

The Alternative Energy Portfolio Standards Act of 2004

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Renewable Portfolio Standards: Emerging Technologies, Regulations and Institutions

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Introduction

- On November 30, 2004, Governor Rendell signed the Alternative Energy Portfolio Standards Act, No. 213 of 2004, into law. 73 P.S. §§ 1648.1 - 1648.8.
- Act 213 took effect on February 28, 2005
- Act 213 is intended to foster economic development and encourage reliance on more diverse and environmentally friendly source of electricity.
- The Public Utility Commission, in conjunction with the Pennsylvania Department of Environmental Protection, has been charged with carrying out the provisions of Act 213.

Act 213's General Mandates

- Requires that a gradually increasing percentage of electricity sold to retail customers in Pennsylvania by electric distribution companies (“EDC”) and electric generation suppliers (“EGS”) be derived from “alternative energy sources.”
- Requires EDCs to permit retail customers to interconnect and net meter distributed generation resources from 50 kw to 2 MW, depending on customer type.
- Compliance is measured in quantities of “alternative energy credits,” which represent one MW hour of qualified generation.
- Financial penalties for noncompliance with Act 213 shall be assessed against EDCs and EGSs be used to fund alternative energy development.

Alternative Energy Resources

- Tier I Resources include: solar photovoltaic, solar thermal, wind power, low-impact hydropower, geothermal energy, biologically derived methane gas, fuel cells, biomass, and coal mine methane.
- Tier II Resources include: waste coal, distributed generation systems, demand-side management, large scale hydropower, municipal solid waste, byproducts of wood-pulping and manufacturing, and integrated combined coal gasification technology.
- Act 213 does not include comprehensive definitions for these resources. Specific standards will be identified by the Commission and the Pennsylvania DEP.

Act 213 Implementation Proceeding

- The Commission has opened an administrative proceeding at Docket M-00051865, *Implementation of the Alternative Energy Portfolio Standards Act of 2004*, to develop the necessary rules and procedures for Act 213.
- The Commission has convened staff led working group to provide a public forum to discuss issues and assist in the development of regulations.
- Participants have included representatives from Pennsylvania DEP, other state agencies, EDCs, EGSs, environmental interests, merchant generation companies, and others.
- The Commission has issued a number of orders at this docket identifying a compliance schedule and resolving certain procedural matters.

Act 213 Compliance Schedule

<u>Reporting Year</u>	<u>Period</u>	<u>Tier I</u>	<u>(incl. solar)</u>	<u>Tier II</u>
□ Year 1:	June 1, 2006 through May 31, 2007	1.5%	.0013%	4.2%
□ Year 2:	June 1, 2007 through May 31, 2008	1.5%	.0013%	4.2%
□ Year 3:	June 1, 2008 through May 31, 2009	2.0%	.0013%	4.2%
□ Year 4:	June 1, 2009 through May 31, 2010	2.5%	.0013%	4.2%
□ Year 5:	June 1, 2010 through May 31, 2011	3.0%	.0203%	6.2%
□ Year 6:	June 1, 2011 through May 31, 2012	3.5%	.0203%	6.2%
□ Year 7:	June 1, 2012 through May 31, 2013	4.0%	.0203%	6.2%
□ Year 8:	June 1, 2013 through May 31, 2014	4.5%	.0203%	6.2%
□ Year 9:	June 1, 2014 through May 31, 2015	5.0%	.0203%	6.2%
□ Year 10:	June 1, 2015 through May 31, 2016	5.5%	.2500%	8.2%
□ Year 11:	June 1, 2016 through May 31, 2017	6.0%	.2500%	8.2%
□ Year 12:	June 1, 2017 through May 31, 2018	6.5%	.2500%	8.2%
□ Year 13:	June 1, 2018 through May 31, 2019	7.0%	.2500%	8.2%
□ Year 14:	June 1, 2019 through May 31, 2020	7.5%	.2500%	8.2%
□ Year 15:	June 1, 2020 through May 31, 2021	8.0%	.5000%	10.0%

Compliance Exemption Periods: Compliance with Act 213 is exempted in an EDC service territory for that EDC and any EGSs for the term of its stranded cost recovery period or for the term of a POLR plan approved prior to February 28, 2006. 73 P.S. §1648.2.

<u>EDC Service Territory</u>	<u>Exemption expires</u>	<u>Compliance begins</u>
□ UGI Utilities Inc. – Electric Division	December 31, 2006	February 28, 2007
□ Pennsylvania Power Company	December 31, 2006	February 28, 2007
□ Pike County Power and Light	December 31, 2007	January 1, 2008
□ Citizens Electric of Lewisburg	December 31, 2007	January 1, 2008
□ Wellsboro Electric Company	December 31, 2007	January 1, 2008
□ Duquesne Light Company	December 31, 2007	January 1, 2008
□ PPL Electric Utilities, Inc.	December 31, 2009	January 1, 2010
□ West Penn Power Company	December 31, 2010	January 1, 2011
□ Pennsylvania Electric Company	December 31, 2010	January 1, 2011
□ Metropolitan Edison Company	December 31, 2010	January 1, 2011
□ PECO Energy Company	December 31, 2010	January 1, 2011



Other issues requiring resolution

- ❑ Attribute ownership and existing energy contracts
- ❑ Interconnection and net-metering rules
- ❑ Rules for demand side management and energy efficiency
- ❑ Cost-recovery standards and processes
- ❑ Resource qualification and credit certification standards and processes
- ❑ Force majeure standards and processes
- ❑ Credits program and administrator selection
- ❑ Credits registry: monitoring and reporting compliance
- ❑ Standards for receipt and disbursement of alternative compliance payments by the Pennsylvania Sustainable Energy Board
- ❑ Commission/DEP reporting obligations

Ownership of Alternative Energy Attributes

- Who owns the alternative energy attributes for generation sold pursuant to currently effective long-term generation contracts, where contract language is silent?
- The Commission has referred this issue to its Office of Administrative Law Judge for hearings and adjudication. *Petition for a Declaratory Order regarding the ownership of alternative energy credits*, Docket No. P-00052149 (Order entered March 23, 2005). Decision expected in 2006.

Interconnection Rules

- ❑ Act 213 requires the Commission to develop uniform, statewide rules for the interconnection of customer-generators of up to 50 KW at residential locations and 1 MW at other customer locations. Facilities of up to 2 MW that are designed to operate in parallel with and support the grid during emergencies may also qualify.
- ❑ Interconnection rules refer to the technical standards governing the physical connection of a customer-generator's distributed generation system with an EDC's distribution infrastructure.
- ❑ The Commission has issued proposed interconnection regulations for public comment. *Proposed Rulemaking Re Interconnection Standards for Customer-generators pursuant to Section 5 of the Alternative Energy Portfolio Standards Act, 73 P.S. 1648.5, Docket No. L-00050175* (Order entered November 16, 2005).
- ❑ Commission's interconnection rules, like rules in neighboring jurisdictions, are based on the IEEE 1547 technical standard.

Interconnection Rules, continued

- ❑ The Commission is one of the sponsors of the Mid-Atlantic Distributed Resources Initiative (“MADRI”), a coalition of interested parties trying to develop uniform standards for distributed generation in the Mid-Atlantic region.
- ❑ Recognizing the value of regional standardization, the Commission will continue to work with the MADRI process in developing its interconnection standards.
- ❑ These proposed rules will be published in the Pennsylvania Bulletin in the first quarter of 2006. After that, a sixty day public comment period will commence.
- ❑ After the comment period concludes, the Commission will make necessary revisions to the proposed rule and submit it for final approval by IRRC and the Attorney General.

Net Metering Rules

- ❑ Act 213 required the Commission to develop uniform, net metering rules for customer-generators.
- ❑ Net metering rules refers to the business rules that govern billing and compensation of customer-generators interconnected with the local EDC's distribution system.
- ❑ The Commission has issued proposed net metering regulations for public comment. *Proposed Rulemaking Re Net Metering for Customer-generators pursuant to Section 5 of the Alternative Energy Portfolio Standards Act, 73 P.S. 1648.5, Docket No. L-00050174* (Order entered November 16, 2005).
- ❑ These proposed rules will be published in the Pennsylvania Bulletin in the first quarter of 2006. After that, a sixty day public comment period will commence.
- ❑ After the comment period concludes, the Commission will make necessary revisions to the proposed rule and submit it for final approval by IRRC and the Attorney General.

Demand Side Management and Energy Efficiency

- Rules must also be developed to enable the participation of DSM/EE resources in this market.
- Standards for verifying and tracking savings from these measures, and a depreciation schedule, were issued on June 23, 2005. *Implementation of the Alternative Energy Portfolio Standards Act of 2004: Standards for the participation of Demand Side Management resources*; Docket No. M-00051865 (Order issued June 23, 2005).
- A sixty day public comment period ensued from the entry date of this Order.

Demand Side Management and Energy Efficiency, continued

- A final Order was issued on September 29, 2005. *Implementation of the Alternative Energy Portfolio Standards Act of 2004: Standards for the participation of Demand Side Management resources*; Docket No. M-00051865 (Order issued September 29, 2005).
- The Act requires that these interim standards subsequently be established through formal regulations.
- These issues were also referred to the WG. The subgroup met periodically and comments were filed on these issues. The WG will continue to meet to study these issues.

Cost-Recovery Standards and Processes

- Act 213 provides that EDCs may fully recover compliance costs through an automatic adjustment clause consistent with 66 Pa.C.S. § 1307.
- Costs are to be considered a cost of “generation supply under 66 Pa.C.S. § 2807.”
- The Commission will address this issue in its default service regulations (Docket No. L-00040169).
- The Commission reopened the public comment period in its default service rulemaking to address this issue. (Order entered November 18, 2005).

Resource Qualification Considerations

- ❑ Facilities must satisfy certain requirements for their electricity to qualify for alternative energy credits.
- ❑ Environmental, health and safety compliance. 73 P.S. §§ 1648.6 and 1648.7(b)
- ❑ Facility location. Act 213 places geographic restrictions on which energy facilities are eligible for alternative energy credits. 73 P.S. § 1648.4.
- ❑ Facility compliance with definitions of alternative energy sources. 73 P.S. § 1648.2

Alternative Energy Credit Certification

- Step 1: Energy must be generated from a facility that has qualified for alternative resource status.
- Step 2: The energy must satisfy the “delivery requirement.” While the alternative energy attribute may be sold separately from the energy commodity, the associated energy must be delivered into a particular region (yet to be decided).
- Step 3: The alternative energy attributes may not have already been counted towards another state’s renewable portfolio standard. 73 P.S. § 1648.4.

Force Majeure: Standards and Process

- Act 213 provides that the Commission may modify the compliance obligation for a given reporting year if alternative resources are not “reasonably available.” 73 P.S. § 1648.3(a)(2).
- For example, the Commission could reduce the compliance obligation in a given reporting year.
- Commission must establish procedures governing force majeure determinations.

Credits Program and Administrator

- ❑ The Commission may establish a credit trading program to assist in the implementation of the Act. The Commission may assign or retain an independent administrator for this role. 73 P.S. § 1648.3(e)(1).
- ❑ Powers and duties of administrator will be established through Commission regulation.
- ❑ The Commission anticipates using an RFQ/RFP process for retaining an administrator.
- ❑ The Act requires that the program administrator utilize a credits registry to track and monitor compliance with Act 213. 73 P.S. § 1648.3(e)(8).
- ❑ The Commission has tentatively designated PJM-EIS's Generation Attribute Tracking System ("GATS") for the credit registry role. *Implementation of the Alternative Energy Portfolio Standards Act of 2004: Designation of the Alternative Credits Registry*, Docket No. M-00051865 (Order entered October 28, 2005). After the Commission has completed its review of the comments, it will enter a final order on the designation of a credits registry.

Alternative Compliance Payments and the Sustainable Energy Funds

- ❑ As a general rule, EDCs and EGSs will be assessed an “alternative compliance payment” of \$45 for each credit they are short of meeting their compliance obligation. 73 P.S. § 1648.3(f)(3).
- ❑ For non-compliance with the solar photovoltaic requirement, a penalty of 200% times the average market price of solar credits sold during that reporting period within the regional transmission organization. 73 P.S. §1648.3(f)(4).
- ❑ Alternative compliance payments are paid into a fund of the Pennsylvania Sustainable Energy Board (“PASEB”).
- ❑ The PASEB is to make these payments available to these nonprofit corporations solely for projects “that will increase the amount of electric energy generated from alternative energy resources.”
- ❑ The March 23 Implementation Order directed the Board to develop the necessary standards to incorporate into its bylaws to meet this obligation.
- ❑ The PASEB will provide the Commission with recommendations on the standards for the receipt, custody and disbursement of these funds.



Resolving these issues

- ❑ Commission will release Orders establishing resource qualification and credit certification standards in 2006.
- ❑ Process for program administrator selection will commence in 2006.
- ❑ Other Orders will be released as appropriate.

Additional Information

- The Commission maintains information related to the implementation of Act 213, including a link to an online copy of the law, under the “Electricity” dropdown bar, followed by the “Issues” subsection found at www.puc.state.pa.us.
- The Commission has opened a public docket at M-00051865 for Act 213 implementation. Filings and issuances can be accessed by using the “Search for documents” feature and inputting this docket number.
- A database identifying renewable portfolio standards, net metering, and interconnection rules in effect in all fifty states is available at: www.dsireusa.org/