

*Net Energy Metering
and
Other Distributed Energy Resources*

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Definition of "net metering" from Order 2003-A.

"Net metering allows a retail electric customer to produce and sell power onto the Transmission System without being subject to the Commission's 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 use itself. This electricity is sent back onto the Transmission System to be consumed by other end-users. Since the program participant is still a net consumer of electricity, it receives an electric bill at the end of the billing cycle that is reduced by the amount of energy it sold back to the utility. Essentially, the electric meter "runs backwards" during the portion of the billing cycle when the load produces more power that it needs, and runs normally when the load takes electricity off the system." *Standardization of Generator Interconnection Agreements and Procedures*, [Order No. 2003-A](#), *FERC Statutes and Regulations, Regulations Preambles 2001-2006* ¶31,160 at P 744, *order on red's*, [Order No. 2003-B](#), *FERC Statutes and Regulations, Regulations Preambles 2001-2005* ¶31,171 (2004), *order on reh'g*, [Order No. 2003-C](#), *FERC Statutes and Regulations, Regulations Preambles 2001-2005* ¶31,190 (2005), *aff'd sub nom. NARUC v. FERC*, 475 F.3d 1277 (D.C. Cir 2007).

Gradual Drift of NEM

- **Allowing excess generation (or \$) to be carried for from month-to-month**
- **Payment to customer for built-up credit at anniversary or annually**
- **Allowing customers to size generators larger than historical load**

NEM- Key Jurisdictional Variations

	Delaware	New Jersey	Maryland	District of Columbia
Generator Size	2 MW Commercial 25 kW Residential 100 kW Agricultural	None	2 MW (30 kW for Micro-CHP)	1 MW
Generation Cap (% of Annual Consumption)	110% (Based on 2 yr history)	100%	200%	100%
Monthly Excess Generation	kWh carried forward	kWh carried forward	kWh carried forward	Converted to \$ & \$ carried forward
Annual Payout	Credited on Anniversary by Energy Supplier	Credited on Anniversary by Energy Supplier	Paid @ end of April by EDC	-
Excess Valued @	@ Supply Charge (No Trans)	@ LMP	@ Generation or Commodity Rate (No Transmission)	<=100kW @Supply + Dist Charges >100kW Supply Only (Yes Trans)

Gradual Drift of NEM

- **Allowing customer to size generator to be “net metered” across several aggregated accounts (Aggregated Net Energy Metering – ANEM)**
- **Allowing a generator to assign its output to several customers to be “net metered” (Virtual Net Energy Metering)**

Community Energy Facilities

- * **A renewable generator signs up customers as subscribers**
- * **The contractual arrangement between the generator and subscribers not necessarily known by the supplier**
- * **The generator's output would be directly metered and sold to the customer's supplier to offset subscriber's consumption**
- * **The value of generation is based on the supplier's rates to subscribers**
- * **Compensation is made directly to the generator or split-up and provided to the subscribing customer as a line item credit on their utility bills.**

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New Tariff Implementation

	Delaware	New Jersey	Maryland	District of Columbia
Aggregate Net Metering	Tariff Effective Virtually Unlimited (3 participating)	Pilot (Red Skye) (11 participants)	Pilot Tariff (4 participants)	-
ANEM Limitations	Single Supplier	Agricultural, 5 Meters Total Contiguous Property New ANEM for Munis Rulemaking in Progress	Agricultural, Municipal, or Not-For-Profit 3 Generator and 20 Aggregated Meters Single Supplier	-
Community Energy Facility	Tariff Effective Payment to Generator	-	WG Addressing Issues with Stalled Bill) (SB 595)	WG Established to Address Issues with Stalled Bill
CEF Limitations	NEM Technologies Single Supplier	-	NEM Technologies Single Supplier	Renewable Only



Outstanding Issues (Short-List)

- * **FERC and SEC Treatment**
 - ▶ **FERC Jurisdictional Sale**
 - ▶ **CEF Subscribers considered investors by SEC**

- * **Avoidance of Distribution Charges**

- * **Coordination with wholesale & third-party suppliers**

- * **Definition of single customer or entity (ANEM)**

- * **Potential for cross-subsidization**

- * **Cost Recovery for utilities**