

# Pennsylvania: Procurement of Renewable & Alternative Energy

## AERS and PA PUC Partnership

September, 2008



## Table of Contents

- I. Alternative Energy Portfolio Standards Act
- II. Alternative Energy Sources
- III. Resource Qualification Considerations
- IV. Geographical Eligibility Requirement
- V. Credit Certification Restrictions
- VI. Force Majeure
- VII. Alternative Compliance Payments
- VIII. Cost Recovery Standards and Processes
- IX. Alternative Energy Credit Program Administrator
- X. Alternative Energy Credit Registry
- XI. Program Administrator
- XII. Credit Procurement Models
- XIII. Additional Information



## I. Alternative Energy Portfolio Standards Act

- Alternative Energy Portfolio Standards Act ("AEPS Act"), 73 P.S. §§ 1648.1 - 1648.8.
- On July 19, 2007, Governor Rendell signed into law Act 35 of 2007 amending portions of the AEPS Act.
- 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."
- Compliance is measured in quantities of "alternative energy credits," which is a tradable instrument representing one MW hour of qualified generation or conservation.



## II. Alternative Energy Sources

Tier I sources 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 sources 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.



## III. Resource Qualification Considerations

Only facilities that have been qualified as an "alternative energy system" can produce qualifying energy.

Requirements include:

- 1) Correct Fuel and Technology Type
- 2) Geographic Eligibility
- 3) Environmental, Health, and Safety Compliance



## IV. Geographic Eligibility Requirement

- Section 1648.4 restricts "alternative energy system" status to facilities located in Pennsylvania, or in the service territory of regional transmission organization ("RTO") that manages a portion of Pennsylvania's transmission system.
- The two RTO's which control transmission systems in Pennsylvania are PJM Interconnection, LLC (PJM) and the Midwest Independent System Operator (MISO).
- At the current time, resources within Pennsylvania may provide alternative energy credits to any load in Pennsylvania.
- Resources located outside Pennsylvania may only serve those portions of Pennsylvania within the relevant RTO service territory, e.g. resources in MISO located in Michigan may only serve areas in Pennsylvania located within MISO's transmission network.



## V. Credit Certification Restrictions

- Not all energy production or conservation from a qualified alternative energy system is eligible for alternative energy credits.
- Vintage limitation: Only conservation measures taken after November 30, 2004, and generation of electricity after February 28, 2005, are eligible for alternative energy credits.
- No double counting: Credits may not be awarded for alternative energy already used to meet the portfolio requirements of another jurisdiction.



7

## VI. Force Majeure: Minimizing the Rate Impact

- The Commission may modify the compliance obligation for a reporting year if alternative resources are not "reasonably available in sufficient quantities." 73 P.S. § 1648.3(a)(2).
- Separate determinations will be made for each Tier and solar photovoltaic resources prior to the reporting period.
- In the event of a force majeure declaration, providers may make an alternative compliance payment of \$45 per needed credit.
- The cost of alternative credit payments is recoverable, provided that less expensive alternative energy credits were not available in the market.



8

## VII. Alternative Compliance Payments

- In the absence of force majeure, an EDC or EGS will be assessed a penalty of \$45 for each credit they are short in meeting their portfolio obligations for a reporting period.
- 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).
- EDCs and EGSs will be provided notice of their expected payment, and offered the opportunity to contest the amount.
- EDCs may not recover the cost of these alternative compliance payments from ratepayers, as they represent a penalty for not obtaining alternative energy credits when they were reasonably available in sufficient quantities.



9

## VIII. Cost-Recovery Standards and Processes

- The AEPS Act provides that EDCs may fully recover compliance costs.
- Costs are to be considered a cost of generation supply under 66 Pa. C.S. § 2807.
- Default Service Providers are entitled to recover costs for AEPS compliance in default service rates.



10

## IX. Alternative Energy Credits Program Administrator

- The Commission may retain an independent entity to provide certain administrative services. 73 P.S. § 1648.3(e)(2).
- Powers and duties of the administrator include processing alternative energy system applications, verifying EDC and EGS compliance with the portfolio requirement, recommending levels of alternative compliance payments, verifying the activities of alternative energy systems, and generating alternative energy credit pricing information.
- The administrator will maintain a website and helpline to assist EDCs, EGSs, customer-generators and alternative energy systems with relevant issues.



11

## IX. Program Administrator (cont.)

- The Commission selected Clean Power Markets to serve as its alternative energy credit program administrator on November 30, 2006.
- A contract was executed and all regulatory approvals were obtained in March 2007.
- CPM will verify EDC and EGS compliance with the portfolio standard, qualify alternative energy systems, calculate alternative energy compliance payment levels, etc.



12

## X. Alternative Energy Credits Registry

- The Commission has designated PJM Environmental Information Services Inc.'s Generation Attribute Tracking System ("GATS") for the credit registry role. [www.pjm-eis.com](http://www.pjm-eis.com).
- All EDCs and EGSs must enter into user agreements with PJM-EIS by the time their compliance obligation commences.
- EDCs and EGSs must record the price paid for each alternative energy credit in GATS. This will allow the Commission to meet its credit price reporting obligation to the public and the Pennsylvania General Assembly.
- Each qualified alternative energy system is provided with a unique Pennsylvania state certification number that permits that system to register with GATS.



13

## XII. Credit Procurement Models

- Commission expressly provides for multiple procurement methods.
- Some suppliers require wholesale energy suppliers for default service load to provide credits. If credits not provided, supplier will be responsible for the EDCs alternative compliance payments.
- There has been a proposal to obtain credits through a competitive RFP.
- There are bilateral contracts with alternative energy generators specifying credit transfers
- AECs are defined as separately tradable instruments. Once participants become comfortable with certification standards, it is expected that an AEC market will be developed for trading. Freely tradable AECs, with a functioning market, will further stimulate alternative sourced energy production.



14

## XIII. Additional Information

- The Commission provides links to key documents at: [http://www.puc.state.pa.us/electric/electric\\_alt\\_energy.aspx](http://www.puc.state.pa.us/electric/electric_alt_energy.aspx)
- At that page are hypertext links to Act 213, Act 35 of 2007, the final net metering and interconnection rulemaking orders, the standards for DSM/EE participation, the alternative energy system application form, and a list of approved alternative energy systems.
- The Commission maintains a public docket at M-00051865 for Act 213 implementation, and L-00060180 for Act 35 implementation. Orders, Secretarial Letters, and comments issued or filed this docket can be accessed by using the "Search for documents" feature on the Commission's web site and using 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/](http://www.dsireusa.org/)

15