

PA Incentives for DG and CHP

Act 213 – Alternative Energy Portfolio Standard

- SB 1030 signed into law (Act 213) on November 30, 2004
- Economic development was a primary driver for passage.
- 15 year standard. Begins June 1, 2006.
- Establishes two tiers for generation
 - Tier I includes the more traditional renewables; requirement is 8% by 2021 and is phased in over time.
 - Solar Photovoltaic
 - Wind Power
 - Low-Impact Hydropower
 - Geothermal Energy
 - Biologically Derived Methane Gas
 - Fuel Cells
 - Biomass Energy
 - Coal Mine Methane
 - Tier I includes a solar mandate, which is above the 8% Tier I requirement and = 0.5% of total electricity consumption by 2021, phased in over time.
 - Tier II includes alternative sources of electricity that provide some additional environmental benefit; requirement is 10% by 2021 and is phased in over time.
 - Waste Coal
 - Distributed Generation Systems
 - Demand Side Management
 - Large Scale Hydropower
 - Municipal Solid Waste
 - Electricity Generation from by-products pulping and wood manufacturing
 - Integrated Combined Coal Gasification Technology
- Requirement of all electricity generation companies and electricity distribution companies to comply with the standard by purchasing Renewable Energy Certificates (RECs)
- Requires the PUC to establish a tracking and trading mechanism for the RECs
- Requires the DEP to establish eligibility criteria for the specified resource categories; draft guidance posted at <http://www.dep.state.pa.us/dep/deputate/pollprev/PDF/Section%202%20Technical%20Guidance%20Final.pdf>
- Requires the PUC to establish uniform net metering and interconnection standards for the entire state rather than the limited, uncoordinated approach currently established within the major utilities tariff sheets.

CHP within the AEPS

- The AEPS definition of Distributed Generation Systems is all about CHP. The Act defines Distributed Generation Systems as the small-scale power generation of electricity and useful thermal generation.
- CHP is also be included under the definition Demand Side Management - industrial by-product technologies consisting of the use of a by-product from an industrial process, including the reuse of energy from exhaust gases or other manufacturing by-products that are used in the direct production of electricity at the facility of a customer.

DG within the AEPS

- DEP advocated that efficiency and conservation measures should be included as part of Tier I. It was initially inserted as a Tier I resource but through negotiations with multiple stakeholders, was eventually placed in Tier II.
- However, under Section 7(b) of the act, the Department is responsible for determining eligibility and compliance of all resources. The Department, through its draft technical guidance, has recommended that DG be limited to only Tier I resources.

Net Metering and Interconnection rules and procedures

- Technical standards are expected to follow standards that PJM is adopting.
- DEP is advocating for retail in, retail out with an annual true-up period. For generators producing excess power over the 12-month period, wholesale or locational marginal price would be offered for that portion.
- The Act defines a customer-generator as “A non-utility owner of a net metered distributed generation system with a nameplate capacity of:
 - Not greater than 50 kilowatts if residential
 - Not greater than 1,000 kilowatts at other customer service locations
 - Exception - Customers above 1 MW and up to 2 MW who make their systems available to operate in parallel with the electric utility during grid emergencies or where a micro-grid is in place for the purpose of maintaining critical infrastructure.
- An electricity generating company or electricity distribution company should not charge a customer-generator any fee or charge; or require additional equipment, insurance or any other requirement; unless the fee, charge, or other requirement would apply to other customers that are not customer-generators.
- Notwithstanding the above, strong consideration should be given, for consistency with PJM interconnection standards and the New Jersey interconnection and net metering rule, to allow all customer-generators up to two megawatts to qualify as a customer-generator, regardless of whether or not they allow systems to operate in parallel with the electric utility during grid emergencies.

NOx Rules

- Pennsylvania's recently adopted regulations to reduce NOx from mid-sized boilers, turbines, and IC engines contains several provisions that are designed to encourage the installation and operation of more efficient electrical generation equipment as well as broaden compliance options.
- The rules are designed to make it easier for all operators of affected units to comply and is especially helpful to those who operate smaller DG units by simplifying the compliance requirements and allowing the use of NOx allowances in lieu of installing emission controls.
- Operators of affected units may also use emission credit derived from the installation and operation of zero emission generation equipment. Other provisions allow the use of output based emission limits to encourage the utilization of more efficient units.
- <http://www.pacode.com/secure/data/025/chapter129/chap129toc.html>