



Testimony to House Committee on Energy and Technology on H.396

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Good morning. My name is Bill Bender, and I am President of Solaflect Energy based in Norwich, VT. I wish to express my support for this bill. I would like to extend my sincere appreciation to my Representative Jim Masland of Thetford, as well as Representatives Chestnut-Tangerman, McCormack, and Weed for introducing this much needed bill.

I grew up in Rutland. Although climate change is generally well understood in Vermont, some reminders of its pace are always warranted. In my lifetime, winters are now an average of 5.2 degrees warmer than when I was born. There are 40 days less ice on ponds, and lilacs leaf out 17 days earlier. The top of Mt. Mansfield has 50% more days of winter thaw, which directly translates to damage to the hundreds of millions of dollars of economic activity resulting from winter sports. In my lifetime, Vermont's climate has migrated to become equivalent to that of Pennsylvania during my childhood. On the current trajectory, the climate will approach that of Tennessee and even Georgia in this century. At this pace, the damage to the Vermont economy and lifestyle will be unprecedented during our children's and grandchildren's lifetimes.

The mission of Solaflect Energy and most of our customers is to slow this trajectory. Solaflect is nearly 10 years old, and received two nationally competitive, scientifically peer-reviewed \$1 million awards from the SunShot program of the U.S. Department of Energy. The SunShot program was started in 2011, and was modeled after JFK's moonshot. In 1961, Kennedy declared that the U.S. would put a man on the moon before the decade was out, and in 1969 this occurred. In 2011, the U.S. Department of Energy set the goal to make solar grid competitive without any subsidies by the end of the decade, and the industry is on track to meet this goal for most of the country. SunShot invested in the development of the Solaflect Tracker due to its material efficiency. By using less than 10 pounds of steel cables, Solaflect has eliminated about 1,000 pounds of steel from traditional designs. Solaflect is entering its fifth year of selling this Tracker commercially, and now has hundreds of installations. In our hometown of Norwich, VT, one of every six households has some kind of solar, and Solaflect is responsible for fifty percent of all installations. This is unprecedented for a ground mount solar system. Solaflect is now selling in Massachusetts and New Hampshire, and is continuing to expand its geographic reach.

Solaflect is quite proud that it has never sold any Renewable Energy Certificates; the solar component of the energy produced by our machines is legally retained in Vermont. Solaflect is also proud that a higher percentage of solar dollars spent on Solaflect is retained within Vermont than any other solar in the State. This is because the Tracker produces 40% more energy for every PV module utilized, which all come from out of state. The extra energy instead comes from the Tracker which is largely manufactured within Vermont, and much of that in low income census districts within Vermont. Solaflect has approximately 200 vendors that it utilizes in Vermont.

Most Solaflect customers are residential or small business customers, and they are concerned about both the economic benefits of going solar and the environmental benefits of going solar. Our customers either receive financing from banks or credit unions, or they fully finance the systems themselves. In the latter case, they are often looking at solar as a competitive investment, and take money from mutual funds, stocks, bonds or other financial assets that are usually parked outside Vermont in a major metropolitan area. When they buy a Solaflect Tracker, those funds directly benefit the Vermont economy through our vendor purchases and payroll, and create a multiplier impact on the economy. As a result, our customers are keenly aware of the economics of a solar purchase. However, the vast majority of our customers are equally concerned about the environmental benefits of their purchase. They are generally concerned about the impact of their fossil fuel consumption, including the impacts on climate change, pollution from fossil production and transportation, military expenditures and veteran sacrifices to protect fossil fuel sources and transport, and pollution from fossil burning. As a result, they are interested in making a personal investment in solar to mitigate their personal use of fossil fuels in electricity production.

If the RECs are sold to Massachusetts as often happened last year with other solar companies, then a rooftop solar system actually increases the carbon footprint of the owner. They legally consume the “residual mix” of the New England grid, which is more carbon intensive than most Vermont utilities. We have encountered numerous such customers that fully believe and claim that they have gone “solar” because they see the solar modules on their roof, even though they have benefited from lower installation prices due to the sale of these RECs. This is double counting of the solar and is neither legal nor ethical, yet has at times been overtly or subtly encouraged.

This year the current regulations strongly encourage the transfer of the RECs to the utility. We strive to be an honest business, but this puts us in a very awkward position. It is difficult to sell any solar at all if we bluntly tell customers that their significant investment does not in any meaningful way change their carbon footprint. This is abysmal public policy to force a business into this awkward situation. This is even more egregious for our business customers in Vermont. The State has many businesses that capitalize upon the “green” reputation of the State brand, and some are actively pursuing solar for their businesses to be able to market to out-of-state customers that their products are produced using solar energy. With the current system, this is not legal unless the business accepts a financial penalty that probably destroys the positive economics of a solar system. This is extremely detrimental to the Vermont brand that the State has worked so hard to maintain and encourage.

We therefore strongly endorse the intention of H.396. We appreciate that the changes do not penalize utilities, and in fact it encourages utilities to cooperate and support solar installers as they contribute towards their renewable mandates. By allowing Vermont customers to retain and retire the RECs, a resident or business can make an investment in their future and their children's future, while simultaneously legally reducing their carbon footprint and attaining the other benefits of solar energy.

We respectfully request attention to three details in this bill. First, we would like to make sure that it explicitly includes this change for group net metering systems. Second, we would ideally like to see a way for 2017 customers to take advantage of these provisions. In the long sweep of Vermont support for solar systems, 2017 would be the only year in which customers cannot legally claim they are solar without a large financial penalty. Finally, it is our opinion that the requirement for the filing of an annual affidavit is unrealistic and unworkable. Our staff that has regular customer contact unanimously agree that the vast majority of customers will not attend to this requirement beyond the first year or two at most. We believe that there are several workable alternatives. It is our belief that a firm and permanent declaration to retain and retire RECs made upon application for the CPG will be respected by the vast majority of customers. If more enforcement is desired, any REC payments discovered could be owed to the State along with a penalty. Finally, statistical enforcement could be utilized if further confirmation is desired.

Thank you for your consideration of these comments.