



Partnership Between National Association of Regulatory Utility Commissioners Energy Regulatory Partnership Program

and

The National Commission for Energy State Regulation of Ukraine



Ninth Partnership Activity







Renewable Energy Requirements

On January 19, 2005, the District of Columbia Council enacted the Renewable Energy Portfolio Standard Act ("REPS Act"), which established a renewable energy portfolio standard ("RPS") through which a minimum percentage of District electric providers' supply must be derived from renewable energy sources beginning January 1, 2007.





Renewable Energy Requirements

Distributed Generation Amendment

REPS Requirements

Year	Tier I	Tier II	Solar
2011	4.0%	2.5%	0.400%
2012	5.0%	2.5%	0.500%
2013	6.5%	2.5%	0.500%
2014	8.0%	2.5%	0.600%
2015	9.5%	2.5%	0.700%
2016	11.5%	2.0%	0.825%
2017	13.5%	1.5%	0.980%
2018	15.5%	1.0%	1.150%
2019	17.5%	0.5%	1.350%
2020	20.0%	0.0%	1.580%
2021	20.0%	0.0%	1.850%
2022	20.0%	0.0%	2.175%
2023	20.0%	0.0%	2.500%





Renewable Energy Sources

- Tier I: solar, wind, biomass, methane, geothermal, ocean, and fuel cells; and
- Tier II: hydroelectric power other than pumped storage generation and waste-to-energy.
- Currently, solar energy systems must be located within the District or in a location served by a distribution feeder serving the District.





Creation and Tracking of Renewable Energy Credits (RECs)

- RECs created and tracked through the PJM Environmental Information Services' Generation Attribute Tracking System (GATS);
- Renewable generators and electricity suppliers establish accounts with GATS;
- Renewable generators submit an application to the Commission to determine eligibility and to receive a certification number before registering with GATS.





Compliance Requirements

- Electricity suppliers file an annual compliance report on May 1, following the year of compliance;
- If an electricity supplier fails to meet the RPS requirement, the supplier must submit a compliance fee;
- For Tier 1 resources, the compliance fee is \$50 per REC shortfall. For Tier II resources, the compliance fee is \$10 per REC shortfall. For solar resources, the compliance fee is \$500 per REC shortfall.





Net Metering

- Net energy metering allows customers to generate and sell excess electricity back to the grid.
- NEM meters measure electricity flowing to and from PEPCO's electrical distribution system.
- According to the 1999 Act, Net Metering eligible customer-generators include cogeneration, microturbines, fuel cells and renewable resources.





Net Metering

- On June 11, 2010, the Commission issued Order No. 15837 adopting final Net Energy Metering Rules and directing PEPCO to file a new NEM tariff and standard contract consistent with the Commission's NOFR.
- On April 8, 2011, the Commission issued Order No. 16300, approving PEPCO's Net Energy Metering Rider and Net Energy Metering Contract. (See Formal Case No. 945 in www.dcpsc.org)





Net Metering Rules

- An eligible customer-generator's facility shall meet all applicable safety and performance standards established by National Electrical Code (NEC), National Electrical Safety Code, the Institute of Electrical and Electronics Engineers (IEEE), Underwrites Laboratories (UL) and any other relevant standards specified by the Commission.
- For customer generators that have a capacity greater than 100 kWs but less than or equal to 1 MW, customer's net export will be paid at generation rate.
- For customer generators that have a capacity less than or equal to 100 kWs, the customer's net export will be paid at full retail rate (including generation, transmission and distribution).





Net Metering

- Such credits for excess generation shall be expressed as a dollar value showing in the customer's next bill.
- Net energy billing applies only to kWh usage charges. Net energy billing customers are responsible for all other charges applicable to the customer's rate class and recovered through fixed amounts or over units other than kWhs, including customer, demand and/or minimum charge, as applicable.
- Pepco also developed a standard contract and interconnection agreement which were approved by the Commission for customer's net metering purpose.





Net Metering/Interconnection

- Now we have smart meters which are compatible with net metering. However, for net metering, a special software fix must be done.
- Average size of Level 1 (less than 10 kW) net metering (interconnection) is around 4 kWs
- According to Pepco, they have processed and approved over 1,200 interconnection applications for operation in the District of Columbia from 2007 to date
- Our Commission also approved small generator interconnection rules in 2009 in Formal Case No. 1050. This rule covers small generators up to 10 MWs. The final rule is available at www.dcpsc.org.