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[6450-01-P]

**DEPARTMENT OF ENERGY**

[Case Number 2017-014]

**Notice of Decision and Order Granting a Waiver to Huawei from the Department of Energy External Power Supply Test Procedure**

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

**ACTION:** Notice of decision and order.

**SUMMARY:** This notice announces a Decision and Order granting Huawei Technologies, Co. Ltd. (“Huawei”) a waiver from specified portions of the DOE test procedure for determining the energy efficiency of specified external power supply (“EPS”) basic models. Huawei is required to test and rate the specified basic models of its EPS in accordance with the alternate test procedure described in the Decision and Order.

**DATES:** The Decision and Order is effective on **[INSERT DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**.

**FOR FURTHER INFORMATION CONTACT:**

Ms. Lucy deButts, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Office, EE-5B, 1000 Independence Avenue, SW., Washington, DC, 20585-0121. Telephone: (202) 287-1604. E-mail: [AS\\_Waiver\\_Requests@ee.doe.gov](mailto:AS_Waiver_Requests@ee.doe.gov).

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. Email: *Michael.Kido@hq.doe.gov*.

**SUPPLEMENTARY INFORMATION:**

On December 1, 2017, Huawei filed a petition for waiver and an application for interim waiver from the applicable EPS test procedure set forth in 10 CFR part 430, subpart B, appendix Z. On March 23, 2018, DOE published a notice announcing its receipt of the petition for waiver and its granting Huawei an interim waiver. 83 FR 12737. In that notice, DOE also solicited comments from interested parties on all aspects of the petition and specified an alternate test procedure that must be followed for testing and certifying the specific basic models for which Huawei requested a waiver. *Id.* On **[INSERT DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**, DOE publishes this notice announcing a Decision and Order granting a wavier to Huawei. This notice includes a copy of the Decision and Order DOE issued to Huawei.

Issued in Washington, DC, on May 23, 2018.



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

**Case #2017-014**  
**Decision and Order**

**I. Background and Authority**

The Energy Policy and Conservation Act of 1975 (“EPCA” or “the Act”),<sup>1</sup> Public Law 94-163 (42 U.S.C. 6291–6317, as codified), among other things, authorizes the U.S. Department of Energy (“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, a program that includes EPSs, which are the subject of this Order. (42 U.S.C. 6291(36); 42 U.S.C. 6295(u)) 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.

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 that product (42 U.S.C. 6293(c)). Similarly, DOE must use these test procedures to determine whether the product complies with relevant standards promulgated under EPCA. (42 U.S.C. 6295(s))

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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 as Part A.

Under 42 U.S.C. 6293, EPCA sets forth the criteria and procedures DOE is required to follow when prescribing or amending test procedures for covered products. EPCA requires that any test procedures prescribed or amended under this section must be reasonably designed to produce test results which reflect energy efficiency, energy use or estimated annual operating cost of a covered product during a representative average use cycle or period of use and requires that test procedures not be unduly burdensome to conduct. (42 U.S.C. 6293(b)(3)) The test procedure for EPSs is contained in the Code of Federal Regulations (“CFR”) at 10 CFR part 430, subpart B, appendix Z, *Uniform Test Method for Measuring the Energy Consumption of External Power Supplies* (“Appendix Z”).

Under 10 CFR 430.27, any interested person may submit a petition for waiver from DOE’s test procedure requirements. DOE will grant a waiver from the test procedure requirements if DOE determines either that the basic model for which the waiver was requested contains a design characteristic that prevents testing of the basic model according to the prescribed test procedures, or that the prescribed test procedures evaluate the basic model in a manner so unrepresentative of its true energy consumption characteristics as to provide materially inaccurate comparative data. 10 CFR 430.27(f)(2). DOE may grant the waiver subject to conditions, including adherence to alternate test procedures. *Id.*

## **II. Petition for Waiver: Assertions and Determinations**

By e-mail with attachment dated December 1, 2017, Huawei filed a petition for waiver from the DOE test procedure for EPSs under 10 CFR 430.27 for several basic models of adaptive

EPSs<sup>3</sup> that meet the provisions of the International Electrotechnical Commission’s “Universal serial bus interfaces for data and power - Part 1-2: Common components - USB Power Delivery” (“IEC 62680-1-2:2017”) specification.<sup>4</sup> The purpose behind this specification is to help provide a standardized approach for power supply and peripheral developers to ensure backward compatibility while retaining product design and marketing flexibility. See generally, IEC 62680-1-2:2017 (Abstract) (describing the standard’s general provisions and purpose).

In Huawei’s view, applying the DOE test procedure to the adaptive EPSs specified in its petitions would yield results that would be unrepresentative of the active-mode efficiency of those products. The DOE test procedure requires that the average active-mode efficiency for adaptive EPSs be measured by testing the unit twice – once at the highest achievable output voltage (“V”) and once at the lowest. The test procedure requires that active-mode efficiency be measured at four loading conditions relative to the nameplate output current of the EPS. See 10 CFR 430.23(bb) and Appendix Z. The lowest achievable output voltage supported by the IEC 62680-1-2:2017 specification is 5V and the nameplate current at this voltage output is 3 amps (“A”), resulting in a power output of 15 W. Huawei contends that while the IEC 62680-1-2:2017 specification requires the tested EPS to support this power output, the 15W at 5V condition will be rarely used and only for brief periods of time, and that adaptive EPSs operating at 5V do not exceed 10W for almost all usage conditions.

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<sup>3</sup> The specific basic models for which the petition applies are EPS basic models HW-200200UPX, HW-200300UPX, HW-200325UPX, and HW-200500UPX. These basic model names were provided by Huawei in its December 1, 2017 petition.

<sup>4</sup> International Electrotechnical Commission Universal serial bus interfaces for data and power - Part 1-2: Common components - USB Power Delivery specification, <https://webstore.iec.ch/publication/26174/>

Huawei contended that, when charging a product that is sold or intended to be used with the adaptive EPS, the EPS charges at 5 volts only with a dead battery or fully charged battery (and then at 0.5A or less). At other times when more power is needed, the adaptive EPS will use a higher voltage rail (greater than 5V). (A “voltage rail” refers to a single voltage provided by the relevant power supply unit through a dedicated circuit/wire used for that voltage.) Huawei further stated that when using an adaptive EPS that supports the IEC 62680-1-2:2017 specification to charge an end-use product of a manufacturer different from the one who manufactured the EPS, it is likely that the product would charge at less than 10W at 5V, or may even be capable of exploiting the ability of an adaptive EPS to provide higher voltages for faster charging.

Accordingly, Huawei asserted that the DOE test procedure’s measurement of efficiency at the prescribed power level (i.e., 5V, 3A) is unrepresentative of the true energy consumption of these EPSs. Consequently, it sought a waiver from DOE to permit it to use an alternate test procedure to measure the energy efficiency of the specified adaptive EPSs that support the IEC 62680-1-2:2017 specification by testing these devices at the lowest voltage, 5V, and at an output power at 10W instead of 15W.

On March 23, 2018, DOE published a notice announcing its receipt of the petition for waiver, and granting Huawei an interim waiver. 83 FR 12737. In the notice of petition for waiver, DOE reviewed the alternate test procedure suggested by Huawei and granted the interim waiver. DOE found that the alternate test procedure would allow for the accurate measurement of efficiency of these EPSs, while alleviating the testing problems associated with Huawei’s

implementation of EPS testing for the basic models specified in its petition. DOE also solicited comments from interested parties on all aspects of the petition and specified an alternate test procedure that must be followed for testing and certifying the specific basic models for which Huawei's requested a waiver. *Id.* DOE received no relevant comments in response to the notice of petition for waiver.<sup>5</sup>

Based on the information provided by Huawei, DOE has determined that the current test procedure at Appendix Z would evaluate the specified EPS basic models in a manner so unrepresentative of their true energy consumption characteristics as to provide materially inaccurate comparative data. Therefore, in the Decision and Order, DOE is requiring that Huawei test and rate the EPS basic models for which it has requested a waiver according to the alternate test procedure specified in the Decision and Order, which is identical to the procedure provided in the interim waiver.<sup>6</sup>

In its petition Huawei sought a test procedure waiver for certain basic models. The Decision and Order is applicable only to the basic models listed within it and does not extend to any other basic models.

Manufacturers not currently distributing such a product in commerce in the United States must petition for and be granted a waiver prior to the distribution in commerce of that product in

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<sup>5</sup> DOE received seven anonymous comments regarding issues unrelated to the waiver petition. See the docket for this notice at <http://www.regulations.gov/docket?D=EERE-2017-BT-WAV-0061>.

<sup>6</sup> The alternate test procedure specified in this Decision and Order is also identical to the alternate test procedure in the Decision and Order issuing individual waivers to Apple, Inc., Microsoft Corporation, Poin2 Lab, and Hefei Bitland Information Technology Co. Ltd. 83 FR 11738 (March 16, 2018).



the United States. Manufacturers may also submit a request for interim waiver pursuant to the requirements of 10 CFR 430.27.

### **III. Consultations with Other Agencies**

In accordance with 10 CFR 430.27(f)(2), DOE consulted with the Federal Trade Commission (“FTC”) staff concerning the Huawei petition for waiver. The FTC staff did not have any objections to granting a waiver to Huawei.

### **IV. Order**

After careful consideration of all the material that was submitted by Huawei in this matter, DOE grants a waiver regarding the below specified basic models. Therefore, in accordance with 10 CFR 430.27, it is **ORDERED** that:

(1) Huawei must test and rate Huawei brand EPS basic models HW-200200UPX, HW-200300UPX, HW-200325UPX, HW-200500UPX in accordance with the alternate test procedure as set forth in paragraph (2) of this section.

(2) The alternate test procedure for the Huawei basic models listed in paragraph (1) of this section of this Order is the test procedure for EPSs prescribed by DOE at Appendix Z, except that under section 4(a)(i)(E) and Table 1 of Appendix Z, the adaptive EPSs must be tested such that when testing at the lowest achievable output voltage (*i.e.*, 5V), the Nameplate Output Current shall be 2A (which corresponds to an output power of 10W at the 100% loading

condition). The 75%, 50%, and 25% loading conditions shall be scaled accordingly and the nameplate output power of such an EPS, at the lowest output voltage, shall be equal to 10W.

(3) *Representations.* Huawei must make representations about the efficiency of the basic models identified in paragraph (1) of this section for compliance, marketing, or other purposes only to the extent that the basic model has been tested in accordance with the provisions set forth above and such representations fairly disclose the results of such testing in accordance with Appendix Z and 10 CFR 429.37.

(4) This waiver shall remain in effect according to the provisions of 10 CFR 430.27. This Decision and Order will terminate on the compliance date of any future updates to the test procedure for EPSs located in Appendix Z that address the issue presented in the waiver. At such time, testing to demonstrate compliance with standards, and any other representations of energy use, will require manufacturers to use the relevant test procedure for these products.

(5) This waiver is issued on the condition that the statements, representations, and documentation provided by Huawei are valid. DOE may revoke or modify this waiver at any time if it determines the factual basis underlying the petition for waiver is incorrect, or the results from the alternate test procedure are unrepresentative of the basic models' true energy consumption characteristics. 10 CFR 430.27(k)(1). Likewise, Huawei may request that DOE rescind or modify the waiver if Huawei discovers an error in the information provided to DOE as part of its petition, determines that the waiver is no longer needed, or for other appropriate reasons. 10 CFR 430.27(k)(2).

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

Signed in Washington, DC, on May 23, 2018.

A handwritten signature in black ink, appearing to read 'KBH', is written over a horizontal line.

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