



[6450-01-P]

**DEPARTMENT OF ENERGY**

**10 CFR Parts 430 and 431**

**[EERE-2018-BT-TP-0020]**

**Energy Conservation Program: Notice of Request for Information on the Measurement of Average Use Cycles or Periods of Use in DOE Test Procedures**

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

**ACTION:** Request for information (RFI).

**SUMMARY:** The U.S. Department of Energy (DOE) is initiating a data and information collection process through this request for information to better understand whether there are provisions in the Department's test procedures for consumer appliances and industrial equipment that could be improved to produce results that are more representative of average use cycles or periods of use. Over time, many of DOE's test procedures have been amended to account for products' increased functionality and modes of operation. DOE's intent in issuing this RFI is to gather information to ensure that the inclusion of measurement provisions in its test procedures associated with such increased functionality has not inadvertently compromised the measurement of representative average use cycles or periods of use, and made some test procedures unnecessarily burdensome. DOE welcomes written comments from the public on any subject

within the scope of this document, including topics not directly outlined in this RFI. DOE particularly welcomes comments on any suggestions for reducing or avoiding regulatory burdens within the context of measuring average use cycles or periods of use.

**DATES:** Written comments and information are requested and will be accepted on or before **[INSERT DATE 60 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>. Follow the instructions for submitting comments. Alternatively, interested persons may submit comments, identified by docket number EERE-2018-BT-TP-0020, by any of the following methods:

1. *Federal eRulemaking Portal:* <http://www.regulations.gov>. Follow the instructions for submitting comments.
2. *E-mail:* to [UseCycleRFI2018TP0020@ee.doe.gov](mailto:UseCycleRFI2018TP0020@ee.doe.gov). Include docket number EERE-2018-BT-TP-0020 in the subject line of the message.
3. *Postal Mail:* Appliance and Equipment Standards Program, U.S. Department of Energy, Building Technologies Office, Mailstop EE-5B, 1000 Independence Avenue, SW., Washington, DC, 20585-0121. Telephone: (202) 287-1445. If possible, please submit all items on a compact disc (CD), in which case it is not necessary to include printed copies.
4. *Hand Delivery/Courier:* Appliance and Equipment Standards Program, U.S. Department of Energy, Building Technologies Office, 950 L'Enfant Plaza, SW., Suite 600,

Washington, DC, 20024. Telephone: (202) 287-1445. 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 III of this document.

*Docket:* The docket for this activity, 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-TP-0020>. The docket web page will contain simple instructions on how to access all documents, including public comments, in the docket. See section III for information on how to submit comments through <http://www.regulations.gov>.

**FOR FURTHER INFORMATION CONTACT:** Ms. Jennifer Tiedeman, U.S. Department of Energy, Office of the General Counsel, GC-33, 1000 Independence Avenue, SW., Washington, DC, 20585-0121. Telephone: (202) 287-6111. E-mail: [Jennifer.Tiedeman@Hq.Doe.Gov](mailto:Jennifer.Tiedeman@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*.

## **SUPPLEMENTARY INFORMATION:**

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### **I. Authority and Background**

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 B<sup>2</sup> 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. Title III, Part C of EPCA established the Energy Conservation Program for Certain Industrial Equipment.

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

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

enforcement procedures. Relevant provisions of the Act include definitions (42 U.S.C. 6291; 42 U.S.C. 6311), energy conservation standards (42 U.S.C. 6295; 42 U.S.C. 6317), test procedures (42 U.S.C. 6293; 42 U.S.C. 6314), labeling provisions (42 U.S.C. 6294; 42 U.S.C. 6315), and the authority to require information and reports from manufacturers (42 U.S.C. 6296; 42 U.S.C. 6316).

DOE's test procedures are required to be reasonably designed to produce test results that measure energy efficiency, energy use, water use (in the case of showerheads, faucets, water closets and urinals), or estimated annual operating cost of covered products or equipment during a representative average use cycle or period of use, and they cannot be unduly burdensome to conduct. (42 U.S.C. 6293(b)(3); 42 U.S.C. 6314(a)(2))

## **II. Request for Information**

DOE is issuing this RFI for the purpose of gathering information on how the Department could reasonably design its test procedures to produce results representative of average use cycles or periods of use, while at the same time ensure that they are not unduly burdensome to conduct. The Department is interested in identifying specific instances in which its test procedures' methods of measuring energy use have become unnecessarily complex, potentially incorporating the testing of modes and/or functions that do not, in fact, produce results that are representative of average use cycles or periods of use. In certain cases, DOE's test procedures have evolved in response to product evolution in the market, including increased product functionality and modes of product operation. This trend may have contributed to procedures that, while accounting for a wide variety of functions, cease to accurately capture representative

average use cycles or periods of use, as required by EPCA. (42 U.S.C. 6293(b)(3); 42 U.S.C. 6314(a)(2))

DOE seeks information with respect to any of its test procedures for both consumer products and industrial equipment, which stakeholders believe could be improved to produce results that are representative of average use cycles or periods of use and are not unduly burdensome to conduct.

Consider an example from DOE's clothes washer test procedure. Over time, machine labeling and literature have evolved to the point that the term "normal" cycle, as previously defined in the DOE test procedure, no longer captured all of the control settings most consumers would typically – or could possibly – choose in operating the machine to wash their laundry. (*See, e.g.*, 75 FR 57556, 57575 (Sept. 21, 2010)). Further, the range of cycle options and terminology on the control panels changed over time such that many machines no longer refer to a "normal" cycle, instead relying upon other terms. DOE concluded that testing only the wash temperature options available on what has typically been considered the normal cycle, despite consumers being able to access the other temperature options by switching out of the normal cycle, may not result in testing that "contributes to an accurate representation of energy consumption as used by consumers." *Id.*: 80 FR 46730, 46737 (Aug. 5, 2015). The standard of "energy consumption as used by consumers", however, appears to be inconsistent with the statutory requirement for test procedures at 42 USC 6293(b). Specifically, the statute requires a test method that measures energy use at those wash or rinse temperature selections that comprise

a “representative average use cycle or period of use” – not every wash or rinse temperature available on the machine.<sup>3</sup>

For two other examples, consider DOE test procedures for single-package vertical air conditioners and heat pumps and commercial water source heat pumps. DOE recently issued two requests for information that asked commenters to consider whether changes to the test procedures are needed with regard to fan energy use to properly characterize a representative average use cycle per 42 USC 6293(b), or whether including such energy use would be “additive of other existing accounting of fan energy use.” *See* 83 FR 34499, 34503, 504 (July 29, 2018); 83 FR 29048, 29050 (June 22, 2018).

Also consider the current DOE test procedure for ceiling fans, which requires manufacturers to test multi-mount ceiling fans – i.e., fans that can be mounted in either the standard or hugger position – to test the fan in both positions. 81 FR 48620, 48633 (July 25, 2016). DOE discussed in the proposed rule, however, data that suggested that fans were installed in the standard position 73 percent of the time. 79 FR 62522, 62532 (Oct. 17, 2014). As a result, testing in the standard position arguably meets the statutory test of measuring the energy use of the product during a representative average use cycle or period of use, whereas requiring testing in the more energy-intensive hugger configuration may not.

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<sup>3</sup> There are other provisions of the clothes washer test procedure that may also be inconsistent with the statutory requirement of measuring energy use or efficiency “during a representative average use cycle or period of use.” For example, the DOE test procedure specifies that the cycle considered to be the “Normal cycle” must be able to wash “up to a full load,” even though the average load has the highest load usage factor in the test procedure based on consumer use data. DOE further stated that the DOE test procedure “approximates consumer usage habits” by requiring minimum, average, and maximum load sizes, which also may be inconsistent with the statutory requirement to measure the energy use or efficiency during a representative use cycle or period of use. 80 FR 46730, 46742 (Aug. 5, 2015).

There are instances for which the DOE test procedures rely on streamlined approaches so as not to be unduly burdensome, while still being designed to reasonably provide results that are representative of an average use cycle or period of use. For one example, DOE's existing test procedures for refrigerators, refrigerator-freezers, and freezers generally require testing with the cabinet doors kept closed in an environmentally-controlled room at 90 °F temperature. This test condition is intended to simulate performance in more typical room temperature conditions (72 °F) with door openings. See, 10 CFR 430.23(a)(1) and (b)(7)). Requiring actual door openings during testing can make it difficult to maintain the necessary operating conditions and introduces test variability. It also would increase test burden by requiring additional equipment and labor for test setup and conducting the test. The 90 °F ambient condition with no door openings is designed to provide a measurement consistent with representative average consumer use, while avoiding excessive testing burden. 74 FR 29824, 29831.

A further example is the test procedure for dehumidifiers. In application, a dehumidifier generally cycles through dehumidification mode and off-cycle mode based on ambient room conditions (*i.e.*, the dehumidifier operates until the ambient reaches the humidity setpoint, then it cycles off, and then cycles back on when ambient humidity increases above a certain level). Instead of operating a dehumidifier continuously through varying conditions to achieve the different modes, the DOE test procedure requires testing the dehumidification mode, off-cycle mode, and other low-power modes separately. See generally, appendix X1 of 10 CFR part 430, subpart B. Prescribed hours of operation for each mode are then used to calculate the associated annual energy consumption and calculate the integrated energy factor, the metric for the dehumidifier energy conservation standard effective in 2019. *Id.* The hours allocated between dehumidification mode and off-cycle mode are intended to reflect the cyclic operation between



these modes for a dehumidifier, so that the test procedure produces results that measure energy efficiency during a representative average use cycle or period of use. This approach reduces the time necessary for testing and avoids the additional test burden that would be required to properly control and account for varying ambient test conditions.

The examples described above are just that; examples to highlight the issue upon which DOE seeks input. These examples are not intended suggest and particular outcome or in any way to limit the requested input from interested parties on how DOE might improve its test procedures to better capture average use cycles or periods of use, while minimizing regulatory test burdens. Rather, DOE is interested in relevant arguments and suggestions and input across all product and equipment types.

DOE would specifically be interested in whether there is reliable, non-proprietary consumer use data that could better inform its understanding of average use cycles or periods of use, or a less burdensome definition of normal cycle that could capture such use. DOE also welcomes comments on other issues relevant to this topic that may not specifically be identified in this document. In particular, DOE notes that under Executive Order 13771, “Reducing Regulation and Controlling Regulatory Costs,” Executive Branch agencies such as DOE are directed to manage the costs associated with the imposition of expenditures required to comply with Federal regulations. *See* 82 FR 9339 (February 3, 2017). Pursuant to that Executive Order, DOE encourages the public to provide input on measures DOE could take to lower the cost of its regulations applicable to appliances or equipment.

### **III. Submission of Comments**

DOE invites all interested parties to submit in writing, by the date listed in the DATES section of this notice, comments and information on matters addressed in this notice. These comments and information will aid in DOE's better understanding of how its test procedures could potentially be improved to best produce results that are representative of average use cycles or periods of use, and the Department's better understanding of any related concerns with respect to undue regulatory burden.

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).

DOE considers public participation to be a very important part of the process for developing a greater understanding of the emerging "smart" technology sector. 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*.

Signed in Washington, D.C., on March 8, 2019.

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Assistant Secretary  
Energy Efficiency and Renewable Energy

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