

To: The State of New Hampshire Public Utilities Commission

From: Harry "Dutch" Dresser, Managing Director, Maine Energy Systems

Re: DE 13-298, Renewable Energy Fund

Dear Members of the Public Utilities Commission:

I applaud your continued efforts to diversify energy resources in New Hampshire to include bulk wood pellets and appreciate the opportunity to comment on DE 13-298, Renewable Energy Fund.

- 1. At this stage of integration of wood pellet central heating into the energy mix in New Hampshire and in the U.S., in general, education remains the primary need and focus. In our experience, every good boiler installation seen by others catalyzes the sale of several more boilers. Permitting widespread installation of boilers in the C&I categories, particularly in buildings with significant public exposure, such as schools, churches, and municipal buildings, will favorably impact boiler installation in New Hampshire beyond that directly subsidized by this program.
- 2. I recommend that there be no min/max size requirements for the program assuming there is a cap on the grant size. If there is no cap on grant size, and it is simply a proportion of installed cost, a few large projects could consume the funds with a relatively limited public education/exposure impact.
- 3. I recommend that 80% efficiency, or greater, measured using the higher heat value of the fuel, be required. This efficiency can be demonstrated or shown by third party laboratory type testing. Care should be taken to ensure that European measures that commonly use the lower heat value of fuel are not construed as the HHV measures commonly used in the U.S., as they yield efficiency values that are often 5-8% higher than the HHV measures depending upon the moisture content of the fuel.
- 4. In Maine we have found that requiring energy audits and minimum efficiency gains prior to installation of incentivized boiler equipment present a substantial hurdle to application for otherwise available resources. I recommend against complicating the application process.
- 5. No opinion.
- 6. Beyond ensuring that a cap prevents the use of the bulk of the funds for a few very large projects, I have no sense about the level of incentivization that catalyzes installations for larger systems. A proportional grant with a cap has proven itself a good general formula for using money wisely and garnering program support.
- 7. No opinion.





- 8. Warranties are a manufacturer's considered opinion of the useful lifespan of his equipment. American consumers place stock in that opinion. I recommend that systems with vessel warranties of less than 20 years, even if pro-rated, not be considered for funding.
- 9. The thermal storage debate is a very complicated one with no simple, universal answer. Thermal storage can improve the efficiencies of some systems and can give some systems adequate efficiency to have responsible emissions profiles. Thermal storage can also reduce the efficiency of systems if it isn't proper insulated and installed and if its cold-water injection turbulence disrupts stratification and leads to short boiler cycling. I recommend that bureaucracies allow manufacturers and consumers to settle this debate brand by brand, installing thermal storage where it's recommended and avoiding the substantial additional expense on systems where it is not necessary for high efficiency and low emissions.

10. No opinion.

Respectfully submitted,