# **Traditional Net Energy Metering**

- Net Energy Metering (NEM)– An incentive that allows customersited generators to use energy generated to offset all or part of the customer's on-site energy use during a billing period
- Occasional excess energy generated during a billing month is typically credited to offset the next month's energy use
- If excess credits carry forward for a year, customers often qualify for a payment to clear excess
- Generation is sized with the intent to primarily offset some or all of a customers load (typically interpreted to mean no more than a customer's annual consumption)

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

Pepco Holdings, Inc

"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 endusers. 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 <u>131,171</u> (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).

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# **NEM-** Cross 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%	100%	200%	100%
Excess Payments	Paid on Anniversary by Energy Supplier	Paid on Anniversary by Energy Supplier	Paid @ end of April by EDC	Paid each month by Energy Supplier
Excess Payment Rate	@ Supply Charge (No Trans)	@ LMP	@ Generation or Commodity Rate (Trans in dispute)	<=100kW @Supply + Dist Charges >100kW Supply Only (Yes Trans)

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# Range of Distributed Energy Resources

• Net Energy Metered Facilities

\* Generators injecting behind the retail customer's meter as allowed under an ECS net metering rider.

- Distributed Generators
  - \* Aggregated NEMs
  - **\*** Virtual NEMs
  - **\*** Qualifying Facilities
  - **\*** Community Energy Facilities

#### **NEM-Like Constructs**

- \* Aggregate Net Energy Metering (ANEM) A customer-generator uses excess energy generated to offset the energy use at the customer's other metered accounts regardless of physical location
- Virtual Net Energy Metering (VNEM) A generator that uses (excess) energy to offset the energy consumption of a set of customers designated by the generator regardless of physical location

### **Community Energy Facilities**

- \* A renewable generator signs up customers as subscribers
- \* The contractual is arrangement between the generator and subscribers not necessarily know by the utility/supplier
- \* The generator's output would be directly metered
- \* The generator compensated by the utility/supplier at a rate related to the tariff rates of the subscribing customers
- \* Generator distributes any benefits to subscribers

# New Tariff Implementation

	Delaware	New Jersey	Maryland	District of Columbia
Aggregate Net Metering	Tariff Effective	Pilot	Pilot Tariff Full Tariff by 2013	-
ANEM Limitations	-	Agricultural, 5 Meters Total Contiguous Property	Agricultural, Municipal, or Not-For-Profit 1 Generator and 5 Aggregated Meters	-
Virtual Net Metering	Legislated as with ANEM but with alternative structure (CEF) available	Bill Stalled	Draft Bill	Draft Bill
VNEM Limitations	_	-	_	_
Community Energy Facility	Tariff Effective	Bill Stalled Pilot Being Negotiated	-	_
CEF Limitations	Renewable Only	-	-	-