

RECEIVED



The Pennsylvania Public Utility Commission  
Attn.: James J. McNulty, Secretary  
Commonwealth Keystone Building  
400 North Street  
P.O. Box 3265  
Harrisburg, PA 17105-3265.

INDEPENDENT REGULATORY  
REVIEW COMMISSION

RECEIVED

APR - 4 2006

PA PUBLIC UTILITY COMMISSION  
SECRETARY'S BUREAU

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Regarding  
Docket No. L-00050174/M-00051865  
Proposed Rulemaking Re Net Metering for Customer-generators pursuant to Section 5 of  
the Alternative Energy Portfolio Standards Act, 73 P.S. § 1648.5.

Dear Secretary McNulty:

*NativeEnergy* is developing the renewable energy credits market for several Pennsylvania farms that are installing manure digesters. We employ a unique marketing model to create the highest value for the farmer's credits, and are committed to helping them also secure the best possible value for their electricity generation.

We wish to thank the Commission for your sincere and considered efforts to date in drafting Net Metering regulation that will encourage the growth of renewable and alternate energy sources, from many technologies and in many user sectors, consistent with the intent of Act 213.

**Discussion**

In the Discussion section of the preamble to the Proposed Rulemaking Order, the Commission states, "the proposed regulations strive to eliminate the barriers which may have previously existed with regards to net-metering while ensuring that net-metering customer-generators will not unduly burden other customers on a particular electric company's (EDC) system".

Further in the Conclusion section, the Commission seeks to receive comments "regarding the effect of the non-discriminatory rate treatment and charges that existing self-generating customers find to be onerous". One such effect is the continuance of stranded costs being charged to self-generators on electricity that they no longer are purchasing.

At the heart of the challenge in reducing the barriers is the question of whether to allow a discriminatory rate structure, one that provides exemption - incentives if you will - to the businesses or individuals that are investing in renewable energy. This is a leadership decision that not everyone will agree with, but which may be needed to achieve the goals of Act 213. The Commission has made such a decision already by proposing to exempt the self-generation residential class from continued stranded costs on power generated. *NativeEnergy* would like to see this extended to support self-generation on farms. We would also like to see aggregate net metering that would permit the farmer's generation system to be recognized against all meters on the farm's properties regardless of rate class.

In both considerations, we urge the Commission to remember that the renewable energy self-generation by farms provides truly unique benefits to the Commonwealth beyond additional base load capacity (a fraction really), with significant reductions in greenhouse gas emissions (more than 2 tons of CO<sub>2</sub> and CO<sub>2e</sub> methane per MWh), reduced pollution runoff into waterways, and a reduction of community odor problems. Also, unlike some other classes of customer self-generators, under Pennsylvania's recent ACRE law, the farms are now required to control these latter two pollution impacts, and the digester's energy earnings help provide some cost recovery not otherwise offered for this new regulation.

#### **Stranded Costs.**

In his June 15, 2005 commentary to the PUC on net metering, Dr. David Wagner of Wagner Anaerobics, stated that if 125 Pennsylvania livestock farms – all those large enough to afford digesters (CAFO's) - where to install systems, and if *all* electricity generated by these digesters where credited at full retail (\$0.08/kWh), the total revenue impact would be \$3,700,000.

Therefore if the stranded costs where exempted on the *entire* generation value – which would surely overstate the case should stranded costs for farm self-generators be eliminated in the rules – then about \$0.027/kWh of the farms' costs would be passed on to other consumers, a worse case burden of \$1,202,500 annually until 2011, or less than \$0.30 per Pennsylvania household per year. The probably cost would be less than \$ 0.15/household per year as fewer than 60 digesters can be expected to be operating during the period.

The continuance of stranded costs can represent a significant revenue loss for the farm – more than \$26,000/yr on a 165 kW system - and will discourage purchase of digesters until after the transition period of 2011. On average, farmers installing 165 kW systems need approximately \$85,000 in cost recovery annually, most from electricity savings & revenues, to achieve a 5-6 year ROI based on current system capitol costs and 5% interest loans.

Dr. Wagner also noted that virtually all farm digester systems in Pennsylvania would not exceed 400 kW, and if the PUC would need to limit the potential exposure of systems

exempt from stranded costs, then we would propose adopting the New York State exemption to farms systems at 400 kW or below.

Recommended language. We would adjust the beginning of the Section 75.15 to read:

#### 75.15 Treatment of Stranded Costs

“ With the exception of farms employing digester biogas generation systems of 400 kW or less, if a net metering small commercial, commercial or industrial customer’s self-generation results in a 10% or more reduction.....”

This exception statement would also be able to include farms operating under the existing residential rate classes and which are planning for single-phase digester systems.

#### **Aggregate Net Metering**

Unlike most commercial business, farms often do not have centralized facilities. The nature of their work is tied to the landscape and in many cases their work forces are also housed on the property. In its Proposed Rulemaking Order, the Commission has already recognized the value in permitting the farms to aggregate some of its meters. We believe that all of the barns, buildings and residences that are part of farming operations should be included in net metering so that full economic benefits are applied. Typically, these structures all have their own meters, some with residential rate schedules and others with commercial schedules.

The proposed regulations deal with the issue of multiple meters through physical and virtual “meter aggregation”. This is defined as:

“the combination of readings and billing for all meters *in a particular rate class* on contiguous and adjacent properties owned and operated by a customer-generator”

The language needs to be changed for both physical and virtual meter aggregation so it reads “*regardless of rate class*”, so that all buildings and demand load are included. In order to deal with multiple rate classes, we recommend that onsite generation be first applied to the meter through which the system feeds. Then all excess should be applied equally to other meters in the farm operation, allowing each meter to maintain its current rate class.

Would this modification unduly burden other customers? As with the stranded costs, extending the aggregate metering to all meters on the farm could significantly improve electricity earnings for the farms while presenting minimal impact on other customers. Many of the 125 CAFO farms are either being required by their utility provider or by efficiency needs of their digester systems to install 3-phase equipment, causing the digester

service to be rated commercial. Most of their other facilities are single phase and metered residential.

For the same 165 kW digester system – an 800 cow farm – not aggregating all meters could mean a revenue loss of up to \$20,000 per year; significant against the annual \$85,000 earnings needed to capitalize the project. On the other hand, with less than 30 % of the total power generated by the farms – as valued at \$3,700,000 – being associated with the *other facility* meters, the pass along cost to consumer households in the Commonwealth for implementing an all-inclusive aggregate metering would again be under \$ 0.30 per household per year if all 125 digesters were installed. The likely cost would be \$0.15 per household with 60 digesters installed.

In summary, we respectfully ask the Commission to consider modifying the Proposed Rulemaking Order with these adjustments that would significantly help farmers afford renewable energy biogas digesters without unduly burdening other electricity customers.

Thank you for your consideration.

*George F. Hoguet*

George F. Hoguet  
Director, Mid-Atlantic Operations  
**NativeEnergy, LLC**

---

NativeEnergy, LLC \* 823 Ferry Rd., P.O. Box 539 \* Charlotte, VT 05445  
Tel: 802.425.3418 Fax: 802.425.3431 email: info@nativeenergy.com

♻️ Printed on 100% post-consumer recycled paper

