

Testimony Before the Public Utility Commission

By Jim Harbach

On Docket No. M-00051865

Implementation of the Alternative Energy

Portfolio Standards Act of 2004

My name is Jim Harbach, and I am a family partner in Schrack Dairy Farms of Loganton, Pennsylvania. Together with my wife and her father, brother, and sister-in-law, we operate a 1800-acre farm and 1200 cow dairy. I am also Vice-President of the Clinton County Farm Bureau. I am testifying here today on behalf of the Pennsylvania Farm Bureau, the state's largest general farming organization with more than 34,000 rural and farm family members. I appreciate the opportunity to present this statement as you consider implementation of your the Alternative Energy Portfolio Standard established in Act 213 of 2004.

I first became interested in the potential for operating a methane digester on our farm when I learned about the Pennsylvania Energy Harvest Grant. After doing our research and preparation, we applied for one of these grants and in the spring of 2004, Schrack Dairy was awarded a \$357,000 Pennsylvania Energy Harvest Grant to partially fund installation of a 160-kilowatt methane digester. I enlisted the help of RCM Digesters in Berkley, California, for their expertise to successfully navigate us through the process of bringing our digester online. Native Energy also has invested in this project by entering into a fifteen year contract to purchased our green certificate rights.

In spite of our hard work and research, and assistance from our consultants, we have yet to actually begin construction of the digester. We have discovered that in Pennsylvania's current public utility environment, it will be very difficult for us to recoup our investment. While we expect that this methane digester will produce more than

enough electricity to supply all of our farm's electrical needs, we have been told by our local supplier PP&L that due to "Rule 6", we will still be forced to pay 2/3 of our normal monthly electric bill. We currently pay an average of 8.06 cents per kilowatt hour for our electricity, and according to PPL, once we start producing all of our own power, it will save us only 2.7 cents per kilowatt hour.

In addition to the charges that Rule 6 will impose for the production of our own electricity, we found more problems when we began to examine our options for selling any extra electricity generated by the digester. We have been told that any excess power we produce will need to be sold to the PJM retailer and cannot be purchased by PP&L. But the nature of the needs of the PJM system are incompatible with the operations of a methane digester for several reasons. It is my understanding that any generator on the PJM system must be designed to be dispatchable, because power generation is turned on when the locational marginal price (LMP) of electricity, which changes hourly, matches the asking price and is turned off when the LMP is less than the asking price. Cows, however, produce biogas 24 hours a day, seven days a week, and as a dairy, of course our focus must be on milk production rather than power production. Even ignoring the relative small size of our system, as well as the fees that would be required to access this market, there is no potential for us to succeed in this system.

As has been shared with me by RCM Digesters, there are many examples around the country where methane digester production of electricity is hindered by public utility

regulations. Similar to Pennsylvania's Rule 6 tariff, a farm may be charged a large standby charge if it cannot generate electricity at its capacity 99.97 percent of the time. Some of these charges result in the farmer paying more for supplying electricity to the grid than he would otherwise pay if he purchased all of his electricity from the utility company. Some states will not allow a generator with a capacity greater than 100 kilowatts to interconnect with utilities, while other purchasers sign much shorter contracts than are provided for other generators. All this in spite of the fact that even if all farm manure in the U.S. was made into electricity, the farms could not supply more than one tenth of one percent of the US electricity requirements. Farm waste systems should not be considered a threat to public utilities. Rather, they should be considered another generator that can feed needed electricity into the power grid and help meet the energy needs of our state.

Some utilities also claim that farm methane digesters are a burden to the grid because they are unreliable and require extra investment to ensure that the utility can provide the support needed if the farm generator is off. However, many experts have demonstrated that the methane digester is as reliable or more reliable than the average of all power plants. Therefore this becomes a minimum risk investment that benefits the environment and helps the utilities meet the new Alternative Energy Portfolio Standard for Pennsylvania while reducing our reliance on fossil fuels and ensuring that there will be an adequate supply of power for our state.

Our Energy Harvest Grant expires at the end of this year, so it is important that the hurdles resulting from current regulation be resolved now. I have been told that we may be able to get an extension on our grant but if I can't be cost-effective in this manure digester, there is no reason to ever begin construction. I have the potential to offer a valuable source of power to help my electric utility meet its obligation under the Alternative Energy Portfolio Standard, but not under the current circumstances.

To successfully integrate the Schrack family digester as a cogenerator, Pennsylvania needs a net metering system that will make it more economical for us to build a methane digester. I have to compete with dairy farmers from states such as Vermont, New York and California that have already adopted net metering laws which are much more friendly to agriculture. Although the environmental benefits are many, there is no sense in building something that may cost our family farm business more money in the long run.

Net metering should be allowed in Pennsylvania for any farmer who owns or operates a farm on which a manure digester is being installed. This means our current net metering rule needs to be expanded to include farm waste systems. Customer-generators who produce a net excess of electricity annually should also be compensated per kilowatt hour for the energy they contribute to public utilities. On a larger family operation like ours, I would also like to be able to use any net excess energy generated on our farm at other properties in the area that are owned by my family. Finally, requirements for interconnectivity, should be standardized for all public utilities. We encourage the PUC

to develop an interconnectivity standard that is consistent with industry standards and would be adopted by every utility in the state.

Anaerobic digestion systems are certainly beneficial to agriculture, but very costly to install, and the current regulatory environment for public utilities in Pennsylvania is not conducive to making these projects economically viable. In fact, these regulations even impact our ability to obtain private loans to fund this project. Here we have proven technology that uses a natural byproduct of farm animals, and converts that byproduct into electricity. In the process, it removes much of the odor that causes so many conflicts between farmers and their residential neighbors, yet it leaves behind a solid that still maintains nearly all of its original nutrients for application to the soil to fertilize crops.

Now that utilities are facing the challenge of generating 8% of their electricity from renewable sources, including farm waste generators, by 2010, this is the opportune time for us to work together to expand and improve Pennsylvania's net metering law for the benefit of both our businesses.

Thank you for the opportunity to speak to you today. I will be glad to answer your questions.