E3 – Timely Issues About Pennsylvania's Environment, Energy and Economy

Vol. 8, No. 11 – August 16, 2006

Net Metering: Progress in Pennsylvania

There are no energy magic wands or magic bullets. No single policy or market development will reduce our reliance on burning fossil fuels to make electricity. The recipe for shifting from often foreign and polluting fossil fuels to domestic, clean renewable sources of energy includes multiple ingredients like portfolio laws, financial incentives, and net metering.

In June the Pennsylvania Public Utility Commission (PUC) voted four-to-one to adopt a set of net metering standards that will encourage the development of alternative energy as set forth in the Alternative Energy Portfolio Standards Act (AEPS). The new net metering requirements will govern how electric utilities meter and compensate customers who generate their own electricity using alternative energy sources.

While passage of the AEPS in November 2004 was a catalyst for increasing alternative energy supplies in the Commonwealth, outdated net metering regulations still remained in place, creating a disincentive for small businesses and individuals to invest in smaller renewable energy projects located at a home, business or farm.

Under the existing regulations electric customers that produced all their power, whether it be from a biodigester, solar array or fuel cell, still had to pay the utility roughly two-thirds of their electric bills. That is because the regulations allowed the utility to continue charging for items like standby power, the distribution system, past nuclear power costs, manual billing and other factors. In addition, customers generating their own electricity were not receiving full retail rate for the power they produced. Instead the self-generators were paid by the utilities for their excess power about 30 percent of the retail electric rate that utilities charged for power.

The rate treatment of small, renewable generation was so harsh that the construction of farm digester projects that were awarded grants by either the Pennsylvania Department of Environmental Protection's Energy Harvest program or the Pennsylvania Department of Agriculture were actually brought to a halt. Even though state programs were encouraging new alternative energy development, the existing regulations were too often a big stop sign, stopping small, distributed renewable energy systems.

For these reasons, when the PUC began drafting new net metering regulations as required by the AEPS, PennFuture with the support of Pennsylvania's agriculture sector, advocated for viable regulations to provide a greater incentive to customer-generators, particularly farmers, and to encourage the development of alternative energy resources.

Based on our analysis of the new regulations below, PennFuture commends the PUC for substantially improving the net metering rules. The key aspects of the new regulations include:

1. For the first time in Pennsylvania, utilities are required to reimburse customer-generators at the full retail rate for each kilowatt-hour (kWh) produced by an AEPS Tier I or Tier II resource during a billing period, up to the total amount of power consumed. At the end of the billing period, the utility will reimburse the customer-generator at their avoided cost of wholesale power for excess power delivered to the grid during that same billing period.

   While this is a large win for the customer-generator, it would be more beneficial if the crediting cycle occurred annually, as is the case in New Jersey, instead of tied to the monthly billing period. Solar arrays typically produce more power in the summer months and less in the winter. This is also a concern for biodigesters, which produce more power during the colder months. For both these technologies, customer-generators would fare better receiving credits on an annual basis, as opposed to greater amounts some months and nothing at all in other months.

2. The new regulations allow for both physical and virtual meter aggregation "regardless of rate class" on a property "owned and or leased" by a customer-generator. This is particularly advantageous to the farmers who have a wide variety of structures on their lands: barns, buildings, shops and residences. These structures have their own meters, some with residential rate schedules and others with commercial schedules. In addition, since the definition was changed to include those that lease their land, the rule opens up the door for more farmers and other businesses to use net metering.

Citizens for Pennsylvania's Future • 610 North Third Street • Harrisburg, PA 17101
1-800-321-7775 (in PA) • 717-214-7920 (Phone) • 717-214-7927 (Fax)
Email: info@pennfuture.org • Website: www.pennfuture.org

3. The definition of virtual and physical meter aggregation allows for the combining of separate meters within two miles of the customer-generator's property. A customer-generator who has meters on non-contiguous land will be able to net meter, and that is another big win for the agricultural community. The Pennsylvania Department of Agriculture recently conducted a survey of 26 farms in the state that have either a manure digester operating, under construction, or in the planning stages. Of the 21 farm operations that responded, the Department discovered the average farm to contain seven meters and three separate rate classes. In addition, 19 of the 21 farm operations have multiple farms that are not contiguous. In the farming community a livestock or dairy farmer often has a primary facility at which the manure digester generator will be located, plus nearby farm parcels that support the primary operation but are not located on contiguous or adjacent parcels. Without a provision in the regulations to allow for non-contiguous properties to net meter, a large portion of the farms in Pennsylvania would be unable to realize its benefits.

   Those outside the agriculture sector will also benefit from this definition. Other examples include a fuel cell that provides critical power to a community cluster including traffic signals, hospitals, police stations and other critical core facilities. All of these projects will now be able to net meter within two miles of the customer-generator's property.

4. The regulations also allow for the customer-generator to maintain ownership of any alternative energy credits produced. Additionally, if the customer-generator rejects ownership of the credits, the utility needs to inform the customer of the potential value of the credits and other options available to them for the settlement of those credits. This provides an additional revenue stream for the customer.

The new net metering regulations will remove many of the traditional barriers to the development of clean distributed generation. While this is a victory for Pennsylvania, new regulations alone may not be enough. Customers need to be educated on the availability of net metering and the benefits it offers.

Additionally, the PUC is still in the process of finalizing interconnection standards for distributed generation systems. This rulemaking will affect those customers who net meter, and it is equally important that the PUC develop these in a manner that does not discriminate against customer-generators. Interconnection requirements that include lengthy review and application timeframes and unreasonable insurance requirements can create barriers to the development of clean generation.

While the net metering rules are not perfect and are not a magic energy wand, the new rules are much better and the PUC should be commended for the improvement. Pennsylvania now has a good net metering tool in its energy tool box and is on its way to building a cleaner more sustainable energy future.