[6450-01-P]

DEPARTMENT OF ENERGY

[Case Number 2019-005; EERE-2019-BT-WAV-0010]

Energy Conservation Program: Decision and Order Granting a Waiver to Anker Innovations Limited from the Department of Energy External Power Supplies Test Procedure

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

ACTION: Notice of decision and order.

SUMMARY: The U.S. Department of Energy ("DOE") gives notice of a Decision and Order (Case Number 2019-005) that grants to Anker Innovations Limited ("Anker") a waiver from specified portions of the DOE test procedure for determining the energy efficiency of a specified external power supply basic model. Under the Decision and Order, Anker is required to test and rate the specified basic model in accordance with the alternate test procedure specified in the Decision and Order.

DATES: The Decision and Order is effective on **[INSERT DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**. The Decision and Order will terminate upon the compliance date of any future amendment to the test procedure for external power supplies located at 10 CFR part 430, subpart B, appendix Z that addresses the issues presented in this waiver. At such time, Anker must use the relevant test procedure for this external power supply for any testing to demonstrate compliance with the applicable standards, and any other representations of energy use.

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

SUPPLEMENTARY INFORMATION:

In accordance with Title 10 of the Code of Federal Regulations (10 CFR 430.27(f)(2)), DOE gives notice of the issuance of its Decision and Order as set forth below. The Decision and Order grants Anker a waiver from the applicable test procedure at 10 CFR part 430, subpart B, appendix Z for the specified basic model of external power supply, and provides that Anker must test and rate such external power supply using the alternate test procedure specified in the Decision and Order. Anker's representations concerning the energy efficiency of the specified basic model must be based on testing according to the provisions and restrictions in the alternate test procedure set forth in the Decision and Order, and the representations must fairly disclose the test results. Distributors, retailers, and private labelers are held to the same requirements when making representations regarding the energy efficiency of this product. (42 U.S.C. 6293(c))

Manufacturers not currently distributing in commerce in the United States external power supplies employing a technology or characteristic that results in the same need for a waiver from the applicable test procedure must petition for, and be granted a waiver prior to, the distribution in commerce of such products in the United States. Manufacturers may also submit a request for interim waiver pursuant to the requirements of 10 CFR 430.27.

Signed in Washington, DC, onOctober 23, 2019.

Alexander N. Fitzsimmons
Acting Deputy Assistant Secretary
for Energy Efficiency
Energy Efficiency and Renewable Energy

I. Background and Authority

The Energy Policy and Conservation Act, as amended ("EPCA"),[1] authorizes the U.S. Department of Energy ("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 B[2] 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 for certain types of consumer products. These products include external power supplies ("EPSs"), the focus of this document. (42 U.S.C. 6291(36); 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 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).

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)

[1] All references to EPCA in this document refer to the statute as amended through America's Water Infrastructure Act of 2018, Public Law 115-270 (October 23, 2018).
[2] For editorial reasons, upon codification in the U.S. Code, Part B was redesignated as Part A.

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))

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 that reflect the 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 external power supplies 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").

Any interested person may submit a petition for waiver from DOE's test procedure requirements. 10 CFR 430.27(a)(1). 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. Anker's Petition for Waiver: Assertions and Determinations

By letter dated April 12, 2019, Anker filed a petition for waiver and a petition for interim waiver from the DOE test procedure applicable to EPSs set forth in Appendix Z.[3] Anker stated that the specified basic model includes adaptive ports 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. The IEC 62680-1-2:2017 specification describes the particular architecture, protocols, power supply behavior, connectors, and cabling necessary for managing power delivery over a universal serial bus ("USB") connection at power levels of up to 100 watts ("W"). 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).

Anker stated that the adaptive ports on the basic model identified in its petition meet the IEC 62680-1-2:2017 specification. Anker asserted that testing the adaptive ports that meet the IEC 62680-1-2:2017 specification at 15 watts at the lowest nameplate output voltage (i.e., 5 volts, 3 amps) does not reflect actual energy use in the field, and that, at this voltage level, these ports do not exceed 10 watts for almost all usage conditions. Accordingly, the petitioner argued that the current DOE test procedure results in a measurement that is grossly unrepresentative of the actual energy consumption characteristics of the EPS in the real world.

[3] The specific basic model for which the petition applies is EPS basic model A2041. This basic model name was provided by Anker in its April 12, 2019 petition, which is available at: *http://www.regulations.gov/docket?D=EERE-2019-BT-WAV-0010*.

Under the current DOE test procedure, average active-mode efficiency for an adaptive EPS is measured by testing the units twice—once at the highest achievable output voltage ("V") and once at the lowest achievable output voltage. 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 USB Power Delivery Specification is 5V and the specified nameplate current at this voltage output is 3 amps ("A"), resulting in a power output of 15W. Anker 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.

Anker requested use of an alternate test procedure to test and rate a specific EPS basic model. The basic model at issue features two USB-A non-adaptive ports, and two USB-C adaptive ports. In its suggested alternate test procedure, Anker suggested that testing be required only at the highest nameplate output voltage by loading both USB-A output ports at a combined power draw of 10 watts ("W") (*i.e.*, 5 volts, 1 amp per USB-A port) for the 100% loading condition, and both USB-C output ports at a combined power draw of 90W (*i.e.,* 20 volts, 2.25 amps per USB-C port) for the 100% loading condition. The 75%, 50%, and 25% loading conditions would then be scaled accordingly (*i.e.*, 0.75 amps, 0.5 amps 0.25 amps for each USB-A port at 5 volts, respectively; and 1.688 amps, 1.125 amps, 0.563 amps for each USB-C output port at 20 volts, respectively.)

On July 17, 2019, DOE published a notice that announced its receipt of the petition for waiver and granted Anker an interim waiver. 84 FR 34167 ("Notice of Petition for Waiver"). In the Notice of Petition for Waiver, DOE reviewed the adaptive external power supply model listed in the waiver and initially agreed with the petitioner's claim that the test procedure at Appendix Z would test the model in a manner that is unrepresentative of its energy use. DOE also reviewed the alternate procedure suggested by the petitioner and initially found that it would also evaluate the basic model in a manner unrepresentative of its true energy characteristics because it effectively would test the EPS only at the highest nameplate output voltage. As discussed, it is the testing of the lowest achievable output voltage that is not representative of the energy use of ports that meet the IEC 62680-1-2:2017 specification and which must necessarily serve as the focus of any relevant alternate test procedure when evaluating the energy use of an EPS device meeting this specification.

In the Interim Waiver Order, DOE required use of an alternate test procedure consistent with previous test procedure waivers for similarly situated basic models.[4] Under the alternate test procedure specified in the Interim Waiver Order, the adaptive ports that meet the IEC 62680-1-2:2017 specification must be tested at an output power of 10W at the lowest nameplate output voltage, 5 volts, instead of 15W. The loading conditions at 75%, 50%, and 25% must be scaled accordingly (*i.e.*, 7.5W, 5W, 2.5W, respectively). For the highest nameplate output voltage, the specified EPS basic model must be tested according to the current EPS test procedure provisions for multiple-voltage EPSs as prescribed in section 4(b) of Appendix Z.

[4] See Notice of Decision and Order Granting Individual Waivers to Apple Inc., Microsoft Corporation, Poin2 Lab and Hefei Bitland Information Technology Co., From the Department of Energy External Power Supplies Test Procedure. 83 FR 11738 (March 16, 2018). See also, Notice of Decision and Order Granting Waiver to Huawei Technologies, Co. Ltd. 83 FR 25448 (June 1, 2018).

In addition, the Notice of Petition for Waiver also solicited comments from interested parties on all aspects of the petition and the alternate test procedure specified as part of DOE's Interim Waiver Order. *Id*. DOE received no comments in response to that document.

For the reasons explained here and in the earlier Notice of Petition for Waiver, absent a waiver the basic model identified by Anker in its petition cannot be tested and rated for energy consumption on a basis representative of its true energy consumption characteristics. DOE has reviewed the test procedure suggested by Anker and concludes that it also would not allow for the accurate measurement of the energy use of the specified external power supply. Instead, DOE has determined that the alternate test procedure required under the Interim Waiver Order allows for the accurate measurement of the energy use of the specified external power supply basic model, while alleviating the testing problems associated with Anker's implementation of DOE's applicable EPS test procedure for the specified basic model.

Thus, DOE is requiring that Anker test and rate the external power supply EPS basic model 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.

This Decision and Order applies only to the basic model listed and does not extend to any other basic models. DOE evaluates and grants waivers for only those basic models specifically set out in the petition, not future models that may be manufactured by the petitioner. Anker may request that DOE extend the scope of this waiver to include additional basic models that employ

the same technology as those listed in this waiver. 10 CFR 430.27(g). Anker may also submit another petition for waiver from the test procedure for additional basic models that employ a different technology and meet the criteria for test procedure waivers. 10 CFR 430.27(a)(1).

DOE notes that it may modify or rescind the waiver at any time upon DOE's determination that the factual basis underlying the petition for 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. 10 CFR 430.27(k)(1). Likewise, Anker may request that DOE rescind or modify the waiver if the company 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).

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 Anker petition for waiver. The FTC staff did not have any objections to DOE granting a waiver to Anker for the specified basic model**.**

IV. Order

After careful consideration of all the material that was submitted by Anker in this matter, it is **ORDERED** that:

(1) Anker must, as of the date of publication of this Order in the *Federal Register*, test and rate the Anker-branded basic model A2041 adaptive external power supply with the alternate test procedure as set forth in paragraph (2):

(2) The alternate test procedure for the Anker basic model referenced in paragraph (1) of this Order is the test procedure for external power supplies prescribed by DOE at 10 CFR part 430, subpart B, appendix Z, except that under section 4(a)(i)(E) and Table 1 of Appendix Z, when testing at the lowest achievable output voltage, ports that meet the IEC 62680-1-2:2017 specification must be tested such that the 100% nameplate loading condition shall be 2 amps (which corresponds to an output power of 10 watts). The 75%, 50%, and 25% loading conditions shall be scaled accordingly and the nameplate output power of such ports, at the lowest output voltage, shall be equal to 10 watts. All other requirements of Appendix Z and DOE's regulations remain applicable.

(3) *Representations*. Anker may not make representations about the energy efficiency of the basic model listed in paragraph (1) of this Order for compliance, marketing, or other purposes unless the basic model has been tested in accordance with the provisions set forth in paragraph (2) and such representations fairly disclose the results of such testing.

(4) This waiver shall remain in effect according to the provisions of 10 CFR 430.27.

(5) This waiver is issued on the condition that the statements, representations, and documents provided by Anker are valid. If Anker makes any modifications to the controls or configurations

of the basic model, the waiver will no longer be valid and Anker will either be required to use the current Federal test method or submit a new application for a test procedure waiver. DOE may rescind 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 a basic model's true energy consumption characteristics. 10 CFR 430.27(k)(1). Likewise, Anker may request that DOE rescind or modify the waiver if Anker 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 Anker from the certification requirements set forth at 10 CFR part 429.

Signed in Washington, DC, on October 23, 2019.

Alexander N. Fitzsimmons
Acting Deputy Assistant Secretary
for Energy Efficiency
Energy Efficiency and Renewable Energy