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April 13, 2016

Ms. Abigail Daken
ENERGY STAR HVAC Program
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Dear Abi:

We have comments on your March 23, 2016 letter regarding the potential addition of boilers in the range of 2.5 million Btu/h to 5 million Btu/h to the Version 1.0 specifications for the ENERGY STAR Program for commercial boilers. Those are provided in the paragraphs subsequent to this one. However before providing those comments, we request EPA to delay finalizing this program. The U. S Department of Energy (DOE) has two rulemakings ongoing that apply to commercial boilers; one to amend the efficiency test procedures and the other to amend the minimum efficiency standards. The rulemaking to revise the efficiency test procedure for commercial boilers is likely to be completed sometime this year. As currently proposed the revised test procedures are different than the existing test procedures. Once finalized all commercial boilers will have to be retested to determine the rating based on the revised test procedure. If the commercial boiler Energy Star program is finalized in April, or soon thereafter, manufacturers will be qualifying models based on the current test procedure. Then, when the amended test procedure is finalized in a few months, they will be required to have the models retested. This is an unnecessary cost and testing burden that can be avoided if the commercial boiler program is not initiated until after the finalization of the revised efficiency test procedure. Delaying the initiation of the program will have no significant adverse consequences since there are other programs which are being used successfully to promote the sale and installation of higher efficiency commercial boilers.

In our October 31, 2015 comments we noted that there is a range of opinions within our commercial boiler manufacturer members as to the need for, or value of, an Energy Star program for commercial boilers. That situation is unchanged by the proposal to expand the scope of the program to cover boilers with input rates up to 5 million Btu/h. Your letter accurately notes that this proposed efficiency criterion specification aligns with other existing programs such as the Federal Energy Management Program (FEMP) specifications for commercial boilers. Our members that question the value of this proposed Energy Star program do not perceive a need to set up another government program that mirrors an existing program.

Since your letter makes clear that EPA intends to finalize the specifications for a commercial boiler Energy Star program, we have the following comments on the proposal presented therein.

Our October 31, 2015 comments supported the approach that the first version of the commercial boiler specification be limited to boilers with input rates of 2.5 million Btu/h and less. That position is unchanged. The decision to expand the scope should be deferred until experience has been collected on the initial program.

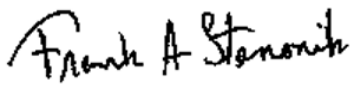
We continue to maintain that the thermal efficiency specification should be lowered to a minimum of 90% and the minimum combustion efficiency should be at the corresponding level to that 90% $E_t$. Significant energy savings occurs when any condensing boiler is installed. As a new program with a fundamental objective of encouraging consumers to select high efficiency equipment, the choice of a minimum 94% thermal efficiency ($E_t$) is unnecessarily restrictive and appears to be driven by the desire to match the FEMP specification. This program is provided for all purchasers of commercial boilers, not just federal government agencies. The energy savings achieved in selecting a unit with a 94% $E_t$ rather than one with an $E_t$ in the 90% to 93% range is relatively minor compared to the larger savings in selecting a condensing boiler rather than a minimum efficiency unit. That minor energy savings does not justify precluding those other condensing boilers from carrying an Energy Star Label. In the case of residential boilers, EPA did not choose such a restrictive efficiency specification.

It is not clear in the March 23 letter whether boilers above 2.5 million Btu/h will be subject to the proposed turn down ratio specification. To resolve this we recommend that the turn down ratio specification be deleted. This criterion complicates this first commercial boilers specification. Furthermore, it is common for commercial boiler installations to employ multiple boilers. Our estimate is that this occurs in at least half of the installations and usually 2 to 4 boilers are installed in those cases. In those multiple boiler installations, the system may be designed to achieve operation at various input rates by controlling the operation of the boilers as a group. This has the same effect as a single boiler with multiple firing rate capability. The turn down ratio specification would unnecessarily discourage the use of Energy Star commercial boilers in multiple boiler installations where "turn down" is provided in the system design rather than by the boiler model.

There is no indication that EPA has accepted our recommendation to add a requirement that the boiler be certified as complying with a nationally recognized safety standard for boilers by an independent third party certification agency. Consequently, we reaffirm that recommendation. Product safety is the most important issue and the Energy Star specifications should not be silent on it.

We appreciate the opportunity to comment on this proposal regarding the Version 1.0 Commercial Boilers Specification. If you have any questions, please do not hesitate to call me.

Respectfully submitted,



Frank A. Stanonik
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