

# Net Energy Metering

MRC

November 16, 2011

- Based on Order No. 2003, FERC has jurisdiction over an interconnection when the Interconnection Customer plans to:
  - Interconnect to the transmission system; or
  - Interconnect to the distribution system to engage in a sale for resale in interstate commerce.

- FERC does not have authority over the physical interconnection of:
  - A net metering project;
  - An interconnection request at a non-OATT point on the distribution system; or
  - A QF selling directly to the Transmission Owner under a state's avoidable cost rate.
- However, even though FERC does not have jurisdiction over the ***physical*** interconnection it does have jurisdiction over any wholesale sales, including **excess** sales by a net metering project or a QF.

- If there is excess output at the end of the annual billing period, that excess is considered a wholesale sale subject to FERC jurisdiction and the generator would have to come in to the PJM queue.
- Regardless, these net energy metering projects will also have impacts to settlements, operations and planning.
- PJM has met with TOs to consider developing a process to handle generators who proposes a net energy metering unit in excess of its load needs.

- Net Energy Metering (NEM)– An incentive that allows customer-sited generators to use energy generated to offset all or part of their energy usage during a billing period.
- Occasional excess energy generated during a billing period is typically credited to offset the next billing periods energy use.
- If excess credits carry forward for a year, customers often qualify for a payment to clear excess
- *Generators can be sized so as to offset part or all of their energy consumption.*

- Several states have adopted net energy metering legislation or regulations proposing changes to net metering. Specifically,
  - Maryland: The eligible customer-generator's proposed electric generating system may not exceed *200 percent* of the eligible customer-generator's baseline annual usage.
  - Delaware: The eligible customer-generator's proposed electric generating system may not exceed *110 percent* of the eligible customer-generator's baseline annual usage.
  - Pennsylvania: The proposed legislation proposes that the eligible customer-generator's proposed electric generating system may not exceed *110 percent* of the eligible customer-generator's baseline annual usage.

- The Delaware law also provides for:
  - Aggregate Net Energy Metering (ANEM)
  - Virtual Net Energy Metering (VNEM)
  - Community Energy Facility (CEF)

- Virtual Net Energy Metering (VNEM) – An energy generating facility (net-metered) that has its (excess) energy credited to various customers' metered accounts by the EDC, typically based upon instructions provided by the owner of the facility. Other pseudonyms for VNEM include Community Solar or Renewable Energy & Local Renewable Energy
- Aggregate Net Energy Metering (ANEM) – A subset of VNEM where net energy metered facility (Host Facility) directs excess energy to be credited to other metered accounts **of the same customer** (often limited to accounts located on a single or contiguous properties).



- As alternative to VNEM, the generator directly receives compensation for net energy generated that would be equivalent to the sum of the avoided costs that would have been provided to individual metered accounts under VNEM.
- The CEF would have customer “subscribers” and would be responsible for distribution of any benefits to subscribers.
- Concept created initially in NJ to avoid the cost of modifying/replacing CIS to handle VNEM and to avoid FERC jurisdictional issues (maybe).

## What are the issues driving the request for this assignment ?

- Separating load (grid withdrawals) & generation (grid injections)
- Design of current zonal bus models for modeling smaller facilities' excess generation injections to the grid (acting like a generator)
- How to handle non-interval metered customers excess injections on other than an hourly basis (monthly or yearly)
- PJM eMTR handling of excess generation injections to the grid to establish revenue for these injections
- The tariff, manual, and business rule changes necessary to accommodate above changes to systems

What are we asking of MRC ?

Make assignment this month or next to new or existing PJM groups in accordance with draft problem statement / task force charter