(2) For service water heating in buildings but does not meet the definition of ''hot water supply boiler'' in this part.

Condensing boiler means a commercial packaged boiler that condenses part of the water vapor in the flue gases, and that includes a means of collecting and draining this condensate from its heat exchanger section.

Flue condensate means liquid formed by the condensation of moisture in the flue gases.

Manufacturer of a commercial packaged boiler means any person who manufactures, produces, assembles or imports such a boiler, including any person who:

(1) Manufactures, produces, assembles or imports a commercial packaged boiler in its entirety;

(2) Manufactures, produces, assembles or imports a commercial packaged boiler in part, and specifies or approves the boiler's components, including burners or other components produced by others, as for example by specifying such components in a catalogue by make and model number or parts number; or

(3) Is any vendor or installer who sells a commercial packaged boiler that consists of a combination of components that is not specified or approved by a person described in paragraph (1) or (2) of this definition.

Packaged boiler means a boiler that is shipped complete with heating equipment, mechanical draft equipment and automatic controls; usually shipped in one or more sections and does not include a boiler that is custom designed and field constructed. If the boiler is shipped in more than one section, the sections may be produced by more than one manufacturer, and may be originated or shipped at different times and from more than one location.

Packaged high pressure boiler means a packaged boiler that is:

(1) A steam boiler designed to operate at a steam pressure higher than 15 psi gauge (psig); or

(2) A hot water boiler designed to operate at a water pressure above 160 psig or at a water temperature exceeding 250 °F, or both; or

(3) A boiler that is designed to be capable of supplying either steam or hot water, and designed to operate under the conditions in paragraphs (1) and (2) of this definition.

Packaged low pressure boiler means a packaged boiler that is:

(1) A steam boiler designed to operate at or below a steam pressure of 15 psig; or

(2) A hot water boiler designed to operate at or below a water pressure of 160 psig and a temperature of 250 °F; or

(3) A boiler that is designed to be capable of supplying either steam or hot water, and designed to operate under the conditions in paragraphs (1) and (2) of this definition.

TEST PROCEDURES

§ 431.85 Materials incorporated by reference.

(a) The Department incorporates by reference the following test procedures into subpart E of part 431. The Director of the Federal Register has approved the material listed in paragraph (b) of this section for incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Any subsequent amendment to this material by the standard-setting organization will not affect the DOE test procedures unless and until DOE amends its test procedures. The Department incorporates the material as it exists on the date of the approval and a notice of any change in the material will be published in the FEDERAL REGISTER.

(b) *List of test procedures incorporated by reference.* (1) The Hydronics Institute (HI) of GAMA Boiler Testing Standard BTS–2000, ''Method to Determine Efficiency of Commercial Space Heating Boilers,'' published January 2001 (HI BTS–2000), IBR approved for § 431.86.

(2) The American Society of Mechanical Engineers Power Test Codes for Steam Generating Units, ASME PTC 4.1–1964, Reaffirmed 1991 (Including 1968 and 1969 Addenda) (''ASME PTC 4.1''), IBR approved for § 431.86.

(c) *Availability of references*—(1) *Inspection of test procedures.* The test procedures incorporated by reference are available for inspection at:

(i) National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: *http://www.archives.gov/federal__register/code__of__federal__regulations/ibr__locations.html.*

(ii) U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Hearings and Dockets, ''Test Procedures and Efficiency Standards for Commercial Packaged Boilers,'' Docket No. EE–RM/TP–99–470, 1000 Independence Avenue, SW., Washington, DC 20585.

(2) *Obtaining copies of Standards.* Anyone can purchase a copy of HI BTS–2000 from the Hydronics Institute Division of GAMA, P.O. Box 218, Berkeley Heights, NJ 07922, or *http://www.gamanet.org/publist/hydroordr.htm;* and a copy of ASME PTC 4.1–1964/RA–1991 from Global Engineering Documents, 15 Inverness Way East, Engelwood, CO 80112, 800–854–7179.

§ 431.86 Uniform test method for the measurement of energy efficiency of commercial packaged boilers.

(a) *Scope.* This section provides test procedures that must be followed for measuring, pursuant to EPCA, the steady state combustion efficiency of a gas-fired or oil-fired commercial packaged boiler. These test procedures apply to packaged low pressure boilers that have rated input capacities of 300,000 Btu/hr or more and are ''commercial packaged boilers, but do not apply under EPCA to ''packaged high pressure boilers.''

(b) *Definitions.* For purposes of this section, the Department incorporates by reference the definitions specified in Section 3.0 of the HI BTS–2000 (Incorporated by reference, see § 431.85), with the exception of the definition for the terms ''packaged boiler'', ''condensing boilers'', and ''packaged low pressure steam'' and ''hot water boiler''.

(c) *Test Method for Commercial Packaged Boilers—General.* After October 23, 2006, follow the provisions in this paragraph (c) for all testing of packaged low pressure boilers that are commercial packaged boilers. Prior to that date, follow either the provisions of this paragraph (c) or of paragraph (d) of this section to test steel boilers, but follow the provisions of this paragraph for all other commercial packaged boilers.

(1) *Test Setup*—(i) *Classifications:* If employing boiler classification, you must classify boilers as given in Section 4.0 of the HI BTS–2000 (Incorporated by reference, see § 431.85).

(ii) *Requirements:* Conduct the combustion efficiency test as given in Section 5.2 (Combustion Efficiency Test) of the HI BTS–2000 (Incorporated by reference, see § 431.85).

(iii) *Instruments and Apparatus:*

(A) Follow the requirements for instruments and apparatus in sections 6 (Instruments) and 7 (Apparatus), of the HI BTS–2000 (Incorporated by reference, see § 431.85), with the exception of section 7.2.5 (flue connection for outdoor boilers) which is replaced with paragraph (c)(1)(iii)(B) of this section:

(B) Flue Connection for Outdoor Boilers: For oil-fired and power gas outdoor boilers, the integral venting means may have to be revised to permit connecting the test flue apparatus described in section 7.2.1 of BTS–2000. A gas-fired boiler for outdoor installation with a venting system provided as part of the boiler must be tested with the venting system in place.

(iv) *Test Conditions:* Use test conditions from Section 8.0 (excluding 8.5.2, 8.5.3, and 8.6.2) of HI BTS–2000 (Incorporated by reference, see § 431.85) for the combustion efficiency testing, and use paragraph (c)(1)(iv)(A) of this section when testing a condensing boiler:

(A) Water Temperatures for Condensing Boilers—For condensing boilers the outlet temperature shall be 180 °F±2 °F and the inlet temperature shall be 80 °F±5 °F at all times during the test. (See also paragraphs (c)(2)(i) and (ii) of this section for condensing boilers.).

(B) [Reserved]

(2) *Test Measurements.* (i) Measure for combustion efficiency according to sections 9.1 (excluding sections 9.1.1.2.3 and 9.1.2.2.3), 9.2 and 10.2 of the HI BTS–2000 (Incorporated by reference, see § 431.85), except that for condensing boilers, replace the boiler water inlet temperature in section 9.1.2.1.4 of the HI BTS–2000 standard with the inlet