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Department of Energy Resources  
100 Cambridge Street  
Boston, Massachusetts

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#### Comments on the Proposed Alternative Energy Portfolio Standard

I am President of Peterson's Oil Service in Worcester, Massachusetts. I am a lifelong resident of the Commonwealth, and represent a family business that spans four generations. I am a graduate of Rensselaer Polytechnic Institute with a degree in Mechanical Engineering. Our light blue delivery trucks are landmarks in Central Massachusetts. I am a voting member of the American Society of Testing Materials, whose standards for testing are worldwide benchmarks for quality and integrity.

We have been patiently awaiting the final adoption of the Alternative Energy Portfolio Standard (APS), and have operated as if the proposed regulations had become effective. Peterson's Oil Service has been delivering liquid energy to our customers in excess of the B10 minimum that the Department is currently recommending. We can report that we have extensive evidence that biodiesel used at blends equal to or greater than the current ASTM standard of B20 operates seamlessly to reduce emissions with existing boilers and furnaces.

I urge you to consider the initial date of January 1, 2015 as the effective date of these regulations and issue Attributes earned from that date, and allow those Attributes to be used to fulfill obligations for any open year until the regulations are final. The initial date of minting Attributes has not previously received comments because interested parties have believed the regulations would have been finalized before the 2015 obligation period becomes closed.

I support the Department's definition of Eligible Liquid Biofuel which states that Liquid Biofuel must be derived from organic waste feedstocks. I ask that the Department examine the language in the regulations and the guideline document and make the language consistent. It could be construed that the Department would allow other feedstocks allowed under the Federal EPA definition, and not in the Massachusetts definition, when comparing language in both the regulations and accompanying guidelines.

I support the Department's audit and qualification standards for producers. The Federal EPA reporting program under the EPA Moderated Transaction Program, which can be forwarded to the Department, should provide all the necessary audit data the Department may require. However, I believe that the Department should review the mandate on subscribing to the Federal EPA's Quality Assurance Plan. There is a defined cost to the QAP, and there may be alternate quality assurance programs that are available to the regional producers that may suit their needs equal to or better than the Federal program. I think the Federal program provides an audit trail, but I am not sure the Federal government is the best platform for quality assurance. Consumers rely on other institutions as well as the Federal government to provide quality assurances.

I understand the Department's cap on the number of Attributes that can be issued on liquid biofuel, and the changes the Legislature made in House Bill 4568, which altered the mandate to the Department. Those changes have extended the timeline under which these proposed regulations will become final. I do not concur with the Department's current cap level placed on Liquid fuels. I believe that as suppliers of liquid fuels are identified and placed on the approved suppliers list to be issued by the Department, the Department will find that the future production from these suppliers will exceed the number of Attributes that can be assigned to the approved distributors. If it is the intent of the Department to grow the use of liquid fuels, then I urge you to increase the quota limit.

As I stated above, my company has found that higher blends of liquid biofuel work interchangeably as a heating fuel, replacing petroleum, in the existing installed base of boilers and furnaces in residences within the Commonwealth. This program allows distributors to bring an environmental solution to many consumers and voters in the Commonwealth without additional capital expenses to them. I understand and support the installation of new solar, wind, and biomass equipment that will reduce the greenhouse gas emissions in the Commonwealth with more efficient equipment. However, for those residences that do not have current capital to re-invest in new equipment today, liquid biofuels provide an important opportunity. In Central and Western Massachusetts, where the economy is not as robust as in the east, the capital resources for many homeowners may be limited as of today. However, the highest blends of liquid biofuels are readily available for sale to even the most conscientious environmental consumer who wants to reduce or eliminate their carbon footprint today.

Liquid biofuels offer an immediate reduction of 80% or more of the greenhouse gas emissions when made from feedstocks as defined under this program. Liquid biofuel distribution will clean the environment faster than the long term slow replacement of existing equipment that continues to use liquid fuels or switch to other fuel sources. It will take years, if not decades for that amount of capital to become available. The use of Liquid Biofuels allows homeowners and voters to become good environmental consumers, and to spend their capital resources wisely if those resources compete with other expenses such as higher education. I think many voters will invest in education before they invest in environmental efficiency. Therefore, distributors like me should be encouraged to use more liquid biofuel. I urge you to raise the cap on this basis alone. It helps improve our Commonwealth in multiple ways immediately.

On a second issue, I understand that House Bill 4568 allows the use of Combined Heat and Power units to receive Attributes under this program. I believe that there is evidence that these plants will not produce enough power for several years to be assigned all of the Attributes that the Department currently proposes to allocate to them currently. Doubling the percentage of Attributes to the Liquid Biofuel allocation will not affect the incentives to build these plants. My personal research indicates that most of these units will be constructed on the campuses of some of the most endowed non-profits in the Commonwealth if not the World. I understand that a CHP plant solves more than one problem and should be encouraged. However, I do not understand the disproportionate allocation of resources to this aspect of the program to the detriment to the voter/homeowner with far fewer capital resources. I do understand, as these units come on line, the Department will have to decide how to allocate Attributes in order to maintain the financial value of each Attribute or the market will become oversupplied.

Finally, I have questions on aspects of the program that I do not understand. The guidelines do not adequately describe to me how a distributor like me will be approved to be on the Department's distributor list. In the Commonwealth, there is no current registration list for traditional heating oil dealers. There are no written standards for dealers, while there are regulations on the products we deliver. When I purchase Biofuel directly from the local producers, I purchase biodiesel, which is defined to be a motor fuel. I use my federal IRS 637 registration to blend the biofuel into petroleum heating oil. At this stage, I "convert" the diesel to heating fuel, and claim an exemption from the payment of excise

taxes to the IRS. In Massachusetts, heating oil is not reported to the Department of Revenue, except when it is subject to sales tax for certain commercial purposes. The administration, auditing and tracking of excise taxes on motor fuels are well documented. Perhaps with proper documentation of actual deliveries to end users, a robust pre-qualification for distributors is not necessary, except to get information to create a data base to issue Attributes. The Department will not have direct financial contact, because the financial integrity will be borne by the aggregator.

I purchased directly from local producers, blend the fuel, and deliver directly to consumers. I can provide data from existing Federal programs to ensure the biofuel has a sufficient content to meet the minimum 10% bio blend stated in the regulations and guidelines. I can provide chain of custody documentation from producer to consumer, using metered bills of lading. The meters are currently under the supervision of the Commonwealth's Weights and Measures units.

Each consumer has a RTGU (Renewable thermal generation unit) unit in the residence to provide heat to their homes. Since Liquid Biofuel is a "drop in" fuel, and at ultrahigh blend rates, or as a standalone fuel would meet even 2050 environmental standards, what data would be needed to complete the collection of documents?

I would submit that specific data on each individual RTGU is not necessary to reduce emissions as the Liquid Biofuel accomplishes that goal. Will it be sufficient to complete the chain of custody documents to provide only the number of metered gallons delivered, a consumer id (last 4 digits of an account number?), and a zip code to confirm location, or more specific delivery location?

These are not the only issues that need to be clarified. I currently purchase and store B99 Liquid Biofuel on an annual basis, and with modest blending the finished fuel can be delivered and used in the coldest weather. Much of this fuel is stored in the off season for delivery in the peak heating season to the end user. Other forms of renewable energy such as solar or wind, do not have these storage characteristics, and are classified as instantaneous fuels. If the allocation of Attributes becomes equally ratable, there needs to be assigned a mechanism to allow for storage of the fuel, the lag period for final delivery and the longer lag period until the fuel is converted to energy in a RTGU. I suggest that the ratability issue be transferred to an annual issue, or even a biannual issue. Used cooking oil is collected year round, with peak collections in the warmest months. Production of Liquid Biofuel follows quickly, as waste oil is not stored in large quantities. In fact, collection of approved feedstocks slows when the waste oil congeals in the coldest weather, making collection more difficult.

Because of the unique storage abilities of liquid energy, the Attributes created can be used to fulfill shortages in the creation of Attributes from the Combined Heat and Power generating units, or other technologies designated under this program. Please create the necessary flexibility for the programs to not only use this fuel to clean our environment, but to smooth the allocation and financial aspects of the program as well.

I have taken too much of your time this morning, and addressed my concerns from my personal experience. I have not commented upon distribution in my industry, where the final distributor to the end user does not purchase fuel directly from a producer. The issue of providing a clear chain of custody for these dealers will be complex as the number of links in the chain increase dramatically. Creating record keeping guidelines where the chain of custody goes from producer, to terminal operator, to wholesale, to distributor and finally to the end user may need to wait for a revised set of Guidelines after the initial implementation period rather than postponing the implementation of the program. There is a clear pathway for the pioneers in Advanced Fuels in your program, and I urge you to provide a final set of regulations quickly.

I thank you for your time, your service to our Commonwealth, and any consideration you give to my remarks. I am always available to expand upon my comments, or to clarify any of my statements.

Howard Peterson