

To: PJM Net Energy Metering Senior Task Force
From: Interstate Renewable Energy Council, Inc., Jason Keyes and Thad Culley
Re: Jurisdictional Implications of New Net Metering Programs
Date: 5/22/2012

I. SUMMARY

FERC precedent clearly keeps traditional net energy metering (NEM) programs, where customers install generation to offset purchases from the utility on monthly billing statements, outside of its jurisdiction. However, emerging state policies such as Aggregate Net Metering (ANM), Virtual Net Metering (VNM) and Community Solar (CS) allow a customer to utilize a generator's output without requiring the generator to be physically connected behind the customer's meter. This memorandum (1) reviews FERC's NEM framework, (2) identifies the elements of new programs that are significant to FERC's analysis regarding NEM, (3) analyzes whether these new considerations fit within FERC's existing framework, and (4) determines how these new types of NEM facilities may become subject FERC jurisdiction. It concludes that in most cases ANM, VNM and CS fit within the FERC framework for traditional NEM and do not trigger FERC jurisdiction.

II. BACKGROUND ON STATE NET METERING PROGRAMS

Net energy metering traditionally involves a customer who installs a generation facility sized to serve on-site load and to offset utility purchases. A customer earns bill credits for all generation that is not instantaneously consumed. The bill credit is applied to the customer's monthly billing statement and netted against consumption.¹ If a customer's generation exceeds its consumption over the billing period, many state programs allow the excess generation to "roll over" to the next month, valued at the full retail rate. In states without rollover provisions, the utility either compensates customers for excess generation at the utility's avoided cost, or it obtains the excess generation without compensation. Forty-three states currently feature NEM policies, including all of the states within PJM's territory, except Tennessee.

Traditional on-site NEM is unavailable to many customers, including those who do not own their residences or do not have sufficient access to sunlight or space to install a system. Recently, states have begun to adopt new programs that expand NEM to these types of customers.² ANM allows a single customer with multiple accounts, or multiple meters, on a property to aggregate

¹ NEM's core policy function is to accommodate generators with intermittent output by allowing generation that exceeds on-site consumption on an instantaneous basis to be netted against that customers total consumption over a billing period.

² This is also the case for agricultural customers who may have multiple metered loads dispersed throughout a farm and the expense configuring a generator to physically interconnect and serve those dispersed loads is impractical. As discussed in footnote 3, below, aggregate net metering is often intended to accommodate agricultural customers.

load against the output of a generating facility.³ VNM is a mechanism whereby customers receive generation credits from a facility that is not physically connected to those customers' meters.⁴ A CS project can mean many things, but in the context of PJM, we refer to Delaware's program. There, customers participate in a renewable energy facility that is sized to offset their collective load, up to the established per-customer NEM capacity limit. Customers may be credited or paid for their proportionate share of the facility's generation. Any customer located within Delmarva's service territory may participate, meaning the benefitting customer can be quite distant from the generating facility.

III. DISCUSSION

A. FERC Treatment of Traditional Net Energy Metering Facilities

FERC precedent holds that the practice of "netting" generation and load over a billing period does not constitute a "sale" subject to FERC jurisdiction.⁵ In *MidAmerican*, FERC rejected the utility's argument that every export in a net metering arrangement "constituted a sale" to the utility.⁶ FERC stated that retail net metering was factually analogous to self-supply, where generating stations connected to transmission "net" consumption and production from one generating station with others owned by the same entity.⁷ This practice, which FERC allows, enables an entity that owns one or more generating assets to self-supply the power needed to operate a generation station rather than having to purchase all of its requirements at retail from the utility serving the site.⁸ Further, FERC determined in *PJM Interconnection* that such instances of self-supply and remote self-supply are a billing practice that do not involve a sale of electricity so long as the generating facility receiving station power was a net producer over the applicable billing period.⁹

FERC's application of the station power "netting" principle to the retail net metering context resulted in a broad definition of net metering. In *MidAmerican*, FERC described net metering as a process where "an individual homeowner or farmer... installs generation and accounts for its dealings with the utility through the practice of netting."¹⁰ Similar to its holding in the station

³ West Virginia allows physical meter aggregation (involving rewiring to physically connect all loads to generation) as well as "virtual meter aggregation" (allowing the aggregation to be done "virtually" through the utility's billing practice).

⁴ Elements of VNM exist in one type of ANM (in West Virginia, discussed in footnote 3, *supra*) and in Community Solar projects.

⁵ FERC's jurisdiction over sales of electricity is limited to sales for resale (i.e., wholesale sales) in interstate commerce. Section 201(b) of the Federal Power Act (FPA) states that FERC's jurisdiction applies to "the sale of electric energy at wholesale in interstate commerce, but except as provided in paragraph (2) shall not apply to *any other sale* of electric energy."⁵

⁶ *MidAmerican Energy Company*, 94 FERC ¶ 61,340 at 62,263 (2001).

⁷ See *PJM Interconnection*, (commonly known as "*PJM II*") 94 F.E.R.C. ¶ 61,251 at 61,890 (2001).

⁸ See *Duke Energy Moss Landing LLC v. California ISO*, 109 FERC ¶ 61,170 at P 25 (2004) (Discussing *PJM II*).

⁹ *PJM II*, 94 F.E.R.C. ¶ 61,251 at 61,890 ("Because a self-supplying generator is not using another's generating facilities, it is not causing another to incur costs associated with the usage of the other's generating resources that would warrant a form of consideration. In other words, there is no sale (for end use or otherwise) between two different parties, but only one party using its own generating resources for the purposes of self-supply and accounting for such usage through the practice of netting.")

¹⁰ *MidAmerican*, 94 FERC ¶ 61,340 at 62,263. [emphasis added].

power cases, FERC characterizes net metering as a net billing arrangement, *i.e.*, a matter of accounting.

Later precedent concurs with *MidAmerican*'s conclusions. In *SunEdison*, FERC noted that it has only asserted its jurisdiction over transactions when there is a "net sale" from the net metering customer to the utility over the course of the billing period.¹¹ FERC further held that a "net sale" only occurs where a customer produces more electricity than it consumes during the applicable billing period.¹²

FERC allows a great deal of flexibility in determining the length of a "billing period." FERC has explicitly stated that a "monthly" billing period is reasonable, but has not excluded the possibility that longer billing periods may also be appropriate. In *MidAmerican*, FERC expressly held that the Iowa Commission's monthly netting process was reasonable and saw no reason to interfere with the process.¹³ In *SunEdison*, FERC stated that "other billing periods could also be reasonable."¹⁴

B. New Jurisdictional Considerations for ANM, VNM, and CS

There are several different factual circumstances between NEM programs and ANM, VNM and CS programs:

- VNM and CS facilities provide generation credits to multiple customers;
- ANM, VNM and CS may provide generation credits to off-site customers and require use of the utility's distribution grid; and
- CS or VNM customers in some programs receive direct payment for system production via a check, rather than bill credits on monthly utility billing statements.

However, our review of FERC precedent on the practice of "netting" concludes that these new programs remain consistent with FERC's view that the practice of net metering—applying generation credits to offset purchases from the utility—does not normally involve a sale of electricity over which FERC will exert its FPA jurisdiction.

1. Does the fact that VNM and CS facilities serve multiple customers change the jurisdictional analysis?

While FERC has not addressed the scenario where a single net metering facility provides bill credit benefits to multiple customers, the number of eligible customer-generators that receive credits from a single generator is immaterial to the jurisdictional analysis. A customer that is eligible to participate in a VNM or CS program, and that has a definite right to some portion of a system's output, engages in the same self-supply as recognized in FERC's station power cases. It is unlikely that the number of customers in a VNM or CS program would trigger FERC jurisdiction.

¹¹ *SunEdison* 129 FERC ¶ 61,146 at P 18.

¹² *MidAmerican*, 94 FERC ¶ 61,340 at 62,263.

¹³ *MidAmerican*, 94 FERC ¶ 61,340 at 62,264.

¹⁴ *SunEdison* 129 FERC ¶ 61,146 at P 18.

2. Does the use of local distribution facilities to credit off-site customers change the jurisdictional analysis?

The practice of netting over local distribution facilities does not trigger FERC jurisdiction but may implicate the state's authority to assess retail delivery charges for use of local distribution facilities. The most significant difference between the new forms and the traditional form of NEM is that the new forms give customers the benefits of generation even where a facility does not physically serve the customers' load. FERC's *MidAmerican* and *SunEdison* cases did not address the question of whether a NEM facility had to be on-site with the customer.

FERC's station power cases do address the circumstances where an off-site generator is used for "netting" purposes, supporting the notion that customer-generators should also be allowed to engage in "remote self-supply."¹⁵ In *PJM II*, FERC affirmed the practice of remote self-supply, holding that no "sale" occurs under those circumstances where a facility uses its own generation to supply station power.¹⁶ Similarly, a NEM facility utilizing ANM—where all meters are on the same property but not necessarily connected to the same utility service point—might engage in "remote self-supply" because it would rely on the utility's grid to net its dispersed loads from its generating facility. FERC has been consistent on this point, and has repeatedly held that aggregating meters on a single site also falls under the concept of "remote self-supply." Accordingly, this practice does not constitute a sale where the generating station is a net producer of electricity over the billing period.

Additionally, FERC has considered the impact of using the local distribution grid to engage in "netting" in the context of whether a state offers retail choice or maintains traditional utility franchise rights. FERC has recognized that third-party supplied station power may constitute a retail sale that could violate a state's territorial service area laws, because a facility that has "negative generation" (i.e., consumes more than it generates) is making a net retail purchase of electricity for its own use.¹⁷ Such a transaction would be subject to state law.¹⁸ Regardless of this separate issue of whether use of the distribution grid to accomplish netting is allowed under state law, the basic principle from the station power cases remains: FERC does not view "netting" as a wholesale sale or a retail sale, even where it occurs through remote self-supply over local distribution facilities.¹⁹

The practice of netting over local distribution facilities may not constitute a "sale", for purposes of FERC jurisdiction, but it may implicate the state's authority to assess retail delivery charges for use of local distribution facilities. FERC's analysis changes when a generating facility is connected to local distribution. Use of the local distribution grid to deliver retail power is part of the state's exclusive jurisdiction over local distribution.²⁰ Using this authority, states may choose

¹⁵ See *KeySpan-Ravenswood v. New York ISO*, 107 FERC ¶ 61,142 P 63, footnote 69 (2004) (rejecting argument that FERC precedent requires netting to occur over the same set of interconnection facilities).

¹⁶ *PJM II*, 94 FERC ¶ 61,251 at 61,980.

¹⁷ *California ISO*, 111 FERC ¶ 61,542 P 17 (2005).

¹⁸ *Id.*

¹⁹ *Id.* at P 18.

²⁰ FPA Section 201(b) reserves jurisdiction over local distribution to the states. 16 U.S.C. § 824(b)(1); see also *Nine Mile Point Nuclear Station v. Niagara Mohawk Power Corp.*, 105 FERC ¶ 61,336 P 23 (2003) ("Any delivery of station power over local distribution facilities and the compensation for such delivery is a matter properly for the New York Commission and not for this Commission.").

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to assess retail delivery charges for netting when a customer-generator engages in remote self-supply through local distribution facilities.²¹

Lastly, the fact that a sale occurs on local distribution facilities does not shield the transaction from FERC's jurisdiction over wholesale sales in interstate commerce. The fact that the electricity is produced and consumed in a single state does not, on its own, remove the sale from interstate commerce.²² Section 201(b) of the FPA does reserve jurisdiction over local distribution facilities to the states, but this does not negate FERC's exclusive jurisdiction over wholesale sales that might occur on those facilities.²³ Accordingly, sales for resale consummated on the local distribution grid that, arguably, never touch the interstate transmission grid, are nonetheless FERC jurisdictional sales for resale in interstate commerce.²⁴

3. Do different compensation mechanisms for ANM, VNM, and CS participants change the jurisdictional analysis?

The only compensation mechanism that triggers FERC's authority is a sale of excess generation over the course of a billing period that is not sold under PURPA. Several VNM and CS programs across the country have introduced the option of compensating a customer for all generation through a monthly check, in lieu of administering bill credits through the utility's billing system.

When there is a "sale" from a QF to a utility pursuant to PURPA (i.e., at or below avoided cost)²⁵, FERC does not assert its jurisdiction and the generator does not have to submit an FPA filing for approval of the sale.²⁶ As FERC explains, these transactions are exempted under FERC regulations that allow QFs to compel purchase of output at or below the utility's avoided cost.²⁷ Any sale for resale from a non-QF, however, is subject to FERC's jurisdiction and FPA filing requirements.²⁸ This is because non-QFs do not enjoy the same exemption from the FPA requirements as QFs. A direct payment from a utility to a non-QF at any price appears to be such a "sale."

²¹ See *Midwest ISO*, 106 FERC ¶ 61,073 P 45 (2004) (clarifying that no local distribution charges apply "to remotely self-supplied station power when no local distribution facilities are actually used to deliver such supply.").

²² See *T&E Pastorino Nursery v. Duke Energy Trading and Mktg., LLC*, 2003 U.S. Dist. LEXIS 16352 (S.D. Cal. Aug. 25, 2003), *aff'd* 2005 U.S. App. LEXIS 3315 (9th Cir. Feb. 25, 2005) ("The fact that a significant portion of the transactions at issue concern sales of electricity generated in California and sold in California does not alter the conclusion that the wholesale transactions are still interstate in nature.").

²³ See, e.g., *Detroit Edison Co. v. Federal Energy Regulatory Commission*, 334 F.3d 48, 51 (D.C. Cir. 2003) ("when a local distribution facility is used in a wholesale transaction, FERC has jurisdiction over that transaction pursuant to its wholesale jurisdiction under *FPA § 201(b)(1)*"); *Federal Power Comm'n v. Southern Cal. Edison Co.*, 376 U.S. 205 (1964).

²⁴ The only exception to this rule occurs when a grid system is physically separate from the interstate grid, as is the case in Hawaii, Alaska, and ERCOT portions of Texas. See *New York v. FERC*, 535 U.S. 1, 7 (2002).

²⁵ See *American Paper Inst., Inc. v. American Elec. Power Serv. Corp.*, 461 U.S. 402, 416 (1983) (noting that a QF may receive a rate below avoided cost where the state commission setting the rate has applied for a waiver from the full avoided cost rule or where the utility and QF negotiate a price below avoided cost).

²⁶ *SunEdison* 129 FERC ¶ 61,146 at P 18.

²⁷ *SunEdison* 129 FERC ¶ 61,146 at P 18 (citing 18 C.F.R. § 292.601).

²⁸ However, it should be noted that most NEM facilities would qualify for the exemption to QF certification filings for eligible technologies less than 1 MW. See FERC Order No. 732 at ¶ 35 (2010).

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For a QF, PURPA regulations appear to provide utilities the option of voluntarily agreeing to make a direct payment to a customer, in lieu of allocating generating credits to multiple customers' bills. This arrangement, however, would appear to be a sale, and as such would be subject to PURPA's limitations for QFs. A direct payment for system output does not appear to fit FERC's concept of "netting" as applying "bill credits."²⁹ Such a direct payment for all generator output appears inconsistent with FERC's view that no sale occurs when a customer consumes more than it generates and that the proper accounting mechanism is a "credit", not a check.

Utilities may voluntarily agree to make direct payments to customers at a rate other than avoided costs, under an exception to the avoided cost limit in FERC's PURPA regulations, but any generator receiving that rate must also be a QF.³⁰ This approach to compensating NEM generators may appeal to utilities because of its relative simplicity; a utility might find that measuring generator output and issuing a check each month might be simpler than reconfiguring billing systems to allocate bill credits to net against multiple customers' loads. A voluntary arrangement to purchase the output of a non-QF in this manner, however, is outside of PURPA and is subject to FERC's exclusive jurisdiction over wholesale sales in interstate commerce under the FPA.

IV. CONCLUSION

FERC precedent clearly allows state NEM programs to give customers full retail credit for generator output to offset purchases from the utility on monthly billing statements. This analysis is not affected by the fact that multiple customers receive credits from a single generating system or the fact that credits to "remote", off-site customers may utilize the local distribution grid for "delivery." ANM, VNM, and CS programs that follow the traditional NEM model for applying bill credits are within the jurisdictional bounds FERC established in *MidAmerican* and *SunEdison*. Thus, we conclude:

- The accounting practice of "netting" does not result in a sale regardless of whether it takes place in a NEM, ANM, VNM or CS program;
- If a sale for resale occurs (i.e., excess generation over the course of the applicable billing period) and the generator is not a QF, the Federal Power Act gives FERC exclusive jurisdiction over the transaction; and
- If a sale for resale occurs and the generator is a QF, then the sale must be pursuant to PURPA and may not exceed the utility's avoided cost.

Please contact Jason Keyes, jkeyes@keyesandfox.com, or Thad Culley, tculley@keyesandfox.com, representing the Interstate Renewable Energy Council, Inc., with any questions or concerns.

²⁹ In *SunEdison*, FERC suggests that the mechanism to accomplish "netting" is narrow, holding that net metering involves a "generator receiv[ing] a credit against its retail power purchases from the selling utility." *Id.*

³⁰ 18 C.F.R. 292.301(b); see also *Pub. Util. Comm'n of Texas v. Gulf States Power Co.*, 809 S.W.2d 201 (Texas 1991) (interpreting § 292.301(b) to allow utilities to negotiate a price above avoided cost, in addition to the U.S. Supreme Court's holding in *American Paper* that this provision allows utilities and QFs to negotiate a rate below avoided cost.).