

**New York State Remote Net Metering Fact Sheet****Written by: Jennifer Pronto and Curt Gooch, P.E.**

March 2012

Dept. of Biological and Environmental Engineering, Cornell University**Introduction**

The combustion of biogas from farm-based anaerobic digesters offers an opportunity for on-farm renewable energy generation. Biogas is commonly combusted in a Combined Heat and Power (CHP) system comprised of an engine-generator set to generate electrical power recover thermal heat from the system. This power is generally first used to offset electricity load on the farm. Any excess power generated is transferred to the utility grid serving the farm.

Net Metering Law

Previously, the Net Metering Law in New York State involved only one meter on the farm; power was transferred from the utility to the farm and from the farm generation equipment to the utility, through the same meter. During the billing year, excess electricity was used to offset purchases of electricity through that one meter. At the end of the billing year the farm was paid the wholesale rate for the net electricity transferred back to the grid. Please see the Net Metering Fact Sheet (http://www.manuremanagement.cornell.edu/Pages/General_Docs/Fact_Sheets/Net_Metering_factsheet_FINAL_2004.pdf) for additional details of the basic processes and requirements of net metering.

Economics of net metering

At the end of the billing year the unit price (cents/kWh) paid for excess electricity

transferred to the utility grid is not the same as the unit price the farm pays to purchase electricity from the utility; for some utility rate classes it is considerably less. This means that although the farm receives payment, this payment does not have as much impact financially as offsetting the farm's electricity load with the power generated. Therefore, the electricity generated on-farm should be first used to offset the electricity consumption on the farm, before transferring excess to the grid in order to realize the largest savings. To achieve greater benefits, some farms have incurred significant expenses to physically consolidate their electric loads from several meters to the one net meter interconnecting the generator and the grid.

Remote net metering

In 2011, the Net Metering Law was updated to reflect the addition of remote net metering. This allows farms to achieve greater benefits from net metering without the expense of physically consolidating the multiple-meter electric loads. Remote net metering allows the farm to, "designate all or a portion of the net metering credits...to meters ("satellite meters") at any property owned or leased by the customer generator" as long as those meters are within the same utility service territory, and are "within the same load zone". The changes were made effective December 1, 2011.



When a farm participates in remote net metering, they generate electricity as they normally would, and there should be no change to their generation or consumption patterns. As per the Net Metering Law:

“The electric corporation will credit the accounts of the customer by applying any credits to the highest use meter first, then subsequent highest use meters until all such credits are attributed to the customer. Any excess credits shall be carried over to the following month.”

Properties do not need to be contiguous in order for satellite meter accounts to be eligible.

Impacts of remote net metering

The biggest impact remote net metering will have for digester-operating farms is the financial impact from cost savings of electricity purchases for any of the farm’s utility meters listed as participating on the account. The cost savings realized through allocation of the excess electricity generated will mean significantly more, financially, than simply receiving the wholesale rate for the same amount of power.

In addition to on-going electrical demands that draw power continuously throughout the year (for example, a barn), some farms may have enterprises that operate seasonally that they would like to allocate remote net metering credits to. In this case as well, there is a savings benefit since excess credits are carried over month to month, with actual payment occurring at the conclusion of the billing year.

Practical considerations

How does remote net metering impact a farm that is already generating power and participating in net metering? A farm in this situation must reapply for net metering in

order to apply credits to satellite meter accounts.

For farms incorporating new digester systems on-farm, the process of interconnection and application for net metering with the appropriate utility provider will include remote net metering. The application process will involve selection of satellite meter accounts.

Farms (both those with new and with existing digester systems) must submit an application to their utility provider: for National Grid on January 1 and for NYSEG between January 1 and January 31 of each year, in order to apply or to amend their net metering contract. This is the *only* time each year a farm can add, subtract, or change the meters for which they can apply credits.

More information

The applications for remote net metering for NYSEG and for National Grid are available by contacting the customer service departments at each of these utilities, and are also posted on the Dairy Environmental Systems website, alongside the link to this fact sheet.

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