This document, concerning commercial refrigerators, freezers, and refrigerator-freezers is an action issued by the Department of Energy. Though it is not intended or expected, should any discrepancy occur between the document posted here and the document published in the Federal Register, the Federal Register publication controls. This document is being made available through the Internet solely as a means to facilitate the public's access to this document.

#### [6450-01-P]

### **DEPARTMENT OF ENERGY**

### [Case Number 2017-007, EERE-2017-BT-WAV-0041]

Notice of Petition for Waiver of AHT Cooling Systems GmbH and AHT Cooling Systems USA Inc. from the Department of Energy Commercial Refrigerator, Freezer, and Refrigerator-Freezer Test Procedures and Notice of Grant of Interim Waiver

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

**ACTION:** Notice of petition for waiver and grant of an interim waiver, and request for comments.

**SUMMARY:** This document announces receipt of and publishes a petition for waiver from AHT Cooling Systems GmbH and AHT Cooling Systems USA Inc. ("AHT"), seeking a waiver from the U.S. Department of Energy ("DOE") test procedure used for determining the energy consumption of commercial refrigerators, freezers, and refrigerator-freezers (collectively "commercial refrigeration equipment"). AHT seeks to use an alternate test procedure to address issues involved in testing twenty-four commercial freezer basic models, identified by AHT as part of its petition, that do not have a defrost cycle when the units are operated in freezer mode. (AHT states that the specified units can operate as a freezer, ice-cream freezer, and refrigerator.) AHT seeks to test and rate the specified basic models using an alternate test procedure to account for the lack of any defrost cycles or defrost capability when the units are operated in freezer mode. This notice announces that DOE grants AHT an interim waiver from the DOE's commercial refrigeration equipment test procedure for the specified basic models, subject to use of the alternate test procedure as set forth in the Interim Waiver Order. DOE solicits comments, data, and information concerning AHT's petition and its suggested alternate test procedure to inform its final decision on AHT's waiver request.

**DATES:** Written comments and information are requested and will be accepted on or before [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

**ADDRESSES:** Interested persons are encouraged to submit comments using the Federal eRulemaking Portal at *http://www.regulations.gov*. Alternatively, interested persons may submit comments, identified by Case Number "2017-007" and Docket number "EERE-2017-BT-WAV-0041," by any of the following methods:

- *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments.
- *E-mail: AHT2017WAV0041@ee.doe.gov.* Include the case number [Case No. 2017-007] in the subject line of the message.
- Postal Mail: Ms. Lucy deButts, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Office, Mailstop EE-5B, Petition for Waiver Case No. 2017-007, 1000 Independence Avenue, SW., Washington, DC 20585-0121. Telephone: (202) 287-1604. If possible, please submit all items on a compact disc ("CD"), in which case it is not necessary to include printed copies.

Hand Delivery/Courier: Appliance and Equipment Standards Program, U.S. Department of Energy, Building Technologies Office, 950 L'Enfant Plaza, SW., 6<sup>th</sup> Floor, Washington, DC, 20024. If possible, please submit all items on a "CD", in which case it is not necessary to include printed copies.

No telefacsimilies (faxes) will be accepted. For detailed instructions on submitting comments and additional information on this process, see section V of this document.

*Docket*: The docket, which includes *Federal Register* notices, comments, and other supporting documents/materials, is available for review at *http://www.regulations.gov*. All documents in the docket are listed in the *http://www.regulations.gov index*. However, some documents listed in the index, such as those containing information that is exempt from public disclosure, may not be publicly available.

The docket Web page can be found at *https://www.regulations.gov/document?D=EERE-2017-BT-WAV-0041-0001*. The docket web page will contains simple instruction on how to access all documents, including public comments, in the docket. See section V for information on how to submit comments through *http://www.regulations.gov*.

#### FOR FURTHER INFORMATION CONTACT:

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

Mr. Pete Cochran, 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) 586-9496. E-mail: *peter.cochran@hq.doe.gov*.

### SUPPLEMENTARY INFORMATION:

### I. Background and Authority

The Energy Policy and Conservation Act of 1975 ("EPCA" or "the Act"),<sup>1</sup> Public Law 94-163 (42 U.S.C. 6291–6317, as codified), among other things, authorizes DOE to regulate the energy efficiency of a number of consumer products and industrial equipment. Title III, Part C<sup>2</sup> of EPCA, added by the National Energy Conservation Policy Act, Public Law 95-619, Title IV, §441(a), established the Energy Conservation Program for Certain Industrial Equipment, which sets forth a variety of provisions designed to improve energy efficiency. This equipment includes commercial refrigeration equipment, the subject of this notice. (42 U.S.C. 6311(1)(E)) Further, Part C requires the Secretary of Energy to prescribe test procedures that are reasonably designed to produce results that measure energy efficiency, energy use, or estimated operating costs during a representative average-use cycle, and that are not unduly burdensome to conduct. (42 U.S.C. 6314(a)(2)) The test procedure for commercial refrigeration equipment is contained in 10 CFR part 431, subpart C, appendix B.

<sup>&</sup>lt;sup>1</sup> All references to EPCA in this document refer to the statute as amended through the EPS Improvement Act of 2017, Public Law 115–115 (January 12, 2018).

<sup>&</sup>lt;sup>2</sup> For editorial reasons, upon codification in the U.S. Code, Part C was re-designated as Part A-1.

DOE's regulation set forth at 10 CFR 431.401 contain provisions that allow an interested person to seek a waiver from the test procedure requirements for a particular basic model when the petitioner's basic model for which the petition for waiver was submitted contains one or more design characteristics that either (1) prevent testing according to the prescribed test procedure, or (2) cause the prescribed test procedures to 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(a)(1). A petitioner must include in its petition any alternate test procedures known to the petitioner to evaluate the basic model in a manner representative of its energy consumption characteristics. 10 CFR 431.401(b)(1)(iii).

DOE may grant a waiver subject to conditions, including adherence to alternate test procedures. 10 CFR 431.401(f)(2). As soon as practicable after the granting of any waiver, DOE will publish in the *Federal Register* a notice of proposed rulemaking to amend its regulations so as to eliminate any need for the continuation of such waiver. 10 CFR 431.401(l). As soon thereafter as practicable, DOE will publish in the *Federal Register* a final rule. *Id*.

The wavier process also provides that DOE may grant an interim waiver if it appears likely that the petition for waiver will be granted and/or if DOE determines that it would be desirable for public policy reasons to grant immediate relief pending a determination on the underlying petition for waiver. 10 CFR 431.401(e)(2). Within one year of issuance of an interim waiver, DOE will either: (i) publish in the *Federal Register* a determination on the petition for waiver; or (ii) publish in the *Federal Register* a new or amended test procedure that addresses the issues presented in the waiver. 10 CFR 431.401(h)(1). When DOE amends the test procedure to

5

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).

#### II. AHT's Petition for Waiver and Application for Interim Waiver

On May 16, 2017, AHT filed a petition for waiver and an application for interim waiver from the test procedure applicable to commercial refrigeration equipment set forth in 10 CFR part 431, subpart C, appendix B. AHT petitioned for waiver for twenty-four basic models<sup>3</sup> of commercial freezers. These units are capable of multi-mode operation (<u>i.e.</u>, as a freezer, icecream freezer, and refrigerator). In the petition, AHT notes that it has already requested waivers for testing this equipment operating in refrigerator mode and ice-cream freezer mode, and states that this waiver request applies only to the specified basic models operating in freezer mode. AHT states that when operating as a freezer, the specified basic models do not have defrosting cycles, and one is not possible. AHT states that that the current DOE test procedure assumes that commercial refrigerators and freezers have cooling or evaporator coils that need to be defrosted; however, the configuration of the AHT equipment when operated in freezer mode does not allow for a defrost cycle to occur. As such, AHT states that the DOE test procedure's provisions that account for a defrost occurrence are not appropriate for this equipment when operated and tested as a freezer due to their lack of a defrost cycle.

<sup>&</sup>lt;sup>3</sup> The specific basic models for which the petition applies are commercial freezer basic models IBIZA 100 NAM F, IBIZA 145 NAM F, IBIZA 210 NAM F, MALTA 145 NAM F, MALTA 185 NAM F, MANHATTAN 175 NAM F, MANHATTAN 210 NAM F, MIAMI 145 NAM F, MIAMI 185 NAM F, MIAMI 210 NAM F, MIAMI 250 NAM F, PARIS 145 NAM F, PARIS 185 NAM F, PARIS 210 NAM F, PARIS 250 NAM F, SYDNEY 175 NAM F, SYDNEY 210 NAM F, SYDNEY 213 NAM F, SYDNEY 223 NAM F, SYDNEY 230 NAM F, SYDNEY 250 NAM F, SYDNEY XL 175 NAM F, SYDNEY XL 210 NAM F, and SYDNEY XL 250 NAM F.

To address the lack of defrost capability, AHT requests that the equipment, when operated and tested as a freezer, be subject to an alternate test procedure that follows the requirements of the existing DOE test procedure, which incorporates by reference ASHRAE 72-2005, with the exception that no defrost cycles will be incorporated in the test protocols.

AHT also requests an interim waiver from the existing DOE test procedure. DOE will grant an interim waiver if it appears likely that the petition for waiver will be granted, and/or if DOE determines that it would be desirable for public policy reasons to grant immediate relief pending a determination of the petition for waiver. See 10 CFR 431.401(e)(2).

DOE understands that, absent an interim waiver, it is not expected that AHT's equipment could be tested and rated for energy consumption on a basis representative of its true energy consumption characteristics. The DOE test procedure specifies test period and door-opening period start times that reference a defrost occurrence, which is not possible in the specified AHT freezer basic models. This lack of defrost results in no defined start to either the test period or the door-opening period under DOE's test procedure.

### III. Requested Alternate Test Procedure

EPCA requires that manufacturers use DOE test procedures when making representations about the energy consumption and energy consumption costs of equipment covered by the statute. (42 U.S.C. 6314(d)) Consistent representations are important for manufacturers to use in making representations about the energy efficiency of their equipment and to demonstrate compliance with applicable DOE energy conservation standards. Pursuant to its regulations

7

applicable to waivers and interim waivers from applicable test procedures at 10 CFR 431.401, and after consideration of public comments on the petition, DOE will consider setting an alternate test procedure for the equipment identified by AHT in a subsequent Decision and Order.

The test procedure for commercial refrigeration equipment is at 10 CFR part 431, subpart C, appendix B, "Amended Uniform Test Method for the Measurement of Energy Consumption of Commercial Refrigerators, Freezers, and Refrigerator-Freezers." AHT seeks to use this test procedure to test and rate specific commercial freezer basic models, except that the test period shall be selected as follows:

The test shall begin when steady state conditions occur (per ASHRAE Standard 72-2005, Section 3, definitions, which defines steady state as "the condition where the average temperature of all test simulators changes less than 0.2°C (0.4°F) from one 24-hour period or refrigeration cycle to the next"). Additionally, the door-opening requirements shall be as defined in ASHRAE 72-2005 Section 7.2, with the exception that the eight-hour period of door openings shall begin three hours after the start of the test. Ambient temperature, test simulator temperatures, and all other data shall be recorded at three-minute intervals beginning at the start of the test and throughout the 24-hour testing period.

### IV. Summary of Grant of an Interim Waiver

DOE has reviewed AHT's application for an interim waiver, the alternate test procedure requested by AHT, and the operating manual for the commercial freezer basic models.<sup>4</sup> DOE understands that the specified commercial freezer basic models are not capable of defrosting. As AHT stated in their petition for waiver, the DOE test procedure requires beginning the test period at the start of a defrost cycle and recording data for 24 hours, and initiating a door-opening period 3 hours after the start of a defrost cycle. As such, for the specified basic models, which do not defrost, there is no defined start to either the test period or the door-opening period under DOE's test procedure. Based on this review, the alternate test procedure that AHT proposes appropriately reflects the energy consumption of and is appropriate for the commercial freezer basic models identified in AHT's petition for waiver. Consequently, it appears likely that AHT's petition for waiver will be granted. Furthermore, DOE has determined that it is desirable for public policy reasons to grant AHT immediate relief pending a determination of the petition for waiver. For the reasons stated, DOE has granted an interim waiver to AHT for specified commercial freezer basic models.

Therefore, DOE has issued an Order, stating:

(1) AHT must, going forward, test and rate the following AHT commercial freezer basic models (which do not have defrost cycle capability when operated in freezer mode) as set forth in paragraph (2) below:

<sup>&</sup>lt;sup>4</sup> The petition for waiver and operating manual can be found at *https://www.regulations.gov/docket?D=EERE-2017-BT-WAV-0041*.

IBIZA 100 NAM F, IBIZA 145 NAM F, IBIZA 210 NAM F, MALTA 145 NAM F, MALTA 185 NAM F, MANHATTAN 175 NAM F, MANHATTAN 210 NAM F, MIAMI 145 NAM F, MIAMI 185 NAM F, MIAMI 210 NAM F, MIAMI 250 NAM F, PARIS 145 NAM F, PARIS 185 NAM F, PARIS 210 NAM F, PARIS 250 NAM F, SYDNEY 175 NAM F, SYDNEY 210 NAM F, SYDNEY 213 NAM F, SYDNEY 223 NAM F, SYDNEY 230 NAM F, SYDNEY 250 NAM F, SYDNEY XL175 NAM F, SYDNEY XL210 NAM F, and SYDNEY XL250 NAM F.

(2) The alternate test procedure for the AHT basic models listed in paragraph (1) is the test procedure for CRE prescribed by DOE at 10 CFR part 431, subpart C, appendix B, except that the test period shall be selected as detailed below. All other requirements of Appendix B and DOE's regulations remain applicable.

The test shall begin when steady state conditions occur (per ASHRAE Standard 72-2005, Section 3, definitions, which defines steady state as "the condition where the average temperature of all test simulators changes less than 0.2°C (0.4°F) from one 24-hour period or refrigeration cycle to the next"). Additionally, the door-opening requirements shall be as defined in ASHRAE 72-2005 Section 7.2, with the exception that the eighthour period of door openings shall begin three hours after the start of the test. Ambient temperature, test simulator temperatures, and all other data shall be recorded at three-minute intervals beginning at the start of the test and throughout the 24-hour testing period.

(3) *Representations*. AHT is permitted to make representations about the energy use of the basic models listed in paragraph (1) for compliance, marketing, or other purposes only to the

extent that the basic models have been tested in accordance with the provisions in the alternate test procedure and such representations fairly disclose the results of such testing in accordance with 10 CFR part 429, subpart B.

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

(5) This interim waiver is issued to AHT on the condition that the statements, representations, and documentary materials provided by AHT are valid. If AHT makes any modifications to the defrost controls or capabilities (e.g., adding automatic defrost to freezer mode) of these basic models, the waiver would no longer be valid and AHT would either be required use the current Federal test method or submit a new application for a test procedure waiver. DOE may revoke 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 the basic models' true energy consumption characteristics. 10 CFR 431.401(k)(1). Likewise, AHT may request that DOE rescind or modify the interim waiver if AHT discovers an error in the information provided to DOE as part of its petition, determines that the interim waiver is no longer needed, or for other appropriate reasons. 10 CFR 431.401(k)(2).

(6) Granting of this interim waiver does not release AHT from the certification requirements set forth at 10 CFR part 429.

DOE makes decisions on waivers and interim waivers for only those basic models specifically set out in the petition, not future basic models that may be manufactured by the petitioner. AHT may submit a new or amended petition for waiver and request for grant of interim waiver, as appropriate, for additional basic models of commercial freezers. Alternatively, if appropriate, AHT may request that DOE extend the scope of a waiver or an interim waiver to include additional basic models employing the same technology as the basic model(s) set forth in the original petition consistent with 10 CFR 431.401(g).

#### V. Request for Comments

DOE is publishing AHT's petition for waiver in its entirety, pursuant to 10 CFR 431.401(b)(1)(iv). The petition did not identify any information as confidential business information. The petition includes a suggested alternate test procedure, as specified in section III of this notice, to determine the energy consumption of AHT's specified commercial freezer basic models. DOE may consider including the alternate procedure specified in the Interim Waiver Order in a subsequent Decision and Order.

DOE invites all interested parties to submit in writing by [**INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER**], comments and information on all aspects of the petition, including the alternate test procedure. Pursuant to 10 CFR 431.401(d), any person submitting written comments to DOE must also send a copy of such comments to the petitioner. The contact information for the petitioner is Scott Blake Harris, Harris, Wiltshire & Grannis LLP, 1919 M Street, NW, Eighth Floor, Washington, DC 20036.

Submitting comments via *http://www.regulations.gov*. The *http://www.regulations.gov* web page will require you to provide your name and contact information. Your contact information will be viewable to DOE Building Technologies staff only. Your contact information will not be publicly viewable except for your first and last names, organization name (if any), and submitter representative name (if any). If your comment is not processed properly because of technical difficulties, DOE will use this information to contact you. If DOE cannot read your comment due to technical difficulties and cannot contact you for clarification, DOE may not be able to consider your comment.

However, your contact information will be publicly viewable if you include it in the comment or in any documents attached to your comment. Any information that you do not want to be publicly viewable should not be included in your comment, nor in any document attached to your comment. Persons viewing comments will see only first and last names, organization names, correspondence containing comments, and any documents submitted with the comments.

Do not submit to *http://www.regulations.gov* information for which disclosure is restricted by statute, such as trade secrets and commercial or financial information (hereinafter referred to as Confidential Business Information ("CBI")). Comments submitted through *http://www.regulations.gov* cannot be claimed as CBI. Comments received through the website

13

will waive any CBI claims for the information submitted. For information on submitting CBI, see the Confidential Business Information section.

DOE processes submissions made through *http://www.regulations.gov* before posting. Normally, comments will be posted within a few days of being submitted. However, if large volumes of comments are being processed simultaneously, your comment may not be viewable for up to several weeks. Please keep the comment tracking number that *http://www.regulations.gov* provides after you have successfully uploaded your comment.

Submitting comments via email, hand delivery, or mail. Comments and documents submitted via email, hand delivery, or mail also will be posted to *http://www.regulations.gov*. If you do not want your personal contact information to be publicly viewable, do not include it in your comment or any accompanying documents. Instead, provide your contact information on a cover letter. Include your first and last names, email address, telephone number, and optional mailing address. The cover letter will not be publicly viewable as long as it does not include any comments.

Include contact information each time you submit comments, data, documents, and other information to DOE. If you submit via mail or hand delivery, please provide all items on a CD, if feasible. It is not necessary to submit printed copies. No facsimiles (faxes) will be accepted.

Comments, data, and other information submitted to DOE electronically should be provided in PDF (preferred), Microsoft Word or Excel, WordPerfect, or text (ASCII) file format. Provide documents that are not secured, written in English and free of any defects or viruses. Documents should not contain special characters or any form of encryption and, if possible, they should carry the electronic signature of the author.

Campaign form letters. Please submit campaign form letters by the originating organization in batches of between 50 to 500 form letters per PDF or as one form letter with a list of supporters' names compiled into one or more PDFs. This reduces comment processing and posting time.

Confidential Business Information. According to 10 CFR 1004.11, any person submitting information that he or she believes to be confidential and exempt by law from public disclosure should submit via email, postal mail, or hand delivery two well-marked copies: one copy of the document marked confidential including all the information believed to be confidential, and one copy of the document marked "non-confidential" with the information believed to be confidential deleted. Submit these documents via email or on a CD, if feasible. DOE will make its own determination about the confidential status of the information and treat it according to its determination.

Factors of interest to DOE when evaluating requests to treat submitted information as confidential include (1) a description of the items, (2) whether and why such items are customarily treated as confidential within the industry, (3) whether the information is generally known by or available from other sources, (4) whether the information has previously been made available to others without obligation concerning its confidentiality, (5) an explanation of the

15

competitive injury to the submitting person which would result from public disclosure, (6) when such information might lose its confidential character due to the passage of time, and (7) why disclosure of the information would be contrary to the public interest.

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It is DOE's policy that all comments may be included in the public docket, without change and as received, including any personal information provided in the comments (except information deemed to be exempt from public disclosure).

Signed in Washington, DC, on May 29, 2018.

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Kathleen B. Hogan, Ph.D. Deputy Assistant Secretary for Energy Efficiency Energy Efficiency and Renewable Energy

### BEFORE THE UNITED STATES DEPARTMENT OF ENERGY WASHINGTON, D.C. 20585

In the Matter of

Energy Efficiency Program: Test Procedure for Commercial Refrigeration Equipment Docket No. EERE-2013-

BT- TP-0025;

RIN 1904-AC99

# PETITION OF AHT COOLING SYSTEMS FOR FREEZER MODE WAIVER OF TEST PROCEDURE FOR COMMERCIAL REFRIGERATION EQUIPMENT

AHT Cooling Systems GmbH and AHT Cooling Systems USA Inc. (collectively AHT)<sup>1</sup> respectfully submit this Freezer Mode Petition for Waiver and Application for Interim Waiver<sup>2</sup> from DOE's test procedure for commercial refrigeration equipment.<sup>3</sup>

Commercial refrigeration equipment, such as AHT's, has recently become subject to a new regulatory regime. This includes new test procedures<sup>4</sup> and efficiency standards.<sup>5</sup> On October 25, 2016,<sup>6</sup> AHT filed an initial Petition for Waiver covering its multi-mode appliances that can operate, with the flip of a switch, as either a refrigerator, a freezer, or an ice cream freezer. As set forth in that Petition, the AHT appliances are also unusual in that their cooling coils are built into the body of the units. This means the cooling coils are not exposed to the air

<sup>&</sup>lt;sup>1</sup> AHT's U.S. subsidiary is AHT Cooling Systems USA Inc., 3235 Industry Drive, North Charleston, South Carolina 29418 (tel. 843-767-6855). AHT's worldwide headquarters are AHT Cooling Systems GmbH, Werkgasse 57, 8786 Rottenmann, Austria (tel. 011-43-3614 / 2451-0).

<sup>&</sup>lt;sup>2</sup> See 10 C.F.R. § 431.401 (petitions for waiver and interim waiver).

<sup>&</sup>lt;sup>3</sup> *Id.* Part 431, Subpart C, Appendix B.

<sup>&</sup>lt;sup>4</sup> *Id.* Part 431, Subpart C, Appendix B, as adopted, 79 Fed. Reg. 22277 (April 21, 2014).

<sup>&</sup>lt;sup>5</sup> *Id.* § 431.66, as adopted, 79 Fed. Reg. 17725 (March 28, 2014).

<sup>&</sup>lt;sup>6</sup> Case No. CR-006.

and do not get covered with frost. This also means the coils do not need to be defrosted for the appliances to be operated effectively. Rather, any defrost cycle is run for esthetic reasons only. As a result, AHT appliances run a defrost cycle less often than the testing procedures assumed and needed a modified testing protocol to measure energy usage accurately. Thus AHT filed its initial Petition for Waiver.

Following the filing of its initial Petition, AHT was advised by the Department that each mode in which its appliances operated would have to be tested separately, and thus each mode in which an appliance operated would have to be listed as a separate model. AHT complied with this instruction. Since the initial Petition for Waiver was filed, however, AHT decided to change the operation of its appliances when they are operating in freezer mode – by eliminating any defrost cycle whatsoever. This meant that even the test proposed in its initial Petition for Waiver was insufficient to measure the energy usage of the AHT appliances when operating in freezer mode. Accordingly, AHT requested that "freezer mode" be eliminated from the models covered by its original waiver Petition.<sup>7</sup> AHT now seeks a Freezer Mode Waiver to cover the testing of its multi-mode appliances when they are operating in freezer mode.

### I. BASIC MODELS FOR WHICH A WAIVER IS REQUESTED

The basic models for which a waiver is requested are set forth in Appendix I. These appliances are all multi-mode display merchandisers with transparent doors. They are capable of operating in refrigerator mode, freezer mode, and ice cream freezer mode. They are distributed in commerce under the AHT brand name. A waiver has already been requested for the testing of these appliances operated in refrigerator mode and ice cream freezer mode. This waiver is being sought for their operation in freezer mode.

<sup>&</sup>lt;sup>7</sup> See Letter from Scott Blake Harris to Ashley Armstrong, Case No. CR-006 (May 2, 2017).

### II. <u>NEED FOR THE REOUESTED WAIVER</u>

The DOE test procedure that would apply to the AHT appliances took effect on March 28, 2017. But it should not apply to the models listed in Appendix I.

As noted above, AHT appliances do not need to be defrosted. As explained in the initial Petition for Waiver, the DOE test procedure understandably assumes that commercial refrigerators and freezers have cooling or evaporator coils that need to be defrosted for the equipment to function effectively. Indeed, the Technical Support Document for the test procedure essentially defines "defrosting" to mean melting ice from evaporator coils:

As the air in the refrigerated space is cooled, water vapor condenses on the surface of the evaporator coil....There are several methods available for defrosting the evaporator coil...<sup>8</sup>

In addition, the ASHRAE test procedure mandated by the DOE regulations provides that the defrost adequacy assurance test "shall verify that any defrost setting and arrangement is adequate to melt all frost and ice from coils and flues and drain it out of the refrigerator."<sup>9</sup> Based on the assumption that all refrigerators and freezers that have evaporator coils from which frost must be melted regularly in order to function, the test procedure calls for starting testing with a full defrost cycle, and may require additional defrost cycles in a 24-hour period before the test is complete (depending on the expected operation of the model).

But as currently configured, the AHT multi-mode appliances operating in freezer mode have no defrost cycle and one is not possible. As a result, the test procedure, which provides for

<sup>&</sup>lt;sup>8</sup> DOE, Technical Support Document: Energy Efficiency Program for Consumer Products and Commercial and Industrial Equipment; Commercial Refrigeration Equipment (Feb. 2014), § 3.3.1.11 (Defrost Cycle; Defrost Mechanism).

<sup>&</sup>lt;sup>9</sup> ANSI/ASHRAE Standard 72-2005, "Method of Testing Commercial Refrigerators and Freezers," § 7.8 (Defrost Adequacy Assurance). ASHRAE 72-2005 is incorporated by reference in the DOE test procedure. 10 C.F.R. § 431.63(d)(1).

at least one full defrost cycle in a 24-hour period is not appropriate for these models. It would grievously overstate their energy consumption.

Accordingly, AHT asks for a waiver to test its multi-mode appliances in freezer mode without a defrost cycle. It would continue to test these appliances in refrigerator and ice cream freezer mode as set forth in its initial Petition, or as that test is modified by any initial waiver granted by the Department.

### III. PROPOSED ALTERNATE TEST PROCEDURE

Under the applicable DOE regulations, the testing protocol that would otherwise be applicable to the freezer mode of AHT's multi-mode appliances is set forth in ASHRAE 72- 2005, *Method of Testing Commercial Refrigerators and Freezers*. It requires including defrost cycles during the 24-hour test period.

Since the freezer mode of AHT's multi-mode appliances has no defrost cycle, the proposed alternate testing procedure for the freezer mode follows the requirements of ASHRAE 72-2005 with the exception that no defrost cycles will be included in the testing protocol. As a result, no direct or indirect<sup>10</sup> energy consumption associated with defrost operations will be included in the evaluation of the Daily Energy Consumption (DEC). Under the proposed alternate testing procedure, the test shall begin when steady state conditions occur.<sup>11</sup> In addition, the alternate testing procedure uses the same requirements for door opening defined in ASHRAE 72-2005 Section 7.2, with the exception that the eight-hour period of door openings shall begin three hours after the start of the test. Ambient temperature, test simulator temperatures, and all

<sup>&</sup>lt;sup>10</sup> Indirect energy consumption refers to the energy used during temperature pulldown after defrosting.

<sup>&</sup>lt;sup>11</sup> Per ASHRAE 72-2005, steady state is defined as "the condition where the average temperature of all test simulators changes less than 0.2°C (0.4°F) from one 24-hour period or refrigeration cycle to the next" (see ASHRAE 72, Section 3, Definitions).

other data shall be recorded at three-minute intervals beginning at the start of the test and throughout the 24-hour testing period.

### IV. <u>REQUEST FOR INTERIM WAIVER</u>

AHT also requests an interim waiver for its testing and rating of the basic models listed in Appendix I. Based on its merits, AHT's Freezer Mode Petition for Waiver is likely to be granted. Further, it is essential that an interim waiver be granted, because without waiver relief, AHT will be at a competitive disadvantage in the market for these important products and would suffer economic hardship. AHT would be subject to requirements that clearly should not apply to such products.

#### V. <u>OTHER MANUFACTURERS</u>

A list of manufacturers of all other basic models distributed in commerce in the United States and known to AHT to incorporate overall design characteristic(s) similar to those found in the basic model(s) that are the subject of the petition is set forth in Appendix II.

\* \* \* \*

AHT requests expedited treatment of the Petition and Application.

Respectfully submitted,

Scott Blake Harris John A. Hodges

Harris, Wiltshire & Grannis LLP 1919 M Street, NW Washington, DC 20036 (202) 730-1313

Counsel to AHT Cooling Systems GmbH and AHT Cooling Systems USA Inc.

May 16, 2017

## **APPENDIX I**

The waiver and interim waiver requested herein should apply to testing and rating of the following basic models that are manufactured by AHT<sup>12</sup>:

IBIZA	100	NAM	F	
IBIZA	145	NAM	F	
IBIZA	210	NAM	F	
MALTA	145	NAM	F	
MALTA 185 NAM F				
MANHATTAN 175 NAM F				
MANHATTAN 210 NAM F				
MIAMI	145	5 NAN	мF	
MIAMI	185	5 NAN	мF	
MIAMI	210	) NAN	мF	
MIAMI 250 NAM F				
MIAMI	250 N	IAM F		
MIAMI PARIS			F	
	145		F F	
PARIS	145 185	NAM NAM	F	
PARIS PARIS	145 185 210	NAM NAM NAM	F F	
PARIS PARIS PARIS	<ol> <li>145</li> <li>185</li> <li>210</li> <li>250</li> </ol>	NAM NAM NAM NAM	F F F	
PARIS PARIS PARIS PARIS	145 185 210 250 Y 17	NAM NAM NAM NAM 5 NAM	F F F 1 F	
PARIS PARIS PARIS PARIS SYDNE	145 185 210 250 Y 17 Y 21	NAM NAM NAM 5 NAM 0 NAM	F F F 1 F 1 F	
PARIS PARIS PARIS PARIS SYDNE SYDNE	145 185 210 250 Y 17 Y 21 Y 21	NAM NAM NAM 5 NAM 0 NAM 3 NAM	F F F 1 F 1 F 1 F	
PARIS PARIS PARIS PARIS SYDNE SYDNE	145 185 210 250 Y 17 Y 21 Y 21 Y 22	NAM NAM NAM 5 NAM 5 NAM 3 NAM 3 NAM	F F F I F I F I F I F	

SYDNEY 250 NAM F SYDNEY XL175 NAM F SYDNEY XL210 NAM F SYDNEY XL250 NAM F

 $<sup>^{12}</sup>$  The "F" designation – for Freezer Mode – will appear only in CCMS and not on the units themselves.

### **APPENDIX II**

The following are manufacturers of all other basic models distributed in commerce in the United States and known to AHT to incorporate overall design characteristic(s) similar to those found in the basic model(s) that are the subject of the petition for waiver.

AMF Sales & Associates (importing LUCKDR)

### ARNEG USA

Avanti Products LLC

Beverage Air

Dellfrio (importing Liebherr cabinets)

**Electrolux Home Products** 

Excellence

Fogel de Centroamerica S.A.

Foshan City Shunde District Sansheng Electrical Manufacture Co., Ltd.

Hillphoenix

Hussmann

Innovative DisplayWorks Inc.

Jiangsu Baixue Electric Appliances Co., Ltd.

Metalfrio Solutions Mexico S.A.

Mimet S.A.

Minus Forty Technologies Corp.

MTL Cool

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Ojeda USA

Panasonic

PREMIERE Corporation

Sanden Vendo

Silver King

Stajac

Industries

Thermell

- Manufacturing True
- Manufacturing Co.

Turbo-Air

Vestfrost Solutions