P. O. Box 512 Montpelier, Vermont 05601 April 6, 2017

House Committee on Energy and Technology State House Montpelier

Subject: H.396, the net metering program and environmental attributes

Dear Committee Members:

I am Thomas Weiss, the owner of a net metering system in Montpelier. I have been engaged with, and trying to shape, the evolution of our net metering program, beginning in 2014 with the bill that became Act 99. Act 99 directed the Public Service Board to create the present net metering program. My role throughout this has been as an advocate for owners of individual net metering systems. On that basis I support this bill.

I plan to use my time with you this morning:

- to place this bill into the larger context of which it is a part
- to clarify some of the issues discussed by the committee
- and to make some suggestions on the bill.

Placing this bill in the larger context.

The discussion surrounding this bill seems to have lost track of why we do net metering. We net meter in order to reduce emissions of greenhouse gases. Renewable energy, and its subset of net metering, are not ends in themselves. They are merely a means to reduce emissions of greenhouse gases. Those goals were placed into statute in 2005 and call for reductions in emissions from the base year of 1990. In 1990, emissions of greenhouse gases were the equivalent of 8.11 million metric tons of carbon dioxide.

We as a state totally missed our first goal, a reduction of 25% by January 1, 2012. Emissions for 2011, the first goal, were the same as in 1990, no reduction. The most recent data available are for 2012. They show an increase in emissions of 2% from the 1990 levels. Greenhouse gas emissions for the electricity sector in 2012 were double those of the previous year: 0.92 million metric tons from 0.44 million metric tons. That doubling is largely because of sales of REC's outside Vermont ("Greenhouse Gas Emissions Inventory Update, 1990 - 2012", issued by the Air Quality and Climate Division in June 2015.)

The second goal for reducing emissions of greenhouse gases is 50% by 2028.

In the larger picture, the storage bill and the renewable energy goals bills are more important than this bill. This bill will not lead to reduction of greenhouse gas emissions. However, this bill will support owners of individual net metering systems.

Clarifications

Some utilities buy and sell REC's. I have heard testimony in other settings that those utilities sell high-value REC's and then buy lower-cost REC's. The requirement that REC's transferred by net metering customers to utilities be retained by the utilities prevents the utilities from gaining windfall profits on those REC's. The statute assures customers who transferred REC's, that those REC's really are used by the utility.

Statute appears to prevent utilities from selling excess REC's from net metering systems. The net metering statute requires "the provider to retain them for application toward compliance with sections 8004 and 8005". Those sections allow REC's from net metering systems to be banked (§8004 (c)), to satisfy tier 1, initially at 55% of retail sales (§8005 (1)(B)), or to satisfy tier 2, initially at 1% of retail sales (§8005 (2)(B)(ii)). So until the REC's from net metering systems equal the goal for tier 1, I would think they cannot be sold. In the aggregate,

net metering customers are generating an amount of electricity equal to 2% of retail sales in 2015 and 4% in 2016. Very few of the REC's generated by that electricity are now owned by the utilities. That is changing. In the future, most REC's will be transferred to the utilities, based on the results of the first three months of 2017.

Selling REC's out of state increases the emissions of greenhouse gases accountable to Vermont. In 2012 those increases were about 5% of our greenhouse gas emissions. So if REC's from Vermont cannot be sold in other markets, then that helps us to achieve our greenhouse gas reduction goals.

I am surprised that one of the committee members believes he has transferred his REC's to the utility because he is getting paid for them. The solar adder is an incentive that was originated by Green Mountain Power to encourage solar generation. Green Mountain Power found that it was cheaper to pay the 6 \not e per kWh to net metering customers than to buy electricity during the afternoon peaks. Green Mountain Power did not buy any REC's with its solar adder. The ability for an individual to transfer REC's to a utility was not granted until Act 99 in 2014, effective April 1, 2014. I believet is my understanding that almost no one chose to transfer the REC's to the utility under that option.

REC's are an artificial creation that allow people to trade environmental attributes and to make claims for meeting environmental goals. I recognize that I transfer electricity with my utility almost all the time, except for those rare moments when my production exactly matches my use. However, this artificial creation is intended to give people the legal right to claim the environmental attributes. This bill will give more individuals that option.

The net metering program allows solar systems up to 15 kW to be built with no setback to adjoining property

Suggestions on the bill

Electricity from net metering systems is also suitable for meeting the requirements of total renewable energy in §8005 (a)(1). Please revise the bill to allow the same type of reduction as for distributed energy.

Sale of REC's impairs our ability to achieve the goals of reducing emissions of greenhouse gases. I think that such sales should be discouraged. That said, establishing a requirement for a permit to sell REC's can be an alternative to requiring affidavits from customers who will retain and not transfer their REC's. The advantage of a permit system is that there likely will be fewer permits than affidavits.

The Renewable Energy Standards are not a state standard. They are, rather, a set of standards for each individual utility. The Renewable Energy Standards were designed to prohibit individuals from helping to meet the goals without going through the utility. This bill will begin to allow individuals to participate outside the utilities.

The utilities already know the amount of electricity generated by each net metering customer on a monthly basis. Under the present program, the utilities know which customers have retained the REC's and which have transferred them. Under this bill, the utilities will need to track three categories, not two. Under the present program, the utilities apply retained REC's in the same year as the REC's are created. It seems reasonable to apply the same procedures to adjust the goals on an on-going basis throughout the year. And if the calculation isn't quite right, that's one purpose of the banking covered in §8004. Thus, it seems that the REC's retained and not sold by customers can be counted toward the goals for that same year.

The term "REC's that are retained and not sold" might replace the term "retired". My proposed alternative is a bit longer. It does avoid using "retired", if indeed "retired" has a different meaning in the industry.

<u>In conclusion</u> please remember that the overall energy goal is reducing emissions of greenhouse gases. Please amend the bill in line with my suggestions, in support of owners of individual net metering systems. Thank you for allowing me to testify.

Sincerely, Thomas Weiss