

To: Mass DOER regarding the proposed APS Regulations:

My company is based in Peterborough, NH. We are very experienced in doing retrofit installations of clean burning, high efficiency wood pellet and dry wood chip boiler systems in New Hampshire and Vermont. The specific boilers that we use are all of the latest European biomass technology. All of these were approved through the NYSERDA program that the Massachusetts program refers to for boiler approval. Over the last six years we have installed over 180 of these boilers in a mix of school, commercial, municipal and residential buildings. Our focus in recent years has been on boilers of over 1 million BTU/hour. When the fuel consumption of all of our customers are totaled, they are offsetting the burning of over 1 million gallons of fuel oil each year. The biomass fuels that are being used by our clients are bulk wood pellets and semi-dry wood chips which we produce in our Peterborough facility. Our Semi-dry wood chips have 25% moisture content and burn cleanly in the best boilers from Europe.

The activation of the Thermal REC program in New Hampshire two years ago has had a tremendous positive effect on client decisions to make the investment in a biomass boiler system. We have recommended that all states in our region create similar programs. I hope that you are aware of the specifics of their program as it is the first in the nation.

The proposed regulations in the Mass DOER program are tougher than NH on systems design and fuel specifications. System design changes are acceptable so long as you leave room for reasonable innovation. It is in fuel specifications that we foresee problems that will limit potential success of the program.

MAIN POINT #1: As I understand it, wood pellets will not have a problem meeting the spirit of the regulations which require limited "Thinnings" and more lesser grade wood and/or industrial wood waste (generally). However a representative of the largest producer of wood pellets in the Northeast explained that they would have a problem segregating and verifying product to be delivered to Massachusetts. Even though they utilize as little as 10% thinnings annually and up to 90% of the accepted "other wood", they are concerned because they will not be able to produce paperwork that proves the pellets that were delivered to Massachusetts AEC producing sites meet requirements. If you were to review their annual purchases of wood that makes up all their pellets destined for the entire region, and approve that mix, it would be possible for them to comply.

MAIN POINT #2: The concern of Froling Energy has to do with verification of the supply chain and actual source of our semi-dry wood chips (called PDCs) which are currently produced out of over 90% Thinnings. Per your proposed regulations for wood source content, our PDCs are not an acceptable fuel for Mass AECs. Yes, we could set aside some Special chips that meet the Massachusetts requirements, but that is impossible due to a lack of covered storage space for that purpose. After hearing the loggers and foresters speak today at the meeting in Holyoke we feel that Thinnings are as viable alone as a mix of lesser grade fuels and request that pure Thinnings be allowed as a Class of its own. We use a good grade of bole wood, mixed hard and soft woods, sourced from renewably harvested trees.

Furthermore, the paperwork verification required of logging operations is onerous and well outside of their current business practice. It would take radical changes in their processes to comply. None of our current wood suppliers are willing to take this step. We are very interested to see if wood suppliers from nearby areas of Massachusetts will be able to meet the requirements. If some are able to comply that would be a big stride forward for your program. If not, it will be a significant impediment.

MAIN POINT #3: Why are semi-dry wood chips important? It has to do with INNOVATION. New innovations are difficult to predict. Your new Regulations should encourage positive innovation. At a time when wood pellets cost about the same as fuel oil, our semi-dry chips cost 35% less than pellets with minimal infrastructure changes from what a purely pellet boiler system requires. Simply put, PDC boiler systems have a much better ROI than wood pellet and green wood chip systems. There is some real enthusiasm in NH and VT for the semi dry chips right now while pellet system interest is low. This innovation has paid off.

AND OFFER OF ASSISTANCE: If the Thermal AEC program becomes established as now written, we at Froling Energy would be very interested in consulting with DOER staff as we experience the resulting situation so we can advise on possible changes.

Today I described a study done by BTEC that compared the PM output of old woodstoves with pellet stoves and the current generation of high efficiency pellet boilers. that report is ATTACHED. It seems that a woodstove changeout program is an area that would produce tremendous results in air quality improvement.

Thank you for hearing our comments.

Jim Van Valkenburgh
VP Sales & Marketing

Froling Energy

New Hampshire's Number One Biomass Installation and Service Company---Plus PDCs

Office: 603-924-1001 x2

www.FrolingEnergy.com

Learn about Froling Energy's PDCs--Least Cost Biomass Fuel: <http://www.frolingenergy.com/solutions/pdcs-a-new-biomass-fuel-made-by-froling-energy/>