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#### [6450-01-P]

#### **DEPARTMENT OF ENERGY**

#### Case No. 2018-001

Notice of Petition for Waiver of HH Technologies from the Department of Energy Walk-in Cooler and Walk-in Freezer Test Procedure, and Notice of Grant of Interim Waiver

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

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

**SUMMARY:** This document announces receipt of, and publishes a petition for waiver from, HH Technologies, which seeks an exemption from specified portions of the U.S. Department of Energy ("DOE") test procedure used for determining the energy consumption of walk-in cooler and walk-in freezer doors (collectively, "walk-in doors"). HH Technologies seeks to use an alternate test procedure to address issues involved in testing the basic models identified in its petition. HH Technologies asserts in its petition that the percent time off ("PTO") value specified in the test procedure for walk-in door motors is unrepresentative of actual performance and causes the test procedure to overestimate the energy use of the motors used in the specified walk-in door basic models. Accordingly, HH Technologies seeks to test and rate the basic models identified in its petition using an alternate PTO value for walk-in door motors. DOE is granting HH Technologies an interim waiver from the DOE's walk-in door test procedure for its specified basic models, subject to use of the alternative test procedure as set forth in this document. DOE solicits comments, data, and information concerning HH Technologies' petition and its suggested alternate test procedure to inform its final decision on HH Technologies' waiver request.

**DATES:** DOE will accept comments, data, and information with respect to the HH Technologies Petition until **[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 "2018-001," and Docket number "EERE-2018-BT-WAV-0001," by any of the following methods:

- *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments.
- *E-mail*: *HHT2018WAV0001@ee.doe.gov* Include the case number [Case No. 2018-001] in the subject line of the message.
- *Postal Mail*: Ms. Lucy deButts, U.S. Department of Energy, Building Technologies Office, Mailstop EE-5B, Petition for Waiver Case No. 2018-001, 1000
  Independence Avenue, SW., Washington, DC 20585-0121. 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.,
Room 6055, Washington, DC, 20024. If possible, please submit all items on a compact disc ("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 *http://www.regulations.gov/docket?D=EERE-2018-BT-WAV-0001*. The docket web page 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, Building Technologies Office, Mailstop EE-5B, 1000 Independence Avenue, SW., Washington, DC 20585-0121. E-mail: *AS\_Waiver\_Requests@ee.doe.gov.* 

Mr. Michael Kido, 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) 586-8145. E-mail: *Michael.Kido@hq.doe.gov*.

#### **SUPPLEMENTARY INFORMATION:**

#### I. Background and Authority

The Energy Policy and Conservation Act of 1975, as amended ("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, sec. 441 (Nov. 9, 1978), 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 walk-in coolers and walk-in freezers, the focus of this document. (42 U.S.C. 6311(1)(G))

<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 redesignated as Part A-1.

Under EPCA, DOE's energy conservation program consists essentially of four parts: (1) testing, (2) labeling, (3) Federal energy conservation standards, and (4) certification and enforcement procedures. Relevant provisions of the Act include definitions (42 U.S.C. 6311), energy conservation standards (42 U.S.C. 6313), test procedures (42 U.S.C. 6314), labeling provisions (42 U.S.C. 6315), 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 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 must 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 reflecting the energy efficiency, energy use, or estimated annual operating costs 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 walk-in doors is contained in 10 CFR part 431, subpart R, appendix A.

The regulations set forth in 10 CFR 431.401 provide that upon receipt of a petition, 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 procedure, or that the prescribed test procedure evaluates 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*.

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 waiver process also provides that DOE may grant an interim waiver if it appears likely that the underlying 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 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. HH Technologies' Petition for Waiver and Application for Interim Waiver

On January 9, 2018, HH Technologies filed a petition for waiver and a petition for interim waiver from the test procedure applicable to walk-in doors set forth in 10 CFR part 431, subpart R, appendix A. (HH Technologies, No. 1 at pp. 1-7<sup>3</sup>) Appendix A accounts for the power consumption of all electrical components associated with each door and discounts the power consumption of electrical components based on their operating time by an assigned PTO value. 10 CFR part 431, subpart R, appendix A, section 4.5.2. Section 4.5.2 specifies a PTO of 25% for "other electricity-consuming devices" (*i.e.*, electrical devices other than lighting or anti-sweat heaters) that have demand-based controls, and a PTO of 0% for other electricity-consuming devices without a demand-based control. As described in its petition, the walk-in door basic models specified by HH Technologies are automated and designed with microprocessor controls that use motion sensor inputs to trigger a door motor, which is considered to fall within the category of "other electricityconsuming devices with demand-based control."<sup>4</sup> HH Technologies states that the controller standby power is continuous with motor power consumed solely for door openings and closing.

<sup>&</sup>lt;sup>3</sup> A notation in this form provides a reference for information that is in the docket for this test procedure waiver (Docket No. EERE-2018-BT-WAV-0001) (available at *http://www.regulations.gov/docket?D=EERE-2018-BT-WAV-0001*). This notation indicates that the statement preceding the reference is document number 1 in the docket and appears at pages 1-7 of that document.

<sup>&</sup>lt;sup>4</sup> The specific walk-in door basic models that are subject of the petition for waiver and application for interim waiver are included in HH Technologies' petition, which is reproduced at the end of this document. It is also available in the docket at *http://www.regulations.gov/docket*?*D*=*EERE-2018-BT-WAV-0001*.

In its petition, HH Technologies states that the DOE test procedure does not represent the power consumption saved by automated door controls in high traffic applications. HH Technologies notes that its performance data show that its doors are cycled (*i.e.*, opened and closed) between 100 and 300 times per day. HH Technologies adds that the doors specified in its petition have a 10-second cycle time (5 seconds to open and 5 seconds to close). Assuming door-cycling frequency at the upper end of the range (300 cycles per day), HH Technologies calculates that the total run time of the motor would be approximately 50 minutes (0.83 hours) per day. HH Technologies states that for the remaining 23.2 hours, the drive motor is disengaged and the controller is on standby. Based on this standby time, HH Technologies petitioned DOE to apply a PTO value of 96% for the automated walk-in door motors of the basic models specified in its petition.

DOE understands that absent an interim waiver, the specified basic models cannot be tested and rated for energy consumption on a basis representative of their true energy consumption characteristics. The doors specified in its petition are motor-operated with a demand-based control. As described by HH Technologies the motor does not operate for 96% of the day, but the DOE test procedure specifies a 25% PTO value for this type of electrical device. While DOE believes the energy consumption from the motor and controls should be accounted for as part of the door's daily energy consumption, DOE agrees with HH Technologies that the PTO value specified by the test procedure would grossly overestimate the power consumption associated with the motor and controls.

In assessing HH Technologies' proposed PTO value, DOE considered the key factors affecting the daily run time of a door motor: the door's length of motion, motor

speed, and use frequency. In addition to the material submitted by HH Technologies, DOE reviewed HH Technologies' public-facing materials, including websites, product specification sheets, and installation and operation manuals. DOE used these materials in its assessment of HH Technologies' proposed PTO. All materials reviewed by DOE can be found in the docket.<sup>5</sup>

First, DOE considered the length of motion for the models listed in the petition. All of the models listed in HH Technologies' waiver are in either the RS-500 or RS-600 series of its RollSeal brand. Unlike typical horizontally-sliding walk-in doors, RollSeal doors consist of three layers of fabric that are rolled vertically from the top of the door frame to the floor, where a seal is created. Therefore, the length of motion for RollSeal doors is equivalent to the door height. HH Technologies' petition proposes to apply a uniform PTO value to all of the listed basic models, with heights ranging from 60 to 144 inches for RS500 models and 84 to 144 inches for RS600 models. Therefore, assuming the most consumptive scenario, DOE used the tallest door height, *i.e.* longest length of motion (144 inches), to evaluate HH Technologies' proposed PTO.

Second, DOE considered the motor speed for the models listed in the petition. HH Technologies' product literature indicates that both RS-500 and RS-600 models are sold with multiple options for raising the door – both motorized and non-motorized: Intelli-Drive / SC325 ("Intelli-Drive") motor, Jackshaft Operator Gear Head ("Jackshaft") motor, or Manual Chain Hoist (not electricity-consuming and therefore not considered).<sup>6</sup>. HH Technologies' product literature indicates that the door speed differs between motor options

<sup>&</sup>lt;sup>5</sup> The docket is available at http://www.regulations.gov/docket?D=EERE-2018-BT-WAV-0001

<sup>&</sup>lt;sup>6</sup> Docket items 2-5, available at http://www.regulations.gov/docket?D=EERE-2018-BT-WAV-0001

-- the Jackshaft motor option has a slower listed door speed for all models listed in the waiver, operating at 10 inches per second for RS-500 models and 20 inches per second for RS-600 models. HH Technologies did not specify a motor type in its petition and therefore DOE understands that HH Technologies intends to apply a uniform PTO value to all of the listed basic models, irrespective of motor type. Therefore, assuming the most consumptive scenario, DOE used the slowest motor available for the listed models (RS-500 Jackshaft motor, 10 inches per second) to evaluate HH Technologies' proposed PTO.

Finally, DOE considered the use frequency of the types of doors listed in HH Technologies petition. Although not in the context of electricity-consuming devices, DOE previously considered the operational characteristics of passage and freight doors in proposing a procedure to determine the energy use associated with infiltration resulting from the opening of the walk-in doors. 75 FR 55068, 55085 (September 9, 2010) ("September 2010 SNOPR") (supplemental proposal discussing potential assumptions to apply to address air infiltration across door types). In that context, DOE proposed, based on market research and stakeholder feedback, that passage and freight doors have 60 and 120 openings per day, respectively. *Id.*<sup>7</sup> DOE used its previously proposed use frequencies as a reference point for evaluating HH Technologies' petition. Some of the models listed in the petition meet the definition of a freight door, "a door that is not a display door and is equal to or larger than 4 feet wide and 8 feet tall" (10 CFR 431.302). Therefore, assuming the most consumptive scenario, DOE counted 120 cycles per day to evaluate HH Technologies' proposed PTO.

<sup>&</sup>lt;sup>7</sup> DOE's prior consideration did not distinguish between motorized and non-motorized doors and DOE ultimately declined to include door opening infiltration measurements of the test procedure for walk-ins. See 76 FR 21580, 21595 (April 15, 2011).

In order to evaluate the PTO value HH Technologies requested to use, DOE used the door characteristics DOE identified in its review of HH Technologies marketing materials and the door use frequency DOE proposed in the September 2010 SNOPR to calculate a PTO value for comparison. Applying the most consumptive scenario as discussed above, *i.e.* a 144-inch-tall RS500 door with a motor speed of 10 inches per second that undergoes 120 cycles per day, would yield a PTO value of 96%, which is consistent with the value set forth in HH Technologies' petition. Accordingly, DOE believes that the PTO value that HH Technologies seeks to use is appropriate.

In its petition, HH Technologies also noted that the door controller continuously draws a small amount of standby power. DOE assumes that the controller standby power consumption is negligible relative to motor power consumption during opening and closing operations (i.e., the controller has a low amount of energy use relative to the energy use of the motor used to open and close the door). Therefore, DOE believes that the proposed PTO value, which was calculated assuming a conservatively high door use frequency, sufficiently captures this minimal standby power consumption.

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). As discussed above, under the current DOE test procedure, the specified HH Technologies basic models cannot be tested and rated for energy consumption on a basis representative of their true energy consumption characteristics. The PTO value suggested

by HH Technologies allows for an accurate estimation of its walk-in door motor's energy use, and alleviates the problems with walk-in door testing identified by HH Technologies for the basic models specified in its petition. Thus, it appears likely that HH Technologies' petition for waiver will be granted. Furthermore, DOE has determined that it is desirable for public policy reasons to grant HH Technologies immediate relief pending a determination of the petition for waiver.

#### **III.** Alternate Test Procedure

EPCA requires that manufacturers use DOE test procedures when making representations about the energy consumption and energy consumption costs of products 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 products and to demonstrate compliance with applicable DOE energy conservation standards. Pursuant to its regulations 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 HH Technologies in a subsequent Decision and Order.

In its petition, HH Technologies suggests that the basic models listed in its petition be tested according to the test procedure for walk-in doors prescribed by DOE at 10 CFR part 431, subpart R, appendix A, except that the PTO value for door motors is modified from 25% to 96% for freight and passage doors.

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

For the reasons stated above, DOE is granting HH Technologies an interim waiver for the walk-in door basic models specified in its petition. DOE's Interim Waiver Order

lists the basic models to which the interim waiver applies, and provides that the applicable method of test for those basic models is the test procedure for walk-in doors prescribed by DOE at 10 CFR part 431, subpart R, appendix A, except that the PTO specified in section 4.5.2 "Direct Energy Consumption of Electrical Components of Non-Display Doors" of that procedure is 96% for door motors rather than the prescribed 25%.

HH Technologies is required to use the alternate test procedure to test and rate the walk-in door basic models as specified in DOE's Interim Waiver Order. HH Technologies is permitted to make representations of the energy use of the specified basic models for compliance, marketing, or other purposes only to the extent that such products have been tested in accordance with the provisions set forth in the alternate test procedure and such representations fairly disclose the results of such testing in accordance with 10 CFR 429.53.

DOE evaluates and grants waivers and interim waivers for only those basic models specifically set out in the petition, not future models that may be manufactured by the petitioner. HH Technologies 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). In addition, DOE notes that granting of an interim waiver or waiver does not release a petitioner from the certification requirements set forth at 10 CFR part 429. See also 10 CFR 431.401(a) and (i).

Unless otherwise rescinded or modified, the interim waiver shall remain in effect until such time as when DOE amends the test procedure to address the issues presented in

the waiver and use of the amended test procedure is required to demonstrate compliance. DOE may rescind or modify a waiver or interim waiver at any time upon a determination that the factual basis underlying the petition for waiver or interim waiver is incorrect, or upon a determination that the results from the alternate test procedure are unrepresentative of the basic model's true energy consumption characteristics. See 10 CFR 431.401(k)(1). Likewise, the petitioner may request that DOE rescind or modify the waiver if the petitioner 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. See 10 CFR 431.401(k)(2). Furthermore, the interim waiver is conditioned upon the validity of the door motor performance characteristics, statements, representations, and documentary materials provided by HH Technologies.

#### V. Request for Comments

DOE is publishing HH Technologies' petition for waiver in its entirety, pursuant to 10 CFR 431.401(b)(1)(iv), absent any confidential business information. HH Technologies did not request any of the information in its petition to be considered confidential business information. The petition includes a suggested alternate test procedure, as specified in section III of this document, to determine the efficiency of HH Technologies' specified basic models of walk-in doors. 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 Brian Peppers, *BPeppers@hhtech.net*, 1733 County Road 68, Bremen, AL 35033.

#### 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 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 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.

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 June 8, 2018.

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

HH Technologies HH Technologies 1733 County Road 68 Bremen, AL 35033 21 Dec 2017

U.S. Department of Energy Building Technologies Office Test Procedure Waiver 1000 Independence Avenue SW Mailstop EE-5B Washington, DC 20585-0121

# Petition of HH Technologies for Waiver of the Test Procedure for Walk-in Cooler Doors

HHTechnologies submits this Petition for Waiver and Application for Interim Waiver from DOE's test procedure for walk-in cooler doors in accordance with the provisions at 10 CFR 431.401.

## Need for the Requested Waiver and Proposed Alternate Test Procedure

The current DOE test procedure, Appendix A to Subpart R of Part 431—Uniform Test Method for the Measurement of Energy Consumption of the Components of Envelopes of Walk-In Coolers accounts for the thermal transmittance of walk-in cooler doors plus the power consumption from any electrical components associated with the door. The test procedure discounts the power consumption of electrical components based on their operating time by an assigned PTO value. Section 4.5.2, Direct Energy Consumption of Electrical Components of Non-Display Doors, specifies a PTO of 25% for "other electricity consuming devices" (i.e., electrical devices other than lighting or anti-sweat heaters) that have demand based controls, and a PTO of 0% for other electricity consuming devices without a demand based control.

The RollSeal Door is an automated system utilizing microprocessor controls and proprietary sealing technology minimizing infiltration losses from high traffic loading and unloading of Walk-In Cooler (WIC) doors. The microprocessor utilizes motion sensor inputs that trigger a door motor output for demand based control. The controller standby power is continuous with motor power consumed solely for door openings and closing. Standby controller power is minimal while the drive motor comprises the largest demand KW. For a typical stand-alone cooler, the controller and drive motor are installed external to the cooler.

The door control sequences, stocking scenarios and typical door passages for high traffic applications are described below:

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The microprocessor controller has a delay that will close the door after a given time. For the below calculations, this delay is factory set to 45 seconds. The door takes 5 seconds to open as well as 5 seconds to close. The only time the motor is running is during this 5 second open or close sequence due to the fact that the motor is disengaged while the door is in the delay at the top of the cycle. Performance data collected over time shows the door is typically cycled between 100 and up to 300 times per day depending on the degree of traffic. With a total open and close cycle being 10 seconds and this cycle being initiated at an upper limit of 300 times per day. The remaining 23.2 hours, the drive motor is disengaged and the controller is on standby. This 100 to 300 passage approximation comes from a combination of all applications from Employee Passages to Freight Passages with 300 cycles being the conservative upper limit. Table 1 shows PTO Calculations.

PTO Calculations		
Door Passages	300	Cycles
Passage Run Time	10	Seconds
Total Run Time	50.00	Min/Day
Total Run Time	0.833	Hr/Day
Total Standby Time	23.17	Hr/Day
Percent time off (PTO)	0.965	N/A

## Table 1: Percent Time Off Calculations

As shown in Table 1, the PTO Value is based on the total standby time for a given day. The current test procedure for demand based controls does not represent the power consumption saved by automated door controls in high traffic applications. Therefore, HH Technologies requests a waiver to use a minimum PTO value of 96% where drive motor "off time" is over 23 hours even with exceedingly high door cycles. The request applies to Section 4.5.2 (a.3). However, it is suggested a stand-alone door motor energized only during either opening or closing of the door results in a significantly less "on" time even with shorter door opening cycles.

## Request for Interim Waiver

HH Technologies also request an interim waiver for its models listed in this petition. Based on its merits, the petition for waiver is likely to be granted. It is essential the interim waiver be granted, as HH Technologies plans to distribute models that subject to the energy conservation standards for which compliance was required on June 26, 2017. Without waiver relief, HH Technologies will be at a competitive disadvantage in the market for these important products and would suffer economic hardship. HH Technologies would be subject to requirements which should not be applied to such products.

## Basic Models for Which a Waiver is Requested

The brand(s) and basic models for which a waiver is requested include:

Brand name(s) under which the identified basic model(s) will be distributed in commerce	Basic Model Numbers
RollSeal Automated Door System	RS-500 D5036x075
RollSeal Automated Door System	RS-500 D5036x090
RollSeal Automated Door System	RS-500 D5042x072
RollSeal Automated Door System	RS-500 D5042X084
RollSeal Automated Door System	RS-500 D5048x060
RollSeal Automated Door System	RS-500 D5048x072
RollSeal Automated Door System	RS-500 D5048x084
RollSeal Automated Door System	RS-500 D5048X090
RollSeal Automated Door System	RS-500 D5054x084
RollSeal Automated Door System	RS-500 D5054x096
RollSeal Automated Door System	RS-500 D5057x102
RollSeal Automated Door System	RS-500 D5060x084
RollSeal Automated Door System	RS-500 D5060x090
RollSeal Automated Door System	RS-500 D5060X096
RollSeal Automated Door System	RS-500 D5060X108
RollSeal Automated Door System	RS-500 D5066x084
RollSeal Automated Door System	RS-500 D5066x108
RollSeal Automated Door System	RS-500 D5071x090
RollSeal Automated Door System	RS-500 D5072x084
RollSeal Automated Door System	RS-500 D5072x090

RollSeal Automated Door System	RS-500 D5072x096
RollSeal Automated Door System	RS-500 D5072x102
RollSeal Automated Door System	RS-500 D5072x105
RollSeal Automated Door System	RS-500 D5072X108
RollSeal Automated Door System	RS-500 D5072x114
RollSeal Automated Door System	RS-500 D5072X120
RollSeal Automated Door System	RS-500 D5072x126
RollSeal Automated Door System	RS-500 D5072x138
RollSeal Automated Door System	RS-500 D5073x092
RollSeal Automated Door System	RS-500 D5078x094
RollSeal Automated Door System	RS-500 D5078x102
RollSeal Automated Door System	RS-500 D5078X108
RollSeal Automated Door System	RS-500 D5084x084
RollSeal Automated Door System	RS-500 D5084x096
RollSeal Automated Door System	RS-500 D5084x102
RollSeal Automated Door System	RS-500 D5084x108
RollSeal Automated Door System	RS-500 D5084x114
RollSeal Automated Door System	RS-500 D5084x120
RollSeal Automated Door System	RS-500 D5084x126
RollSeal Automated Door System	RS-500 D5090x096
RollSeal Automated Door System	RS-500 D5090x114
RollSeal Automated Door System	RS-500 D5090x120
RollSeal Automated Door System	RS-500 D5096x090
RollSeal Automated Door System	RS-500 D5096x096
RollSeal Automated Door System	RS-500 D5096x102
RollSeal Automated Door System	RS-500 D5096x114

RollSeal Automated Door System	RS-500 D5096x120
RollSeal Automated Door System	RS-500 D5096x126
RollSeal Automated Door System	RS-500 D5102x096
RollSeal Automated Door System	RS-500 D5102X108
RollSeal Automated Door System	RS-500 D5102x114
RollSeal Automated Door System	RS-500 D5102x120
RollSeal Automated Door System	RS-500 D5102x126
RollSeal Automated Door System	RS-500 D5108x102
RollSeal Automated Door System	RS-500 D5108X108
RollSeal Automated Door System	RS-500 D5118X084
RollSeal Automated Door System	RS-500 D5118x090
RollSeal Automated Door System	RS-500 D5118X096
RollSeal Automated Door System	RS-500 D5118x118
RollSeal Automated Door System	RS-500 D5120x090
RollSeal Automated Door System	RS-500 D5120x102
RollSeal Automated Door System	RS-500 D5120X108
RollSeal Automated Door System	RS-500 D5120x114
RollSeal Automated Door System	RS-500 D5120x120
RollSeal Automated Door System	RS-500 D5120x126
RollSeal Automated Door System	RS-500 D5120x138
RollSeal Automated Door System	RS-500 D5120x144
RollSeal Automated Door System	RS-500 D5123x102
RollSeal Automated Door System	RS-500 D5138x114
RollSeal Automated Door System	RS-500 D5144x144
RollSeal Automated Door System	RS-600 D6048x084
RollSeal Automated Door System	RS-600 D6048x090

RollSeal Automated Door System	RS-600 D6060x096
RollSeal Automated Door System	RS-600 D6060x120
RollSeal Automated Door System	RS-600 D6072x084
RollSeal Automated Door System	RS-600 D6072x090
RollSeal Automated Door System	RS-600 D6072x096
RollSeal Automated Door System	RS-600 D6072x102
RollSeal Automated Door System	RS-600 D6072x108
RollSeal Automated Door System	RS-600 D6078x126
RollSeal Automated Door System	RS-600 D6078x138
RollSeal Automated Door System	RS-600 D6084x102
RollSeal Automated Door System	RS-600 D6084x108
RollSeal Automated Door System	RS-600 D6090x126
RollSeal Automated Door System	RS-600 D6096x090
RollSeal Automated Door System	RS-600 D6096x096
RollSeal Automated Door System	RS-600 D6096x102
RollSeal Automated Door System	RS-600 D6096x108
RollSeal Automated Door System	RS-600 D6096x114
RollSeal Automated Door System	RS-600 D6096x120
RollSeal Automated Door System	RS-600 D6096x126
RollSeal Automated Door System	RS-600 D6108x108
RollSeal Automated Door System	RS-600 D6120x120
RollSeal Automated Door System	RS-600 D6144x108
RollSeal Automated Door System	RS-600 D6144x144

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### Other Manufacturers

Manufacturers of other basic models distributed in commerce in the United States that incorporate design characteristics similar to those found in the basic models that are the subject of this petition include: ASIDOORS, JAMISON, CHASE DOORS, HERCULES, EDEY, and FRANK.

BRIAN PEPPERS VP of Product Marketing