September 12, 2013

Ms. Brenda Edwards
U.S. Department of Energy
Office of Energy Efficiency and Renewable Energy
Building Technologies Program, EE-2J
1000 Independence Avenue, S.W.
Washington, D.C. 20585-0121

Re: Proposed Determination of Coverage

Dear Ms. Edwards:

The Air-Conditioning, Heating, and Refrigeration Institute (AHRI) is the trade association representing manufacturers of air conditioning, space heating, water heating and commercial refrigeration equipment. AHRI’s 300 member companies include a majority of the manufacturers of commercial packaged boilers doing business in the U.S. We submit the following comments in response to the August 13, 2013, Proposed Determination of Coverage, regarding natural draft commercial packaged boilers.

AHRI notes that the long time practices of both industry and DOE make clear that natural draft commercial packaged boilers are covered equipment subject to the efficiency standards established in accordance with the Energy Policy and Conservation Act. The Energy Policy Act (EPAct) was passed in 1992 with the intent to establish minimum efficiency standards for a range of commercial and industrial equipment, including space heating boilers. The minimum efficiency standards specified for commercial boilers in EPAct have been applied to all models, natural draft or otherwise, for the past 20 years. Similarly, the minimum efficiency standards specified for commercial boilers in ASHRAE Standard 90.1 have been applied to all models since the first edition of the standard more than 35 years ago. There should be no question that natural draft commercial packaged boilers are covered equipment subject to the Department’s efficiency standards. Consequently, we do not understand the need to classify natural draft commercial packaged boilers as covered equipment. However, if DOE decides that such an action is necessary to provide clarity for all parties, we provide the following comments on the definitions discussed in the August 13, 2013 notice.

The question that seems to have caused DOE to issue this notice is an ambiguity in the definition of commercial packaged boiler. Rather than develop a separate, new definition for a natural draft commercial packaged boiler, we recommend the following edit to the current definition of packaged boiler:

Packaged boiler means a boiler that is shipped complete with heating equipment, mechanical draft equipment, as required, 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.
This edit reflects the proper reading of the definition that it covers all types of boilers. Where a commercial boiler model requires mechanical draft equipment as part of its design, the complete boiler, i.e. packaged boiler, must include that mechanical draft equipment. Where a commercial boiler model does not require any mechanical draft equipment as part of its design, the complete boiler must include the heating equipment and automatic controls that are the essential components of that particular design.

We do not agree with the definition of “Natural draft commercial packaged boiler” proposed in the notice. That definition is unnecessarily complex and includes a mention of dampers, which is irrelevant to defining a natural draft boiler. As noted above, a separate, new definition is not needed. If DOE does not agree with this conclusion, we recommend the following definition:

Natural draft commercial packaged boiler is a packaged boiler that is shipped complete with heating equipment, automatic controls and, as required, mechanical draft equipment; usually shipped in one or more sections and does not include a boiler that is custom designed and field constructed.

The concept of natural draft in relation to combustion equipment is a well-defined term. Since DOE’s concern appears to be defining a type of packaged boiler, any new definition it proposes should focus on that aspect rather than attempting to define “natural draft.” A definition of natural draft can be found in numerous, authoritative sources such as the National Fuel Gas Code or an ASHRAE Handbook.

The notice also raises a question regarding the availability of technologies to improve the efficiency of natural draft commercial packaged boilers. We note that the current DOE minimum efficiency standards for commercial boilers only have distinct requirements based on draft type for gas-fired steam boilers. Furthermore, that distinction in efficiency requirements will cease to exist in 2022. DOE recently issued a notice and Framework Document initiating a rulemaking to revise the minimum efficiency standards for commercial boilers. The discussion of technologies to improve the efficiency of all commercial boilers will be considered thoroughly in that rulemaking. Consequently, we will provide our comments on this particular question in that rulemaking.

We appreciate this opportunity to provide comments and participate in this rulemaking.

Respectfully submitted,

Frank A. Stanonik
Chief Technical Advisor