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DEPARTMENT OF ENERGY

10 CFR Part 430 EERE–

2022–BT–TP–0005RIN

1904-AF11

Energy Conservation Program: Test Procedure for Uninterruptible Power Supplies

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

ACTION: Request for information.

SUMMARY: The U.S. Department of Energy ("DOE") is undertaking the preliminary stages of a rulemaking to consider amendments to the test procedure for uninterruptible power supplies. This request for information ("RFI") seeks data and information regarding issues pertinent to whether amended test procedures would more accurately or fully comply with the requirement that the test procedure produces results that measure energy use during a representative average use cycle or period of use for the product without being unduly burdensome to conduct or reduce testing burden. DOE welcomes written comments from the public on any subject within the scope of this document (including topics not raised in this document), as well as the submission of data and other relevant information.

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 *www.regulations.gov*. Follow the instructions for submitting comments. Alternatively, interested persons may submit comments, identified by docket number EERE–2022–BT–TP–0005, by any of the following methods:

1. *Federal eRulemaking Portal:* *www.regulations.gov*. Follow the instructions for submitting comments.
2. *E-mail:* to *UPS2022TP0005@ee.doe.gov*. Include docket number EERE–2022–BT–TP–0005 in the subject line of the message.

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

Although DOE has routinely accepted public comment submissions through a variety of mechanisms, including postal mail and hand delivery/courier, the Department has found it necessary to make temporary modifications to the comment submission process in light of the ongoing corona virus 2019 (“COVID-19”) pandemic. DOE is currently suspending receipt of public comments via postal mail and hand delivery/courier. If a commenter finds that this change poses an undue hardship, please contact Appliance Standards Program staff at (202) 586-1445 to discuss the need for alternative arrangements. Once the COVID-19 pandemic health emergency is resolved,

DOE anticipates resuming all of its regular options for public comment submission, including postal mail and hand delivery/courier.

Docket: The docket for this activity, which includes *Federal Register* notices, comments, and other supporting documents/materials, is available for review at www.regulations.gov. All documents in the docket are listed in the 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 www.regulations.gov/docket/EERE-2022-BT-TP-0005. The docket web page contains instructions on how to access all documents, including public comments, in the docket. See section III for information on how to submit comments through www.regulations.gov.

FOR FURTHER INFORMATION CONTACT:

Mr. Jeremy Domm, 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. Telephone: (202) 586-9870. E-mail: ApplianceStandardsQuestions@ee.doe.gov.

Mr. Michael Kido, U.S. Department of Energy, Office of the General Counsel, GC-33, 1000 Independence Avenue, SW., Washington, DC, 20585-0121. Telephone: (202) 586-8145. E-mail: Michael.kido@hq.doe.gov.

For further information on how to submit a comment or review other public comments and the docket, contact the Appliance and Equipment Standards Program staff at (202) 287-1445 or by e-mail: *ApplianceStandardsQuestions@ee.doe.gov*.

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I. Introduction

Uninterruptible power supplies (“UPSs”) are a class of battery chargers and fall among the consumer and industrial equipment for which DOE is authorized to establish and amend test procedures and energy conservation standards. (42 U.S.C. 6295(u)) DOE’s test procedures for UPSs are prescribed in the Code of Federal Regulation (“CFR”) at appendix Y to subpart B of 10 CFR part 430 (“appendix Y”). The following sections discuss DOE’s authority to establish and amend test procedures for UPSs, as well as relevant background information regarding DOE’s consideration of test procedures for this product.

A. Authority and Background

The Energy Policy and Conservation Act, as amended (“EPCA”),¹ authorizes 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 B² of EPCA established the Energy Conservation Program for Consumer Products Other Than Automobiles, which sets forth a variety of provisions designed to improve energy efficiency. These products include UPSs, the subject of this RFI. (42 U.S.C. 6295(u))

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 specifically include definitions (42 U.S.C. 6291), test procedures (42 U.S.C. 6293), labeling provisions (42 U.S.C. 6294), energy conservation standards (42 U.S.C. 6295), and the authority to require information and reports from manufacturers (42 U.S.C. 6296).

Federal energy efficiency requirements for covered products established under EPCA generally supersede State laws and regulations concerning energy conservation testing, labeling, and standards. (42 U.S.C. 6297) DOE may, however, grant waivers of Federal preemption for particular State laws or regulations, in accordance with the procedures and other provisions of EPCA. (42 U.S.C. 6297(d))

¹ All references to EPCA in this document refer to the statute as amended through the Energy Act of 2020, Pub. L. 116-260 (Dec. 27, 2020).

² For editorial reasons, upon codification in the U.S. Code, Part B was redesignated Part A.

The Federal testing requirements consist of test procedures that manufacturers of covered products must use as the basis for: (1) certifying to DOE that their products comply with the applicable energy conservation standards adopted pursuant to EPCA (42 U.S.C. 6295(s)), and (2) making representations about the efficiency of those consumer products (42 U.S.C. 6293(c)). Similarly, DOE must use these test procedures to determine whether the products comply with relevant standards promulgated under EPCA. (42 U.S.C. 6295(s))

Under 42 U.S.C. 6293, EPCA sets forth the criteria and procedures DOE must follow when prescribing or amending test procedures for covered products. EPCA requires that any test procedures prescribed or amended under this section be reasonably designed to produce test results that measure energy efficiency, energy use or estimated annual operating cost of a covered product during a representative average use cycle or period of use and not be unduly burdensome to conduct. (42 U.S.C. 6293(b)(3))

In addition, EPCA requires that DOE amend its test procedures for all covered products to integrate measures of standby mode and off mode energy consumption into the overall energy efficiency, energy consumption, or other energy descriptor, taking into consideration the most current versions of Standards 62301 and 62087 of the International Electrotechnical Commission (“IEC”), unless the current test procedure already incorporates the standby mode and off mode energy consumption, or if such integration is technically infeasible. (42 U.S.C. 6295(gg)(2)(A)) If an integrated test procedure is technically infeasible, DOE must prescribe separate standby mode and off

mode energy use test procedures for the covered product, if a separate test is technically feasible. (*Id.*)

EPCA also requires that, at least once every 7 years, DOE review test procedures for all types of covered products, including UPSs, to determine whether amended test procedures would more accurately or fully comply with the requirements that the test procedures be reasonably designed to produce test results that reflect energy efficiency, energy use, and estimated operating costs during a representative average use cycle or period of use and to not be unduly burdensome to conduct. (42 U.S.C. 6293(b)(1)(A)) If the Secretary determines, on her own behalf or in response to a petition by any interested person, that a test procedure should be prescribed or amended, the Secretary shall promptly publish in the *Federal Register* proposed test procedures and afford interested persons an opportunity to present oral and written data, views, and arguments with respect to such procedures. The comment period on a proposed rule to amend a test procedure shall be at least 60 days and may not exceed 270 days. In prescribing or amending a test procedure, the Secretary shall take into account such information as the Secretary determines relevant to such procedure, including technological developments relating to energy use or energy efficiency of the type (or class) of covered products involved. (42 U.S.C. 6293(b)(2)) If DOE determines that test procedure revisions are not appropriate, DOE must publish its determination not to amend the test procedure. DOE is publishing this RFI to collect data and information to inform its decision in satisfaction of the 7-year review requirement specified in EPCA. (42 U.S.C. 6293(b)(1)(A))

DOE has established a process to develop energy conservation standards and test procedures for covered products and equipment. 10 CFR part 430, subpart C, appendix A, *Procedures, Interpretations, and Policies for Consideration of New or Revised Energy Conservation Standards and Test Procedures for Consumer Products and Certain Commercial/ Industrial Equipment* (“Appendix A”). While the procedures, interpretations, and policies laid out in the appendix A are generally applicable to DOE’s rulemaking program, application of these guidelines to a specific rulemaking is determined on a case-by-case basis. 86 FR 70892, 70900-70901, 70925 (December 13, 2021). DOE may, as necessary, deviate from the appendix A to account for the specific circumstances of a particular rulemaking. See appendix A, section 3(a).

DOE’s general procedure is to follow an early assessment process for test procedure rulemakings, in which DOE will first publish a notice in the *Federal Register* whenever DOE is considering initiation of a rulemaking to amend a test procedure. In that notice, DOE will request submission of comments, including data and information on whether an amended test procedure would: (1) more accurately measure energy efficiency, energy use, water use (as specified in EPCA), or estimated annual operating cost of a covered product during a representative average use cycle or period of use without being unduly burdensome to conduct; or (2) reduce testing burden. Appendix A, section 8(a). DOE will review comments submitted and determine whether it agrees with the submitted information. If DOE determines that an amended test procedure is not justified at that time, it will not pursue the rulemaking and will publish a notice in the *Federal Register* to that effect. If DOE receives sufficient information suggesting an amended test procedure (1) could more accurately measure energy efficiency, energy use,

water use (as specified in EPCA), or estimated annual operating cost of a covered product during a representative average use cycle or period of use and not be unduly burdensome to conduct, (2) reduce testing burden, or (3) the information received is inconclusive with regard to these points, DOE would undertake the preliminary stages of a rulemaking to amend the test procedure. *Id.* If DOE determines that it is appropriate to continue the test procedure rulemaking after the early assessment process, DOE would provide further opportunities for early public input through *Federal Register* documents, including notices of data availability and/or RFIs. See appendix A, section 8(b).

Based on the identification of key issues described in section II of this document, DOE has determined that it is appropriate to initiate a test procedure rulemaking for UPSs and is providing opportunity for public input through this RFI. In particular, as discussed in section II.B.1 of this RFI, DOE has identified relevant and substantive updates to industry test standards that are incorporated by reference in DOE's test procedure for UPSs. These updates warrant consideration by DOE through the notice and comment rulemaking process.

B. *Rulemaking History*

On December 12, 2016, DOE amended its battery charger test procedure by adding a discrete test procedure for UPSs. 81 FR 89806 ("December 2016 Final Rule"). The December 2016 Final Rule incorporated by reference specific sections of the relevant industry standard for UPSs, with additional instructions, into the current battery charger test procedure published at appendix Y. *Id.* The December 2016 Final Rule also

established definitions related to UPSs and revised the compliance certification requirements for battery chargers more generally at 10 CFR 429.39. *Id.*

II. Request for Information

In the following sections, DOE has identified a variety of issues on which it seeks input to determine whether, and if so how, an amended test procedure for UPSs would: (1) more accurately or fully comply with the requirements in EPCA that test procedures be reasonably designed to produce test results that reflect energy use during a representative average use cycle or period of use, without being unduly burdensome to conduct (42 U.S.C. 6293(b)(3)); or (2) reduce testing burden.

Additionally, DOE welcomes comments on any aspect of the existing test procedure for UPSs that may not specifically be identified in this document.

A. Scope and Definitions

DOE defines a UPS as a battery charger consisting of a combination of convertors, switches and energy storage devices (such as batteries), constituting a power system for maintaining continuity of load power in case of input power failure. Appendix Y, section 2.27. The scope of the current test procedure at appendix Y, as applicable to UPSs, covers UPSs that utilize the standardized National Electrical

Manufacturer Association (“NEMA”) plug, 1-15P or 5-15P,³ and have an alternating current (“AC”) output. Appendix Y, section 1.

Issue 1: DOE seeks information on whether the current definition for UPS is still appropriate or whether DOE should consider an amended definition. DOE additionally seeks comment on whether the scope of the test procedure as it pertains to UPSs is still appropriate or whether DOE should consider any changes in scope. If either the definition of UPS or scope of the test procedure should be updated, DOE seeks comment and information on how these should be updated.

B. Test Procedure

Section 4 of appendix Y specifies testing requirements specific to UPSs, summarized as follows.

Section 4.1.1 of appendix Y specifies requirements for the power or energy measuring meter, including uncertainty requirements, calibration requirements, and a requirement that the meter must measure input and output values simultaneously.

Section 4.1.2 of appendix Y specifies maximum air speed requirements within the test room; specifies allowable ambient air temperature conditions; prohibits the use of intentional cooling of the unit under test (“UUT”); and requires testing the UUT on a

³ Plug designations are as specified in American National Standards Institute (“ANSI”)/NEMA WD 6-2016 incorporated by reference at 10 CFR 430.2.

thermally non-conductive surface. Section 4.1.3 of appendix Y specifies that the AC input voltage and frequency must be within 3 percent of the highest rated voltage and within 1 percent of the highest rated frequency of the UUT.

Section 4.2.1 of appendix Y specifies general setup requirements and requires configuring the UPS according to Annex J.2 of International Electrotechnical Commission's ("IEC") Standard 62040-3 Edition 2.0 ("IEC 62040-3 Ed. 2.0"),⁴ with additional specified requirements. Specifically, section 4.2.1(a) of appendix Y specifies that if the UPS can operate in two or more distinct normal modes as more than one UPS architecture, conduct the test in its lowest input dependency as well as in its highest input dependency mode where voltage and frequency dependent ("VFD") represents the lowest possible input dependency, followed by voltage independent ("VI") and then voltage and frequency independent ("VFI"). Section 4.2.1(b) of appendix Y specifies that the UPS must not be modified or adjusted to disable energy storage charging features. This section also provides specific instructions for ensuring that the energy storage system is fully charged at the start of testing in order to minimize the transfer of energy to and from the energy storage system. Section 4.2.1(c) specifies that all direct current ("DC") output ports of the UUT must remain unloaded during testing.

Section 4.2.2 of appendix Y addresses additional features that may be present on the UUT; specifically: (a) any feature unrelated to maintaining the energy storage system at full charge or delivery of load power (*e.g.*, LCD display) shall be switched off; or, if it

⁴ IEC 62040-3, "Uninterruptible power systems (UPS)—Part 3: Methods of specifying the performance and test requirements," Edition 2.0, available on IEC webstore at webstore.iec.ch.

is not possible to switch such features off, they shall be set to their lowest power-consuming mode during the test; (b) if the UPS takes (*i.e.*, accepts) any physically separate connectors or cables not required for maintaining the energy storage system at full charge or delivery of load power but associated with other features (such as serial or USB connections, Ethernet, etc.), these connectors or cables shall be left disconnected during the test; and (c) any manual on-off switches specifically associated with maintaining the energy storage system at full charge or delivery of load power shall be switched on for the duration of the test.

Section 4.3 of appendix Y specifies that efficiency can be calculated from either average power or accumulated energy. Section 4.3.1 specifies the calculation method if efficiency is to be calculated using average power and requires sampling the power at a rate of at least one sample per second. Section 4.3.2 requires operating the UUT and the load for a sufficient length of time to reach steady state conditions and specifies a procedure for determining if steady state conditions have been attained. Section 4.3.3 of appendix Y specifies measuring either the input and output power of the UUT according to Section J.3 of Annex J of IEC 62040-3 Ed. 2.0, or measuring the input and output energy of the UUT for efficiency calculations, with the following exceptions: (a) test the UUT at the following reference test load conditions, in the following order: 100 percent, 75 percent, 50 percent, and 25 percent of the rated output power; and (b) perform the test at each of the reference test loads by simultaneously measuring the UUT's input and output power in Watts ("W"), or input and output energy in Watt-Hours ("Wh") over a 15-minute test period at a rate of at least 1 Hertz. Equations for calculating the efficiency for each reference load are provided. Section 4.3.4 of appendix Y specifies an optional

test for the determination of UPS architecture by performing the tests specified in the definitions of VI, VFD, and VFI (sections 2.28.1 through 2.28.3 of appendix Y).

Section 4.3.5 of appendix Y specifies equations for calculating output efficiency of the UUT. This section includes a table of weightings applied to the measured efficiency at each reference test load, as discussed further in section II.B.2 of this RFI.

Issue 2: DOE requests comment on any aspect of the current test procedure requirements provided in Section 4 of appendix Y for testing UPSs, including whether DOE should consider any amendments to these procedures. If any amendments should be considered, DOE requests data and specific information to provide justification for considering such amendments.

1. Updates to Industry Standards

As discussed, the current UPS test procedure incorporates by reference certain sections of IEC 62040-3 Ed. 2.0 regarding test setup, input and output power measurement, and for the optional determination of UPS architecture. Since publication of the December 2016 Final Rule, IEC has updated the IEC 62040-3 standard to its third edition (“IEC 62040-3 Ed. 3.0”). The following paragraphs summarize the key changes from the second edition, based on DOE’s initial review of the revised standard.

Section 4 of IEC 62040-3 Ed. 3.0 includes updates to various environmental conditions, such as the general test environment and operating conditions when testing

UPSs. Appendix Y, however, does not refer to section 4 of the IEC 62040-3 standard but instead provides its own environmental and operating conditions for testing purposes. DOE has therefore determined that its test procedure for measuring the efficiency of UPSs will remain unaffected by the updates to section 4 of the IEC 62040-3 Ed. 3.0.

Section 5.2 of IEC 62040-3 Ed. 2.0 addresses UPS input specifications, such as the input voltage range, input frequency range and total harmonic distortions during which the UPS under test must remain in normal mode of operation. While an initial review of IEC 62040-3 Ed. 3.0 shows significant editorial changes to the sections that define these parameters, except for Table 3, which provides the maximum level of individual harmonic voltages allowed, the remainder of the parameters remain unchanged. Similarly, section 5.3 of IEC 62040-3 Ed. 3.0 provides the minimum output specifications for UPSs that must be declared by manufacturers such as its input dependency, rated output voltage and RMS output voltage tolerance band, rated frequency tolerance band, rated output active and apparent power, total harmonic distortion, etc. As before, the majority of the changes to this section are editorial except for the criteria in section 5.3.4 of Edition 2.0 that are used to classify the output waveform shape when paired with linear and reference non-linear loads (reorganized to section 5.3.4.3 in Edition 3.0).

Issue 3: DOE requests detailed comment on the updates made to sections 5.2 and 5.3 of IEC 62040-3 Ed. 3.0 and whether DOE should revise all or parts of its incorporation by reference to harmonize with these changes. DOE also requests feedback on whether any of the specific updates found in the new standard has the

potential to alter the recorded efficiency of UPSs as currently measured by appendix Y. As an example, DOE requests comment on whether updating its reference to the revised total harmonic distortion requirements found in Table 3 of IEC 62040-3 Ed. 3.0 is necessary and would doing so alter the recorded efficiency as currently measured by appendix Y.

Section 6 of IEC 62040-3 Ed. 2.0 previously provided instructions for performing the AC input failure test (subsection 6.2.2.7), the steady-state input voltage tolerance test (subsection 6.4.1.1), and the input frequency tolerance test (subsection 6.4.1.2) that are used to classify the input dependency of a UPS as VFD, VI or VFI. IEC 62040-3 Ed. 3.0 has since updated these subsections with the following changes: subsection titles and numbering have been updated to specifically refer to them as VI, VFD and VFI input dependency tests, additional criteria have been added for meeting the VI, VFD and VFI classifications and a new test load condition at 0% (i.e. no-load) has been added.

Issue 4: DOE requests comment on the benefits and consequences of aligning its test procedure with the above changes to section 6 of IEC 62040-3 Ed. 3.0.

Specifically, DOE requests information on whether incorporating the additional no-load test and updated criteria for determining input dependency of a UPS has the potential to cause currently reported UPS input-dependency classifications to change.

Additional updates to Annex J to IEC 62040-3 Ed. 3.0 require multi-mode UPSs to be tested at all dependency modes, whereas DOE's current test procedure explicitly requires UPSs to be tested at only their highest and lowest input dependency modes, as discussed previously in section II.B of this RFI. Annex J has also been updated to allow manufacturers to test UPSs with functions or ports set to the lowest power consuming mode or disconnected if they are not related to maintaining the energy storage device (*i.e.*, batteries) at full charge, along with added reporting requirements for manufacturers to report these features, interfaces, or ports that have been turned off or set to the lowest power consuming mode. This updated clarification regarding additional features is similar to DOE's current test procedure, which requires UPSs to be tested with such features off or disconnected, as discussed previously; however, DOE currently does not require manufacturers to report these manually switched off features.

Issue 5: DOE requests comment on the updates to Annex J -- and more specifically on whether DOE should align its own certification requirements with the additional criteria in IEC 62040-3 Ed. 3.0 to report features, interfaces, or ports that have been turned off or set to the lowest power consuming mode during testing.

Issue 6: DOE requests comment on its summary of changes in IEC 62040-3 Ed. 3.0, and whether any other changes not discussed in this RFI would be relevant to DOE's test procedure for UPSs. DOE requests comment on whether DOE should further align any aspects of appendix Y with IEC 62040-3 Ed. 3.0, and on any

impact such alignments may have on test results, test procedure representativeness, and test burden.

2. Load Weightings

As discussed, section 4.3.3 of appendix Y specifies determining the UPS's efficiency at four reference loading points: 25%, 50%, 75%, and 100%. The measured efficiency values from each reference test load are multiplied with their respective load weightings, shown in Table 1, to determine the average load adjusted efficiency. The load weightings represent the portion of time spent at the specified loading point. These weightings were established in the December 2016 Final Rule consistent with the load weightings specified in ENERGY STAR UPS Specification Version 1.0.⁵ 81 FR 89806, 89816 (December 12, 2016).

Table 1. Load Weightings Specified in Table 4.3.1 of Appendix Y

Rated Output Power (W)	UPS Architecture	Portion of Time Spent at Reference Load			
		25%	50%	75%	100%
$P \leq 1500 \text{ W}$	VFD	0.2	0.2	0.3	0.3
	VI or VFI	0 *	0.3	0.4	0.3
$P > 1500 \text{ W}$	VFD, VI, or VFI	0 *	0.3	0.4	0.3

* Measuring efficiency at loading points with 0 time-weighting is not required.

Issue 7: DOE requests comment on whether the UPS load weightings specified in Table 4.3.1 are representative of current UPS usage patterns. DOE also requests data on the consumer usage profile of UPSs with respect to each architecture (*i.e.*, VFD, VI, and VFI).

⁵ The ENERGY STAR UPS Specification Version 1.0 can be found at https://www.energystar.gov/products/spec/uninterruptible_power_supplies_specification_version_1_0_pd

C. Test Procedure Waivers

A person may seek a waiver from the test procedure requirements for a particular basic model of a type of covered product upon the grounds that the basic model for which the petition for waiver is submitted contains one or more design characteristics that: (1) prevent testing of the basic model 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 430.27(a)(1). DOE has not granted any test procedure waivers for the current UPS test procedure.

III. Submission of Comments

DOE invites all interested parties to submit in writing by the date specified under the **DATES** heading, comments and information on matters addressed in this RFI and on other matters relevant to DOE's consideration of amended test procedures for UPSs. These comments and information will aid in the development of a test procedure notice of proposed rulemaking for UPSs if DOE determines that amended test procedures may be appropriate for these products.

Submitting comments via www.regulations.gov. The 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. Following this instruction, 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 *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 *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 *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 *www.regulations.gov* provides after you have successfully uploaded your comment.

Submitting comments via email. Comments and documents submitted via email also will be posted to *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. Faxes will not be accepted.

Comments, data, and other information submitted to DOE electronically should be provided in PDF (preferred), Microsoft Word or Excel, 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 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. DOE will make its own determination about the confidential status of the information and treat it according to its determination.

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).

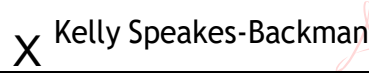
DOE considers public participation to be a very important part of the process for developing test procedures and energy conservation standards. DOE actively encourages the participation and interaction of the public during the comment period in each stage of this process. Interactions with and between members of the public provide a balanced discussion of the issues and assist DOE in the process. Anyone who wishes to be added to the DOE mailing list to receive future notices and information about this process should contact Appliance and Equipment Standards Program staff at (202) 287-1445 or via e-mail at *ApplianceStandardsQuestions@ee.doe.gov*.

Signing Authority

This document of the Department of Energy was signed on January 26, 2022, by Kelly J. Speakes-Backman, Principal Deputy Assistant Secretary for 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, D.C., on January 26, 2022.

 Kelly Speakes-Backman
Digitally signed by Kelly Speakes-Backman
Date: 2022.01.26 08:56:25 -05'00'

Kelly J. Speakes-Backman
Principal Deputy Assistant Secretary for
Energy Efficiency and Renewable Energy