



October 8, 2013

Debra Howland
Executive Director
NH Public Utilities Commission
21 S. Fruit St.
Concord NH 03301

Re: General Comments on CORE Programs

Dear Ms. Howland:

New England Wood Pellet takes great interest in several matters related to current and potential future directions for the electric and gas utility CORE energy efficiency programs.

On October 7 a public stakeholder meeting was held to discuss the CORE programs that I was not able to attend. Mr. Tom Frantz indicated the PUC would be accepting written comments, which is the intent of this letter.

I want to applaud the NH electric and gas utilities and the PUC for your evolving commitment to creative new concepts of fuel and technology neutrality in the use of system benefits charge and RGGI funds, as evidenced by the affirmation of these new options in the PUC's Order No. 25,402. The CORE efficiency programs best achieve public policy goals relative to energy efficiency and renewable energy when they allow the broadest range of technology options for consumers to achieve these goals, as well as save money.

Unfortunately this commitment to fuel and technology neutrality is being arbitrarily limited, in our opinion. The specific issue relates to the requirement of ENERGY STAR designation for appliances and heating systems that can qualify for rebates and on-bill financing under the Home Performance with ENERGY STAR (HPwES) provisions of the CORE programs.

The opportunity to qualify for rebates and attractive on-bill financing provisions for high efficiency home heating systems through HPwES is predicated on these systems having an ENERGY STAR label and average fuel utilization efficiency (AFUE) rating.

Unfortunately, the most advanced, cleanest and highest efficiency wood pellet central heating boilers (generally from European technology) do not have, and cannot presently obtain an ENERGY STAR label from EPA. This is for two reasons:

1) According to Abigail Daken at the ENERGY STAR office at EPA, **wood burning appliances of any sort by EPA definition may never hold an ENERGY STAR label.** ENERGY STAR is a climate change mitigation program. Because combustion of biomass is formally recognized by EPA as a climate neutral activity, there can be no improvements made to appliances to make them *more* carbon neutral. In other words, as far as EPA and DOE are concerned, neutral is neutral and there is no point in recognizing higher efficiency of wood combustion through an ENERGY STAR designation.

2) Even if this were not the case, **EPA's ENERGY STAR program AFUE ratings are based on ANSI/ASHRAE efficiency test standards¹ that only apply to gas, oil, and electric appliances.**

The Biomass Thermal Energy Council is researching the process of amending ANSI/ASHRAE standards to include a consensus test protocol that will allow for AFUE measurements. However, we estimate that this process will take two or more years. Only then will EPA consider recognizing this technology through a formal ENERGY STAR petition – an application process that is expected to take at least another year. There is no malice of intent anywhere in this. The ANSI/ASHRAE standard was created to measure the performance of devices that were and are in common use. EPA very logically relies on this standard for AFUE measurement.

Thus, in the absence of an ENERGY STAR label, the most efficient, most advanced and cleanest wood combustion technology available for residential use cannot qualify for rebate or on-bill financing under the NH utilities' proposed revisions to the HPwES Program – for many years to come.

The irony of the current PUC policy in implementing HPwES is that it allows high efficiency oil and gas heating systems to qualify, effectively perpetuating consumer demand for these imported, high carbon intensity and non-renewable fossil fuels, while the policy arbitrarily excludes pellet appliances that operate at similar output efficiencies and utilize a locally produced, low carbon intensity renewable fuel. **This is not right.**

We ask the PUC to discuss and consider a waiver to this requirement under the HPwES Program. In lieu of an ENERGY STAR requirement for this technology, we ask the PUC to consider recognizing the criteria it is currently using to qualify these systems for rebates under their current program funded with RPS alternative compliance funds. The program won a prestigious award for State Leadership in Clean Energy in 2012. This award was given by the Clean Energy States Alliance. These criteria are very stringent and effectively disqualify all but the most efficient, fully automated and cleanest burning systems. The most recently updated rebate application where the full criteria are summarized [can be found at this link](#). Aside from this waiver, a homeowner seeking to install a pellet boiler should still have to meet all other requirements for HPwES.

Typical high efficiency pellet boilers operate in the range of 85% efficiency at the HHV and consistently produce very low particulate emissions and very low carbon monoxide emissions. For example, a passing emissions grade for pellet boilers according to EPA Phase II is 0.32 pounds of particulate emissions per 1 MM Btu. Pellet boilers like the Fröling P4 or OkoFEN Autopellet have particulate emissions of .03 lb/MM Btu according to the EN303-5 test. While the EPA test differs from the EN303-5 test, the results of testing pellet boilers differ very little because high efficiency pellet boilers operate well in many different operating conditions due to their flexibility of output. Thus, using the PUC's

¹ ANSI/ASHRAE 103-2007 Method of Testing for Annual Fuel Utilization Efficiency of Residential Central Furnaces and Boilers

current rebate program criteria should provide the utilities with sufficient confidence that these systems perform at a very high level, befitting of HPwES recognition.

Central heating of homes and commercial buildings with locally produced wood pellets through fully automated, advanced pellet boilers holds tremendous promise in New Hampshire as one option for homeowners to reduce their heating bills (up to 50% relative to heating oil or propane), reduce greenhouse gas emissions, and support and sustain new and existing jobs in the pellet fuel manufacturing, distribution and appliance industries. NH is the second most dependent state in the country on imported oil and propane for home heating. The ability of this technology to qualify for HPwES rebates or attractive on-bill financing will help greatly to expand consumer access to this option.

We thank the PUC for its consideration of these comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Charles R. Niebling". The signature is fluid and cursive, with the first name "Charles" being the most prominent.

Charles R. Niebling
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