



Primer Definitions and Discussion of Regulatory Issues

NEMSTF
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- **Net Metering**
 - Energy Policy Act of 2005 (EPAct2005) defines net metering service.
 - Service to an electric consumer under which electric energy generated by that electric consumer from an eligible on-site generating facility and delivered to local distribution facilities may be used to offset electric energy provided by the electric utility to the consumer during the billing period (See EPAct2005 at § 1251(a)).
 - FERC description of net metering (See Order No. 2003-A P 744).
 - Net metering allows a retail electric customer to produce and sell power onto the Transmission System without being subject to Commission jurisdiction.
 - A participant in a net metering program must be a net consumer of electricity – but for portions of the day or portions of the billing cycle, it may produce more electricity than it can consume itself.

- Under EPAct2005,
 - Within 2 years of enactment of EPAct2005, state commissions and non-regulated electric utilities were required to commence consideration, or set a hearing date for consideration, regarding adoption of new net metering standards.
 - The consideration of adopting new standards was to be completed within three years of enactment of EPAct2005 unless a state commission had already conducted a proceeding to consider implementation of a comparable standard or the state legislature had voted on the implementation of a comparable standard.
- State Legislation and regulations stemming from EPAct2005 have :
 - Limited the size of the generating unit(s) that qualify under the state's net metering program (at least one state has proposed no limit to the size of a qualifying unit);
 - Provided for an annual billing cycle;
 - Included generating units capable of producing and selling ***in excess*** of its net consumption;
 - Aggregating and Virtual Net Metering arrangements.

Definition of Behind the Meter Generation

- **Behind the Meter Generation** (see PJM Tariff at §1.3B):
 - A generation unit that delivers energy to load without using the Transmission System or any distribution facilities and such consent has been demonstrated to the satisfaction of the Office of the Interconnection.
 - Any Behind the Meter Generation that desires to be designated, in whole or in part, as a Capacity Resource or Energy Resource must submit a Generation Interconnection Request (see PJM Tariff at § 36.1A.1). Any portion qualifying as a Capacity/Energy Resource would not qualify as Behind the Meter Generation.
 - Behind the Meter Generation does not include:
 - at anytime, any portion of such generating unit's capacity is designated as a Generation Capacity Resource; or
 - in an hour, any portion of the output of such generating unit(s) that is sold to another entity for consumption at another electrical location or into the PJM Interchange Energy market.
 - Behind the Meter Generation for which a Generation Interconnection Request is not required may be subject to other interconnection-related requirements of a Transmission Owner or Electric Distributor with which the generation facility will be interconnected (see PJM Tariff at § 36.1A.7).

- Other Forms of Behind the Meter Generation
 - Non-Retail Behind the Meter Generation (see PJM Tariff § 1.27AA):
 - Behind the Meter Generation that is used by municipal electric systems, electric cooperatives or electric distribution companies to serve load.
 - On-Site Generator (see PJM Tariff § 1.3.21A):
 - A generation facility (including Behind the Meter Generation) that:
 - is not a Capacity Resource;
 - is not injecting into the grid;
 - is either synchronized or non-synchronized to the Transmission system; and
 - can be used to reduce demand for the purpose of participating in the PJM Interchange Energy Market.

Description of Qualifying Facility

- The Public Utility Regulatory Policies Act of 1978 (PURPA) was implemented to encourage, among other things,
 - the conservation of electric energy
 - increased efficiency in the use of facilities and resources by electric utilities
 - equitable retail rates for electric consumers
 - expeditious development of hydroelectric potential at existing small dams and
 - conservation of natural gas while ensuring that rates to natural gas consumers are equitable.
- One of the ways PURPA set out to accomplish its goals was through the establishment of a new class of generating facilities which would receive special rate and regulatory treatment. Such generating facilities are known as qualifying facilities (QFs) and fall into two categories:
 - Qualifying small power production facilities: a generating facility of 80 MW or less whose primary energy source is renewable (hydro, wind or solar), biomass, waste, or geothermal resources. In order to be considered a qualifying small power production facility a facility must meet certain requirements for size and fuel use and be certified as a QF; and
 - qualifying cogeneration facilities: a generating facility that sequentially produces electricity and another form of useful thermal energy (heat or steam).

Changes in the QF Regulations

- Under PURPA electric utilities were required to:
 - Enter into a purchase agreement with QF to purchase all available energy from the QF;
 - Rates could not exceed the incremental cost to the electric utility of alternative electric energy (also known as the electric utility's "avoided costs").
- FERC Order No. 688 issued Oct. 20, 2006, amended its regulations to relieve electric utilities located in PJM, MISO, ISO-NE and NYISO of the mandatory power purchase obligation for QFs above 20 MW.
- FERC Order No. 732 issued March 19, 2010 exempted 1 MW and smaller generating facilities from having to file with FERC to qualify as a QF.

- PJM is responsible for FERC jurisdictional interconnection projects.
- 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 a distribution system to engage in a sale for resale (wholesale sale) in interstate commerce.

- Since FERC has authority to regulate wholesale sales' transactions in interstate commerce, FERC exercises jurisdiction over interconnections to the distribution system when:
 - the Interconnection Request is submitted on behalf of a QF seeking to make wholesale sales; **OR**
 - the interconnection customer is not a QF; **and**
 - the interconnection customer requests to interconnect to a distribution facility included in a public utility's Commission-filed OATT; **and**
 - the interconnection is for the purpose of facilitating a jurisdictional wholesale sale of electric energy.

- FERC does not assert jurisdiction over a generating facility if the it is:
 - A net metering project
 - However, if there is excess output at the end of the billing period (e.g. annual billing period), that excess is considered a wholesale sale subject to FERC jurisdiction;
 - A Behind the Meter generator
 - However, if any portion of the output of such generating unit(s) is sold to another entity for consumption at another electrical location or into the PJM Interchange Energy market, such output is considered a wholesale sale subject to FERC jurisdiction; or
 - A QF selling its entire output directly to the Interconnected Transmission Owner under a state's avoidable cost rate (PURPA sale).

- FERC does not assert jurisdiction over the ***physical*** interconnection of a generator seeking to interconnect to a non-OATT distribution facility even though it is seeking to make wholesale sales into the PJM Interchange Energy Market (See Order No. 2003-A, n. 168).
- However, even though FERC does not assert jurisdiction over the ***physical*** interconnection, FERC asserts jurisdiction over any wholesale sales. For example:
 - Generating Facilities that make wholesale sales over a non-OATT distribution facility;
 - Excess sales into the PJM Energy Market by a net metering project; and
 - Any portion of the output from a Behind the Meter Generator that the generator desires to be designated as a Capacity Resource or Energy Resource to be sold into the PJM market.