This final document represents the definitive view of the agency on the questions addressed and may be relied upon by the regulated industry and members of the public.

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Guidance Type: Scope of Coverage, Test Procedures, and Conservation Standards
Category: Commercial and Industrial Equipment
Product: Computer Room Air Conditioners
Guidance Version: FINAL
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The following is a final U.S. Department of Energy (DOE or the Department) guidance document regarding coverage of computer room air conditioners. This draft guidance document represents the Department's interpretation of its existing regulations and is exempt from the notice and comment requirements of the Administrative Procedure Act. See 5 U.S.C. § 553(b)(A).

Q: Are horizontal free-discharge computer room air conditioners (CRACs) covered equipment?

A: Yes. DOE defines a computer room air conditioner in 10 CFR 431.92:

> *Computer Room Air Conditioner* means a basic model of commercial package air-conditioning and heating equipment (packaged or split) that is: Used in computer rooms, data processing rooms, or other information technology cooling applications; rated for sensible coefficient of performance (SCOP) and tested in accordance with 10 CFR 431.96, and is not a covered consumer product under 42 U.S.C. 6291(1)-(2) and 6292. A computer room air conditioner may be provided with, or have as available options, an integrated humidifier, temperature, and/or humidity control of the supplied air, and reheating function.

The current definition of computer room air conditioner does not establish coverage based on the airflow direction of the unit. Horizontal free-discharge CRACs are types of commercial package air-conditioning and heating equipment that are used in the types of applications described in the definition and can be rated for SCOP and tested in accordance with 10 CFR 431.96. Specifically, Table 2 to 10 CFR 431.96 lists the test procedure for computer room air conditioners as ASHRAE 127-2007, *Method of Testing for Rating Computer and Data Processing Room Unitary Air Conditioners* (omit section 5.11). ASHRAE 127-2007 is not specific as to airflow-direction (*i.e.*, upflow, downflow, horizontal) and provides for a procedure for free-air-discharge (section 5.1.4.5.3). As a result, the test method could be applied for testing and rating the SCOP of horizontal free air discharge CRACs. Because horizontal free-discharge CRACs meet all the aspects of DOE's definition of "Computer Room Air Conditioner," they are considered covered equipment and are subject to DOE's regulations.

Q: Are horizontal free-discharge CRACs required to be tested using the current DOE test procedure?

A: Yes. 42 USC 6314(d)(1) states that effective 360 days after a test procedure rule applicable to commercial package air conditioning and heating equipment (which includes computer room air conditioners) is prescribed, "no manufacturer, distributor, retailer, or private labeler may make any

representation—(A) in writing (including any representation on a label), or (B) in any broadcast advertisement, respecting the energy consumption of such equipment or cost of energy consumed by such equipment, unless such equipment has been tested in accordance with such test procedure and such representation fairly discloses the results of such testing." On May 16, 2012, DOE published a final rule in the *Federal Register* which adopted ASHRAE 127-2007 (omitting section 5.11) as the test procedure for computer room air conditioners, with compliance required on and after October 29, 2012, for units less than 65,000 Btu/h and on and after May 13, 2013 for units greater than or equal to 65,000 Btu/h and less than 760,000 Btu/h. 77 FR 28928, 28990. (See also Table 2 to 10 CFR 431.96.) The 2012 test procedure final rule did not have an exception for any specific airflow direction. Therefore, any manufacturer making representations of the energy consumption of CRACs (including horizontal free-discharge units) must test according to the current DOE test procedure. A manufacturer may request a test procedure waiver for a basic model if it contains design features that prevent testing according to the DOE test procedure, or such testing may generate results that are unrepresentative of the true energy consumption of the basic model.

Q: Are horizontal free-discharge CRACs required to meet the energy conservation standards for CRACs?

A: No. DOE specifies minimum efficiency standards for certain equipment classes of CRACs in 10 CFR 431.97. However, Table 7 to 10 CFR 431.97 specifies minimum SCOP efficiency specifically for downflow and upflow units and does not include minimum SCOP requirements for horizontal free-discharge units. Thus, at this time, there are no energy conservation standards applicable to those basic models that are exclusively horizontal-flow free-discharge CRACs.