



September 24, 2015

Abigail Daken
Environmental Protection Agency
1200 Pennsylvania Ave. NW
Washington, DC 20460

Re: ENERGY STAR® Commercial Boilers Specification Version 1.0 Draft 1

Dear Ms. Daken:

On behalf of Bradford White Corporation (BWC), I would like to express our appreciation for the opportunity to comment on the ENERGY STAR Commercial Boilers Specification Version 1.0 Draft 1. Please find our comments below.

BWC is in support of an ENERGY STAR program for commercial boilers. We believe it will increase the likelihood that the higher efficiency commercial boilers are specified for both space heating and volume water heating applications.

While reviewing this specification, we found it unclear whether hot water supply boilers were considered included or excluded products. Hot water supply boilers are very similar in construction, even though they are used in different applications than commercial boilers. BWC believes these should be noted as included products. Also, we support the proposed minimum thermal efficiency level of 94%, as well as the minimum turndown ratio of 5:1. We feel these are appropriate for the more efficient products in the boiler market.

BWC disagrees with the exclusion of boilers larger than 2.5 million Btu/hr. Currently, the boiler market includes several manufacturers that sell packaged boilers larger than this input. By capping this category, it will cause confusion in the marketplace, based solely on input, why some can qualify for ENERGY STAR and others cannot. The goal should be to ultimately promote higher efficiency boilers, regardless of input. Rather than including a maximum input of boilers for this program, we believe a better approach is to allow boilers that meet the following requirements to qualify as ENERGY STAR:

- (1) Must be a packaged boiler;
- (2) Is certified to meet the required thermal efficiency of at least 94% (at maximum input); and
- (3) Has a minimum of 5:1 turndown ratio.

This should also help address the concern regarding boilers larger than 2.5 million Btu/hr being custom built on site by including requirement (1) above.

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Besides the recommended requirements noted above, BWC believes that the ENERGY STAR criteria should include a required thermal efficiency of at least 94% at minimum input. We believe this is needed due to the fact that boilers operate a majority of the time at firing rates much lower than their maximum input.

During the stakeholder meeting regarding this draft specification, multiple comments were made regarding payback periods and the subsequent benefit of systems with condensing (90+%) boilers versus mid-efficiency (84-85%) boilers. The system's efficiency is affected by the number of boilers staged in the system; water temperatures required; how the control systems operate; and variable speed pumping. With that said, it is important to note that a system of multiple mid-efficiency boilers can achieve a system efficiency that is comparable to a single large boiler at 94%. As you can imagine, the combination of these factors can make it much more difficult to discern a payback period.

Bradford White Corporation thanks you for this opportunity to comment on the Draft 1.0 ENERGY STAR Version 1.0 Commercial Boilers Specification. We have coordinated our comments with AHRI.

Respectfully Submitted,

Bradford White Corporation

Eric Truskoski
Engineering Manager – Product Development

Cc: B. Carnevale; B. Root; B. Hill; C. Jacques; C. Sanborn; F. Stanonik;

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