding the waiver no longer being effective when DOE ACIM test procedure is updated to address this test issue. DOE's regulations require that when the test procedure is amended to address the issues presented in a waiver, the waiver will automatically terminate on the date on which use of that test procedure is required to demonstrate compliance. 10 CFR 431.401(h)(2).

For the reasons explained here and in the Notice of Petition for Waiver, absent a waiver the basic models identified by Hoshizaki in its original petition and scope extension request cannot be tested and rated for energy consumption on a basis representative of their true energy consumption characteristics. DOE has reviewed the recommended procedure suggested by Hoshizaki and concludes that a modified version of the recommended alternate test procedure will allow for the accurate measurement of the energy use of the equipment, while alleviating the testing problems associated with Hoshizaki's specified basic models. DOE amended the alternate test procedure specified in the interim waiver granted to Hoshizaki based on the comment received in the Notice of Petition for Waiver, as discussed in this section.

Thus, DOE is requiring that Hoshizaki test and rate its specified ACIM basic models according to the alternate test procedure specified in this Decision and Order.

This Decision and Order is applicable only to the basic models listed and does not extend to any other basic models. DOE evaluates and grants waivers for only those basic models specifically set out in the petition, not future models that may be manufactured by the petitioner. Hoshizaki may request that DOE extend the scope of this waiver to include additional basic models that employ the same technology as those listed in this waiver. 10 CFR 431.401(g). Hoshizaki may also submit another petition for waiver from the test procedure for additional

basic models that employ a different technology and meet the criteria for test procedure waivers. 10 CFR 431.401(a)(1).

DOE notes that it may modify or rescind the waiver at any time upon DOE's determination that the factual basis underlying the petition for waiver is incorrect, or upon a determination that the results from the alternate test procedure are unrepresentative of the basic models' true energy consumption characteristics. 10 CFR 431.401(k)(1). Likewise, Hoshizaki may request that DOE rescind or modify the waiver if the company discovers an error in the information provided to DOE as part of its petition, determines that the waiver is no longer needed, or for other appropriate reasons. 10 CFR 431.401(k)(2).

As set forth above, the test procedure specified in this Decision and Order is not the same as the test procedure offered by Hoshizaki. If Hoshizaki believes that the alternate test method it suggested provides representative results and is less burdensome than the test method required by this Decision and Order, Hoshizaki may submit a request for modification under 10 CFR 431.401(k)(2) that addresses the concerns that DOE has specified with that procedure. Hoshizaki may also submit another less burdensome alternative test procedure not expressly considered in this notice under the same provision.

III. Order

After careful consideration of all the material that was submitted by Hoshizaki**,** the various public-facing materials (*e.g.*, product specification sheets) for the models identified in the petition, and the comment received, in this matter, it is **ORDERED** that:

(1) Hoshizaki must, as of the date of publication of this Order in the *Federal Register*, test and rate the following ACIM basic models with the alternate test procedure as set forth in paragraph (2):

Brand	**Basic Model**
Hoshizaki	DCM-270BAH
Hoshizaki	DCM-270BAH-OS
Hoshizaki	DCM-271BAH
Hoshizaki	DCM-271 BAH-OS

(2) The alternate test procedure for the Hoshizaki basic models listed in paragraph (1) of this Order is the test procedure for ACIM prescribed by DOE at 10 CFR 431.134, with the modifications provided below. All other requirements of 10 CFR 431.134 and DOE's other relevant regulations remain applicable.

Prior to the start of the test, remove the front panel of the unit under test and insert a bracket to hold the shutter (which allows for the dispensing of ice during the test) completely open for the duration of the test. After inserting the bracket, return the front panel to its original position on the unit under test. Conduct the test procedure as specified in 10 CFR 431.134 except that the internal ice bin for the unit under test shall be empty at the start of the test and intercepted ice samples shall be obtained from a

container in an external ice bin that is filled one-half full with ice and is connected to the outlet of the ice dispenser through the minimum length of conduit that can be used.

(3) *Representations*. Hoshizaki may not make representations about the energy use of a basic model listed in paragraph (1) of this Order for any purpose, including, for example compliance and marketing, unless the basic model has been tested in accordance with the provisions set forth above and such representations fairly disclose the results of such testing.

(4) This waiver shall remain in effect according to the provisions of 10 CFR 431.401.

(5) DOE issues this waiver on the condition that the statements, representations, and information provided by Hoshizaki are valid. If Hoshizaki makes any modifications to the controls or configurations of these basic models, such modifications will render the waiver invalid with respect to that basic model, and Hoshizaki will either be required to use the current Federal test method or submit a new application for a test procedure waiver. DOE may rescind or modify this waiver at any time if it determines the factual basis underlying the petition for waiver is incorrect, or the results from the alternate test procedure are unrepresentative of a basic model's true energy consumption characteristics. 10 CFR 431.401(k)(1). Likewise, Hoshizaki may request that DOE rescind or modify the waiver if Hoshizaki discovers an error in the information provided to DOE as part of its petition, determines that the waiver is no longer needed, or for other appropriate reasons. 10 CFR 431.401(k)(2).

(6) Hoshizaki remains obligated to fulfill any certification requirements set forth at 10 CFR part 429.

Signed in Washington, DC, on October 22, 2020

10/22/2020

X Alexander N. Fitzsimmons

Signed by: ALEXANDER FITZSIMMONS
Alexander N. Fitzsimmons
Deputy Assistant Secretary
for Energy Efficiency
Energy Efficiency and Renewable Energy