



Sustainable Development Fund

Cast Iron Building - Suite 300 North
718 Arch Street
Philadelphia, PA 19106-1591

phone: 215-925-1130
fax: 215-923-4764
e-mail: sdf@trfund.com
web: www.trfund.com/sdf

January 14, 2005

James J. McNulty, Secretary
Pennsylvania Public Utility Commission
P.O. Box 3265
Harrisburg, PA 17105-3265

Re: Implementation of the Alternative Energy Portfolio Standards Act of 2004
Docket No. M-00051865

Dear Secretary McNulty:

By this letter I am submitting the comments of the staff of the Sustainable Development Fund in response to the Notice of Technical Conference that you issued on January 7, 2005 in the above-referenced docket.

These comments identify the key issues we see in the task of implementing the Alternative Energy Portfolio Standards Act of 2004. The SDF staff looks forward to working with the Commission staff in developing the actual regulations, guidelines and policies in the coming months. Both Robert Sanders and I will attend the Technical Conference on January 19.

On behalf of SDF, I presented testimony to the General Assembly on this legislation as it was being developed. These comments grow from my tenure as Chief Counsel of the Pennsylvania Energy Office, my active role in the electric utility restructuring proceedings, and the experience Rob Sanders and I have had over the last five years financing and promoting clean energy technologies and projects in Pennsylvania through the Sustainable Development Fund.

Sincerely,

A handwritten signature in black ink that reads "Roger E. Clark".

Roger E. Clark

215.574.5814 (direct phone)
roger.clark@trfund.com

Copies (by electronic mail): Karen Mitchell
Britte Earp

Act 213 Language	SDF Staff Comments
Section 1. Short title.	
This act shall be known and may be cited as the Alternative Energy Portfolio Standards Act.	
Section 2. Definitions.	
The following words and phrases when used in this act shall have the meanings given to them in this section unless the context clearly indicates otherwise:	
" Alternative energy credit. " A tradable instrument that is used to establish, verify and monitor compliance with this act. A unit of credit shall equal one megawatt hour of electricity from an alternative energy source.	
" Alternative energy portfolio standards. " Standards establishing that a certain amount of energy sold from alternative energy sources is included as part of the sources of electric generation by electric utilities within this Commonwealth.	
" Alternative energy sources. " The term shall include the following existing and new sources for the production of electricity:	Not all sources qualifying for Tier 2 are included in the list of "alternative energy sources." For example, "byproducts of the pulping process..." and "integrated combined coal gasification" are listed as Tier 2 resources, but not listed in this definition section.
(1) Solar photovoltaic or other solar electric energy.	Regulations defining this alternative energy source need to establish some general technology and project requirements (pursuant to §6 and §7(b). PV systems not connected to the grid should not count.
(2) Solar thermal energy.	This technology is not included in Tier 1 or in Tier 2. Regulations defining this alternative energy source need to establish some general technology and project requirements (pursuant to §6 and §7(b).
(3) Wind power.	Regulations defining this alternative energy source need to establish some general technology and project requirements (pursuant to §6 and §7(b).

Act 213 Language	SDF Staff Comments
<p>(4) Large-scale hydropower, which shall mean the production of electric power by harnessing the hydroelectric potential of moving water impoundments, including pumped storage that does not meet the requirements of low-impact hydropower under paragraph (5).</p>	<p>Regulations defining this alternative energy source need to establish some general technology and project requirements (pursuant to §6 and §7(b)).</p> <p>The concept of “incremental hydroelectric development” that is contained in the definition of low-impact hydropower should apply to large-scale hydropower.</p>
<p>(5) Low-impact hydropower, consisting of any technology that produces electric power and that harnesses the hydroelectric potential of moving water impoundments, provided such incremental hydroelectric development:</p> <ul style="list-style-type: none"> (i) does not adversely change existing impacts to aquatic systems; (ii) meets the certification standards established by the Low Impact Hydropower Institute and American Rivers, Inc., or their successors; (iii) provides an adequate water flow for protection of aquatic life and for safe and effective fish passage; (iv) protects against erosion; and (v) protects cultural and historic resources. 	<p>Regulations defining this alternative energy source need to establish some general technology and project requirements (pursuant to §6 and §7(b)).</p> <p>The concept of “incremental hydroelectric development” is very important and should not be undermined. Incremental should be interpreted as new hydroelectric capacity, not capacity at existing dams that becomes certified as low impact.</p>
<p>(6) Geothermal energy, which shall mean electricity produced by extracting hot water or steam from geothermal reserves in the earth's crust and supplied to steam turbines that drive generators to produce electricity.</p>	<p>Regulations defining this alternative energy source need to establish some general technology and project requirements (pursuant to §6 and §7(b)).</p>
<p>(7) Biomass energy, which shall mean the generation of electricity utilizing the following:</p> <ul style="list-style-type: none"> (i) organic material from a plant that is grown for the purpose of being used to produce electricity or is protected by the Federal Conservation Reserve Program (CRP) and provided further that crop production on CRP lands does not prevent achievement of the water quality protection, soil erosion prevention or wildlife enhancement purposes for which the land was primarily set aside; or (ii) any solid nonhazardous, cellulosic waste material that is segregated from other waste materials such as waste pallets, crates and landscape or right-of-way tree trimmings or agricultural sources, including orchard tree crops, vineyards, grain, legumes, sugar and other crop by-products or residues. 	<p>Regulations defining this alternative energy source need to establish some general technology and project requirements (pursuant to §6 and §7(b)).</p> <p>The eligible feedstock does not and should not include cellulosic waste material that has been painted or chemically-treated, i.e. demolition waste.</p>

Act 213 Language	SDF Staff Comments
<p>(8) Biologically derived methane gas, which shall include methane from the anaerobic digestion of organic materials from yard waste, such as grass clippings and leaves, food waste, animal waste and sewage sludge. The term also includes landfill methane gas.</p>	<p>Regulations defining this alternative energy source need to establish some general technology and project requirements (pursuant to §6 and §7(b)).</p>
<p>(9) Fuel cells, which shall mean any electrochemical device that converts chemical energy in a hydrogen-rich fuel directly into electricity, heat and water without combustion.</p>	<p>Regulations defining this alternative energy source need to establish some general technology and project requirements (pursuant to §6 and §7(b)).</p> <p>The ‘hydrogen-rich fuel’ does not need to be produced by renewable energy. It can be a fossil fuel.</p>
<p>(10) Waste coal, which shall include the combustion of waste coal in facilities in which the waste coal was disposed or abandoned prior to July 31, 1982, or disposed of thereafter in a permitted coal refuse disposal site regardless of when disposed of, and used to generate electricity; or such other waste coal combustion meeting alternate eligibility requirements established by regulation. Facilities combusting waste coal shall use at a minimum a combined fluidized bed boiler and be outfitted with a limestone injection system and a fabric filter particulate removal system. Alternative energy credits shall be calculated based upon the proportion of waste coal utilized to produce electricity at the facility.</p>	<p>Regulations defining this alternative energy source need to establish some general technology and project requirements (pursuant to §6 and §7(b)). Air emission standards and limits on other environmental impacts need to be part of the definition.</p>
<p>(11) Coal mine methane, which shall mean methane gas emitting from abandoned or working coal mines.</p>	<p>Regulations defining this alternative energy source need to establish some general technology and project requirements (pursuant to §6 and §7(b)). Air emission standards and limits on other environmental impacts need to be part of the definition.</p> <p>The requirement that methane recovery be part of an abandoned or working coal mine is important. Methane recovered from non-mined coal seams are not and should not be included.</p>

Act 213 Language	SDF Staff Comments
<p>(12) Demand side management consisting of the management of customer consumption of electricity or the demand for electricity through the implementation of:</p> <p>(i) energy efficiency technologies, management practices or other strategies in residential, commercial, institutional or government customers that reduce electricity consumption by those customers;</p> <p>(ii) load management or demand response technologies, management practices or other strategies in residential, commercial, industrial, institutional and government customers that shift electric load from periods of higher demand to periods of lower demand; or</p> <p>(iii) 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.</p>	<p>Regulations defining this alternative energy source need to be prepared (pursuant to §3(g)(10) and(11).</p> <p>A MW of load management is not equal to a MW of energy efficiency/conservation. A different methodology is needed to calculate how RECs are earned by these approaches.</p> <p>Regulations defining “industrial by-product technologies” need to establish some general technology requirements (pursuant to §6 and §7(b). Air emission standards and limits on other environmental impacts need to be part of the definition.</p>
<p>(13) Distributed generation system, which shall mean the small-scale power generation of electricity and useful thermal energy.</p>	<p>Regulations defining this alternative energy source need to establish some general technology and project requirements (pursuant to §6 and §7(b). Air emission standards and limits on other environmental impacts need to be part of the definition. The overall efficiency of the system is another element that is important to address.</p> <p>“Small scale” should mean the same 1 MW / 2 MW standard in the definition of “customer/generator.”</p>
<p>"Alternative energy system." A facility or energy system that uses a form of alternative energy source to generate electricity and delivers the electricity it generates to the distribution system of an electric distribution company or to the transmission system operated by a regional transmission organization.</p>	<p>In addition to “alternative energy system” the Act contains references to “distributed generation system” (§2 definition of “customer-generator”), “renewable energy generating system” (§2 definition of “net metering”) and “renewable onsite generators (§5). The regulations should clarify this inconsistency and use “alternative energy system” throughout.</p>
<p>"Commission." The Pennsylvania Public Utility Commission.</p>	

Act 213 Language	SDF Staff Comments
<p>"Cost Recovery Period." the longer of:</p> <p>(1) the period during which competitive transition charges under 66 Pa.C.S. § 2808 (relating to competitive transition charge) or intangible transition charges under 66 Pa.C.S. § 2812 (relating to approval of transition bonds) are recovered or the period during which an electric bonds) are recovered; or</p> <p>(2) the period during which an electric distribution company operates under a Pennsylvania Public Utility Commission-approved generation rate plan that has been approved prior to or within one year of the effective date of this act, but in no case shall the cost recovery period under this act extend beyond December 31, 2010.</p>	
<p>"Customer-generator." A nonutility owner or operator of a net metered distributed generation system with a nameplate capacity of not greater than 50 kilowatts if installed at a residential service or not larger than 1,000 kilowatts at other customer service locations, except for customers whose systems are above one megawatt and up to two megawatts who make their systems available to operate in parallel with the electric utility during grid emergencies as defined by the regional transmission organization, or where a microgrid is in place for the purpose of maintaining critical infrastructure, such as homeland security assignments, emergency services facilities, hospitals, traffic signals, wastewater treatment plants or telecommunications facilities, provided that technical rules for operating generators interconnected with facilities of an electric distribution company, electric cooperative or municipal electric system have been promulgated by the Institute of Electrical and Electronic Engineers and the Pennsylvania Public Utility Commission.</p>	<p>The reference to "distributed generated system" in the first sentence should refer to "alternative energy system." See the comment to the §2 definition of "alternative energy system."</p>
<p>"Department." The Department of Environmental Protection of the Commonwealth.</p>	
<p>"Electric distribution company." The term shall have the same meaning given to it in 66 Pa.C.S. Ch. 28 (relating to restructuring of electric utility industry).</p>	

Act 213 Language	SDF Staff Comments
<p>"Electric generation supplier." The term shall have the same meaning given to it in 66 Pa.C.S. Ch. 28 (relating to restructuring of electric utility industry).</p>	
<p>"Force Majeure." upon its own initiative or upon a request of an electric distribution company or an electric generator supplier, the Pennsylvania Public Utility Commission, within 60 days, shall determine if alternative energy resources are reasonably available in the marketplace in sufficient quantities for the electric distribution companies and electric generation suppliers to meet their obligations for that reporting period under this act. If the commission determines that alternative energy resources are not reasonably available in sufficient quantities in the marketplace for the electric distribution companies and electric generation suppliers to meet their obligations under this act, then the commission shall modify the underlying obligation of the electric distribution company or electric generation supplier or recommend to the general assembly that the underlying obligation be eliminated.</p>	<p>A permissive force majeure provision will undercut the intent of the Act and sharply limit the value of the alternative compliance payment remedy.</p> <p>The regulations for this provision should establish that EDCs and EGSs have any affirmative requirement to facilitate the development of alternative energy systems. Examples would be entering into long-term power purchase agreements, funding rebate programs for solar PV, etc. EDCs and EGSs should not be permitted to simply hold an annual solicitation for alternative energy credits and then come to the Commission and claim force majeure. An assertion of force majeure must be accompanied by a showing of proactive efforts the EDC or EGS undertook.</p> <p>The phrase "modify their obligations" should include postponing the obligation until a subsequent year. It should also include the option of waiving a portion of the obligation rather than it all (see §3(a)(2) language about "...to the extent that the commission find force majeure exists").</p> <p>The ability of some EDCs and EGSs to fulfill their obligations in a particular year should preclude others asserting force majeure.</p>
<p>"Municipal solid waste." This will include energy from existing waste to energy facilities which the Department of Environmental Protection has determined are in compliance with current environmental standards, including, but not limited to, all applicable requirements of the Clean Air Act (69 Stat. 322, 42 U.S.C. § 7401 et seq.) and associated permit restrictions, and all applicable requirements of the act of July 7, 1980 (P.L.380, No.97), known as the Solid Waste Management Act.</p>	<p>Regulations defining this alternative energy source need to establish some general technology requirements (pursuant to §6 and §7(b)). Air emission standards and limits on other environmental impacts need to be part of the definition.</p>

Act 213 Language	SDF Staff Comments
<p>"Net metering." The means of measuring the difference between the electricity supplied by an electric utility and the electricity generated by a customer-generator, when the renewable energy generating system is intended primarily to offset part or all of the customer-generator's requirements for electricity.</p>	<p>The reference to "renewable energy generating system" should refer to "alternative energy system." See the comment to the §2 definition of "alternative energy system." Renewable energy is not defined in the statute.</p>
<p>"Regional transmission organization." An entity approved by the Federal Energy Regulatory Commission (FERC) that is created to operate and manage the electrical transmission grids of the member electric transmission utilities as required under FERC Order 2000, Docket No. RM99-2-000, FERC Chapter 31.089 (1999) or any successor organization approved by the FERC.</p>	
<p>"Reporting period." The 12-month period from June 1 through May 31. A reporting year shall be numbered according to the calendar year in which it begins and ends.</p>	<p>Does this mean that Reporting Year 2005-2006 begins June 1, 2005 and ends May 31, 2006?</p> <p>How does Reporting Year correspond to the numbered years in §3(b) and (c)?</p>
<p>"Retail electric customer." The term shall have the same meaning given to it in 66 Pa.C.S Ch. 28 (relating to restructuring of electric utility industry).</p>	
<p>"Tier I alternative energy source." Energy derived from:</p> <ol style="list-style-type: none"> (1) Solar photovoltaic energy. (2) Wind power. (3) Low-impact hydropower. (4) Geothermal energy. (5) Biologically derived methane gas. (6) Fuel cells. (7) Biomass energy. (8) Coal mine methane. 	<p>What happened to "solar thermal energy" which is included in the definition of alternative energy sources? There are technologies other than PV that use sunlight to generate electricity.</p>

Act 213 Language	SDF Staff Comments
<p>"Tier II alternative energy source." Energy derived from:</p> <ul style="list-style-type: none"> (1) Waste coal. (2) Distributed generation systems. (3) Demand-side management. (4) Large-scale hydropower. (5) Municipal solid waste. (6) Generation of electricity utilizing by-products of the pulping process and wood manufacturing process including bark, wood chips, sawdust and lignin in spent pulping liquors. (7) Integrated combined coal gasification technology. 	<p>The distributed generation systems are defined to be combined heat and power systems.</p> <p>Regulations defining "byproducts of the pulping process..." need to establish some general technology requirements (pursuant to §6 and §7(b). Air emission standards and limits on other environmental impacts need to be part of the definition.</p> <p>Regulations defining "integrated combined coal gasification" need to establish some general technology requirements (pursuant to §6 and §7(b). Air emission standards and limits on other environmental impacts need to be part of the definition.</p>
<p>Section 3. Alternative energy portfolio standards.</p>	
<p>(a) General compliance and cost recover.--</p> <p>(1) From the effective date of this act through and including the 15th year after enactment of this act, and each year thereafter, the electric energy sold by an electric distribution company or electric generation supplier to retail electric customers in this Commonwealth shall be comprised of electricity generated from alternative energy sources, and in the percentage amounts as described under subsections (B) and (C).</p>	
<p>(2) Electric distribution companies and electric generation suppliers shall satisfy both requirements set forth in subsections (b) and (c) provided, however, that an electric distribution company or an electric generation supplier shall be excused from its obligations under this section to the extent that the commission determines that force majeure exists.</p>	<p>The language "to the extent that ... force majeure exists" means the Commission has the ability to waive just a portion of the obligation rather than it all. See the comment to the §2 definition of "force majeure."</p>

Act 213 Language	SDF Staff Comments
<p>(3) All costs for:</p> <p>(i) The purchase of electricity generated from alternative energy sources, including the costs of the regional transmission organization, in excess of the regional transmission organization real-time locational marginal pricing, or its successor, at the delivery point of the alternative energy source for the electrical production of the alternative energy sources; and</p> <p>(ii) Payments for alternative energy credits, in both cases that are voluntarily acquired by an electric distribution company during the cost recovery period on behalf of its customers,</p> <p>shall be deferred as a regulatory asset by the electric distribution company and fully recovered, with a return on the unamortized balance, pursuant to an automatic energy adjustment clause under 66 Pa.C.S. § 1307 (relating to sliding scale of rates; adjustments) as a cost of generation supply under 66 Pa.C.S. § 2807 (relating to duties of electric distribution companies), in the first year after the expiration of its cost recovery period. after the cost recovery period, any direct or indirect costs for the purchase by electric distribution of resources to comply with this section, including, but not limited to, the purchase of electricity generated from alternative energy sources, payments for alternative energy credits, cost of credits banked, payments to any third party administrators for performance under this act and costs levied by a regional transmission organization to ensure that alternative energy sources are reliable, shall be recovered on a full and current basis pursuant to an automatic energy adjustment clause under 66 Pa.C.S. § 1307 as a cost of generation supply under 66 Pa.C.S. § 2807.</p>	<p>EDCs should have an obligation to satisfy the requirements of this Act in a prudent, least-cost manner. Cost recovery should not be on an “anything goes” basis. The Commission should have a process to compare how the different companies met their obligations and their costs of doing so. If a company is paying costs above the norm, some adjustment to the cost recovery should be permitted.</p> <p>Because EGCs operate in a competitive market, the market will tend to hold down the prices and Commission review of compliance costs is unnecessary.</p>

Act 213 Language	SDF Staff Comments
<p>(b) Tier I and solar photovoltaic shares.--</p> <p>(1) Two years after the effective date of this act, at least 1.5% of the electric energy sold by an electric distribution company or electric generation supplier to retail electric customers in this Commonwealth shall be generated from Tier I alternative energy sources. Except as provided in this section, the minimum percentage of electric energy required to be sold to retail electric customers from alternative energy sources shall increase to 2% three years after the effective date of this act. The minimum percentage of electric energy required to be sold to retail electric customers from alternative energy sources shall increase by at least 0.5% each year so that at least 10% 8% of the electric energy sold by an electric distribution company or electric generation supplier to retail electric customers in that certificated territory in the 15th year after the effective date of this subsection is sold from Tier I alternative energy resources.</p>	<p>It needs to be clear that the percentages are tagged to the effective date of the act, not to the year when the EDCs' rate caps expire.</p> <p>The regulations need a clear table showing by date and by numbered year (i.e. Year 1) what the obligations are for each Tier.</p>
<p>(2) Of the electric energy required to be sold from Tier I sources, the TOTAL percentage that must be sold from solar photovoltaic technologies is for:</p> <ul style="list-style-type: none"> (i) Years 1 through 4 - 0.0013%. (ii) Years 5 through 9 - 0.0203%. (iii) Years 10 through 14 - 0.2500%. (iv) Years 15 and thereafter - 0.5000%. 	<p>The regulations need a clear table showing by date and by numbered year (i.e. Year 1) what the obligations are for each Tier.</p> <p>When is Year 1?</p> <p>It is important to smooth out these numbers so the industry builds smoothly. The large jumps in Year 5 and Year 10 are force majeure waiting to happen.</p>
<p>(3) Upon commencement of the beginning of the 6th reporting year, the commission shall undertake a review of the compliance by electric distribution companies and electric generation suppliers with the requirements of this act. The review shall also include the status of alternative energy technologies within this Commonwealth and the capacity to add additional alternative energy resources. The commission shall use the results of this review to recommend to the General Assembly additional compliance goals beyond year 15. The commission shall work with the department in evaluating the future alternative energy resource potential.</p>	<p>Reports about implementation of this Act are required in §3(b)(3), §3(f)(5) and §7(a) and §7(c). These reporting requirements should be combined, with meaningful opportunities for public input, for public comment on the draft report(s) and with posting the report(s) on the Commission website.</p>

Act 213 Language	SDF Staff Comments
<p>(c) Tier II share.--Of the electrical energy required to be sold from alternative energy sources identified in Tier II, the percentage that must be from these technologies is for:</p> <ul style="list-style-type: none"> (1) Years 1 through 4 - 4.2%. (2) Years 5 through 9 - 6.2%. (3) Years 10 through 14 - 8.2%. (4) Years 15 and thereafter - 10.0%. 	<p>The regulations need a clear table showing by date and by numbered year (i.e. Year 1) what the obligations are for each Tier.</p> <p>When is Year 1?</p>
<p>(d) Exemption during cost-recovery period.-- Compliance with subsections (a), (b) and (c) shall not be required for any electric distribution company that has not reached the end of its cost-recovery period or for electric generation supplier sales in the service territory of an electric distribution company that has not reached the end of its cost-recovery period. At the conclusion of an electric distribution company's cost-recovery period, this exception shall no longer apply, and compliance shall be required at the percentages in effect at that time. Electric distribution companies and electric generation suppliers whose sales are exempted under this subsection and who voluntarily sell electricity generated from Tier I and Tier II sources during the cost-recovery period may bank credits consistent with subsection (e)(7).</p>	
<p>(e) Alternative energy credits.--</p> <ul style="list-style-type: none"> (1) The commission shall establish an alternative energy credits program as needed to implement this act. The provision of services pursuant to this section shall be exempt from the competitive procurement procedures of 62 Pa.C.S. (relating to procurement). 	

Act 213 Language	SDF Staff Comments
<p>(2) The commission shall approve an independent entity to serve as the alternative energy credits program administrator. The administrator shall have those powers and duties assigned by commission regulations. Such powers and duties shall include, but not be limited to, the following:</p> <p>(i) To create and administer an alternative energy credits certification, tracking and reporting program. This program should include, at a minimum, a process for qualifying alternative energy systems and determining the manner credits can be created, accounted for, transferred and retired.</p> <p>(ii) To submit reports to the commission at such times and in such manner as the commission shall direct.</p>	<p>PJM's Generation Attributes Tracking System (GATS) will likely be the vehicle for managing alternative energy credits.</p>
<p>(3) All qualifying alternative energy systems must include a qualifying meter to record the cumulative electric production to verify the advanced energy credit value. Qualifying meters will be approved by the commission as defined in paragraph (4).</p>	
<p>(4) (i) An electric distribution company or electric generation supplier shall comply with the applicable requirements of this section by purchasing sufficient alternative energy credits and submitting documentation of compliance to the program administrator.</p> <p>(ii) For purposes of this subsection, one alternative energy credit shall represent one megawatt hour of qualified alternative electric generation, whether self-generated, purchased along with the electric commodity or separately through a tradable instrument and otherwise meeting the requirements of commission regulations and the program administrator.</p>	

Act 213 Language	SDF Staff Comments
<p>(5) The alternative energy credits program shall include provisions requiring a reporting period as defined in section 2 for all covered entities under this act. The alternative energy credits program shall also include a true-up period as defined in section 2. The true-up period shall provide entities covered under this act the ability to obtain the required number of alternative energy credits or to make up any shortfall of the alternative energy credits they may be required to obtain to comply with this act. A force majeure provision shall also be provided for under the true-up period provisions.</p>	
<p>(6) An electric distribution company and electric generation supplier may bank or place in reserve alternative energy credits produced in one reporting year for compliance in either or both of the two subsequent reporting years, subject to the limitations set forth in this subsection and provided that the electric distribution company and electric generation supplier are in compliance for all previous reporting years. In addition, the electric distribution company and electric generation supplier shall demonstrate to the satisfaction of the commission that such credits:</p> <ul style="list-style-type: none"> (i) were in excess of the alternative energy credits needed for compliance in the year in which they were generated and that such excess credits have not previously been used for compliance under this act; (ii) were produced by the generation of electrical energy by alternative energy sources and sold to retail customers during the year in which they were generated; and (iii) have not otherwise been nor will be sold, retired, claimed or represented as part of satisfying compliance with alternative or renewable energy portfolio standards in other states. 	<p>Companies that generate alternative energy should also be able to bank credits (i.e. sell a credit some time after it is generated).</p>

Act 213 Language	SDF Staff Comments
<p>(7) An electric distribution company or an electric generation supplier with sales that are exempted under subsection (d) may bank credits for retail sales of electricity generated from Tier I and Tier II sources made prior to the end of the cost-recovery period and after the effective date of this act. Bankable credits shall be limited to credits associated with electricity sold from Tier I and Tier II sources during a reporting year which exceeds the volume of sales from such sources by an electric distribution company or electric generation supplier during the 12-month period immediately preceding the effective date of this act. All credits banked under this subsection shall be available for compliance with subsections (b) and (c) for no more than two reporting years following the conclusion of the cost-recovery period.</p>	
<p>(8) The commission or its designee shall develop a registry of pertinent information regarding all available alternative energy credits, credit transactions among electric distribution companies and electric generation suppliers, the number of alternative energy credits sold or transferred and the price paid for the sale or transfer of the credits. The registry shall provide current information to electric distribution companies, electric generation suppliers and the general public on the status of alternative energy credits created, sold or transferred within this Commonwealth.</p>	<p>PJM's Generation Attributes Tracking System (GATS) will likely be the manager of the credit registry.</p> <p>In a competitive market, information about the price of supply needs to be protected. The registry needs a way to limit the sharing of the price information only to those who need to see it and then under some nondisclosure agreement to keep the price information proprietary.</p>
<p>(9) The commission may impose an administrative fee on an alternative energy credit transaction. The amount of this fee may not exceed the actual direct cost of processing the transaction by the alternative energy credits administrator. The commission is authorized to utilize up to 5% of the alternative compliance fees generated under subsection (f) for administrative expenses directly associated with this act.</p>	<p>We recommend that PJM should suggest the fee in the GATS program (which would be the same for all PJM credit transactions) and this should be reviewed and approved by the Commission.</p> <p>We recommend that the Commission decline to take a portion of the alternative compliance payments to pay for administrative expenses. The alternative compliance payments should be reserved for obtaining the alternative energy supply that the EDCs and EGSs failed to obtain.</p>

Act 213 Language	SDF Staff Comments
<p>(10) The commission shall establish regulations governing the verification and tracking of energy efficiency and demand-side management measures pursuant to this act, which shall include benefits to all utility customer classes. When developing regulations, the commission must give reasonable consideration to existing and proposed regulations and rules in existence in the regional transmission organizations that manage the transmission system in any part of this Commonwealth. All verified reductions shall accrue credits starting with the passage of this act.</p>	<p>If possible, PJM's Generation Attributes Tracking System (GATS) should be used for managing the demand-side credits.</p>
<p>(11) The commission shall within 120 days of the effective date of this act develop a depreciation schedule for alternative energy credits created through demand side management, energy efficiency and load management technologies and shall develop standards for tracking and verifying savings from energy efficiency, load management and demand-side management measures. The commission shall allow for a 60-day public comment period and shall issue final standards within 30 days of the close of the public comment period.</p>	<p>The Commission's work to obtain stakeholder input on these regulations is appreciated. A collaborative process will be the correct approach for writing regulations under this Act.</p>
<p>(f) Alternative compliance payment.-- (1) At the end of each program year, the program administrator shall provide a report to the commission and to each covered electric distribution company showing their status level of alternative energy acquisition.</p>	<p>The report should also go to all electric generation suppliers. The report should also be public information, posted on the Commission website.</p>
<p>(2) The commission shall conduct a review of each determination made under subsections (b) and (c). If, after notice and hearing, the commission determines that an electric distribution company or electric generation supplier has failed to comply with subsections (b) and (c), the commission shall impose an alternative compliance payment on that company or supplier.</p>	<p>This process should be as prompt as feasible.</p>
<p>(3) The alternative compliance payment, with the exception of the solar photovoltaic share compliance requirement set forth in subsection (b)(2), shall be \$45 times the number of additional alternative energy credits needed in order to comply with subsection (b) or (c).</p>	

Act 213 Language	SDF Staff Comments
<p>(4) The alternative compliance payment for the solar photovoltaic share shall be 200% of the average market value of solar renewable energy credits sold during the reporting period within the service region of the regional transmission organization.</p>	<p>The regulations need to describe how the PJM market price of solar credits will be determined.</p>
<p>(5) The commission shall establish a process to provide for, at least annually, a review of the alternative energy market within this Commonwealth and the service territories of the regional transmission organizations that manage the transmission system in any part of this Commonwealth. The commission will use the results of this study to identify any needed changes to the cost associated with the alternative compliance payment program. If the commission finds that the costs associated with alternative compliance payment program must be changed, the commission shall present these findings to the General Assembly for legislative enactment.</p>	<p>Reports about implementation of this Act are required in §3(b)(3), §3(f)(5) and §7(a) and §7(c). These reporting requirements should be combined, with meaningful opportunities for public input, for public comment on the draft report(s) and with posting the report(s) on the Commission website.</p>
<p>(g) Transfer to sustainable development funds.-- (1) Notwithstanding the provisions of 66 Pa.C.S. §§ 511 (relating to disposition, appropriation and disbursement of assessments and fees) and 3315 (relating to disposition of fines and penalties), alternative compliance payments imposed pursuant to this act shall be paid into Pennsylvania's sustainable energy funds, created under the commission's restructuring orders under 66 Pa.C.S. Ch. 28 (relating to restructuring of electric utility industry). Alternative compliance payments shall be paid into a special fund of the Pennsylvania Sustainable Energy Board, established by the commission under Docket M-00031715, and made available to the regional sustainable energy funds under procedures and guidelines approved by the Pennsylvania energy board.</p>	<p>PASEB needs to adopt guidelines and procedures for awarding funding. As the alternative compliance payments are received, PASEB would invite the regional sustainable energy funds to compete for the money by presenting program and investment proposals for using the money. PASEB would award the funding and the successful SEF would implement the program/investment.</p> <p>The Commission will need to allow the SEFs to amend their bylaws to be able to serve areas outside of their service territory so those utility service territories without a SEF are served.</p>
<p>(2) The alternative compliance payments shall be utilized solely for projects that will increase the amount of electric energy generated from alternative energy resources for purposes of compliance with subsections (b) and (c).</p>	<p>Payments for noncompliance with solar should only be used for solar. Payments for noncompliance with Tier 1 should only be used for Tier 1. Payments for noncompliance with Tier 2 should only be used for Tier 2. The PASEB and the SEFs should be free to determine which Tier 1 technologies and which Tier 2 technologies are supported.</p>

Act 213 Language	SDF Staff Comments
<p>(h) Nonseverability.--The provisions of subsection (a) are declared to be nonseverable. If any provision of subsection (a) is held invalid, the remaining provisions of this act shall be void.</p>	
<p>Section 4. Portfolio requirements in other states.</p>	
<p>If an electric distribution supplier or electric generation company provider sells electricity in any other state and is subject to renewable energy portfolio requirements in that state, they shall list any such requirement and shall indicate how it satisfied those renewable energy portfolio requirements. To prevent double-counting, the electric distribution supplier or electric generation company shall not satisfy Pennsylvania's alternative energy portfolio requirements using alternative energy used to satisfy another state's portfolio requirements. Energy derived only from alternative energy sources inside the geographical boundaries of this Commonwealth or within the service territory of any regional transmission organization that manages the transmission system in any part of this Commonwealth shall be eligible to meet the compliance requirements under this act. Electric distribution companies and electric generation suppliers shall document that this energy was not used to satisfy another state's renewable energy portfolio standards.</p>	<p>PJM's GATS will help address this issue.</p>

Act 213 Language	SDF Staff Comments
------------------	--------------------

<p>Section 5. Interconnection standards for customer-generator facilities.</p>	
<p>The commission shall develop technical and net metering interconnection rules for customer-generators intending to operate renewable onsite generators in parallel with the electric utility grid, consistent with rules defined in other states within the service region of the regional transmission organization that manages the transmission system in any part of this Commonwealth. The commission shall convene a stakeholder process to develop Statewide technical and net metering rules for customer-generators. The commission shall develop these rules within nine months of the effective date of this act.</p>	<p>This is one of the most important sections of the Act. The ability to interconnect, and the cost and hassle of doing so, are major factors in the economics of alternative energy projects. Net metering is likewise a critical aspect of the Act.</p> <p>The reference to “renewable onsite generators” should be interpreted to mean “alternative energy systems.” See the comment to the §2 definition of “alternative energy system.” Renewable energy is not defined in the statute.</p> <p>Alternative energy projects, regardless of their size, should have a right to interconnect, provided they satisfy the legitimate interconnection safety concerns.</p> <p>Alternative energy projects up to 1 MW (or 2 MW if the project’s power can be used for critical infrastructure in the event of a grid emergency) should be eligible for net metering. These size limits are from the §2 definition of “customer-generator.”</p>
<p>Section 6. Health and safety standards.</p>	
<p>The department shall cooperate with the Department of Labor and Industry as necessary in developing health and safety standards, as needed, regarding facilities generating energy from alternative energy sources. The department shall establish appropriate and reasonable health and safety standards to ensure uniform and proper compliance with this act by owners and operators of facilities generating energy from alternative energy sources as defined in this act.</p>	<p>This is a very important section of the Act. This section, along with §7(b), requires DEP to consider health, safety and environmental impacts in developing regulations for each of the alternative energy sources and systems. There should be a comprehensive and thorough review of all of these issues.</p>

Act 213 Language	SDF Staff Comments
Section 7. Interagency responsibilities.	
<p>(a) Commission responsibilities.--The commission will carry out the responsibilities delineated within this act. The commission also shall, in cooperation with the department, conduct an ongoing alternative energy resources planning assessment for this Commonwealth. This assessment will, at a minimum, identify current and operating alternative energy facilities, the potential to add future alternative energy generating capacity, and the conditions of the alternative energy marketplace. The assessment will identify needed methods to maintain or increase the relative competitiveness of the alternative energy market within this Commonwealth.</p>	<p>Reports about implementation of this Act are required in §3(b)(3), §3(f)(5) and §7(a) and §7(c). These reporting requirements should be combined, with meaningful opportunities for public input, for public comment on the draft report(s) and with posting the report(s) on the Commission website.</p>
<p>(b) Department responsibilities.--The department shall ensure that all qualified alternative energy sources meet all applicable environmental standards and shall verify that an alternative energy source meets the standards set forth in section 2.</p>	<p>This is a very important section of the Act. This section, along with §6, requires DEP to consider health, safety and environmental impacts in developing regulations for each of the alternative energy sources and systems.</p>
<p>(c) Cooperation between commission and department.—The commission and the department shall work cooperatively to monitor the performance of all aspects of this act and will provide an annual report to the chairman and minority chairman of the Environmental Resources and Energy Committee of the Senate and the chairman and minority chairman of the Environmental Resources and Energy Committee of the House of Representatives. The report shall include at a minimum:</p> <ol style="list-style-type: none"> (1) The status of the compliance with the provisions of this act by electric distribution companies and electric generation suppliers. (2) Current costs of alternative energy on a per kilowatt hour basis for all alternative energy technology types. (3) Costs associated with the alternative energy credits program under this act, including the number of alternative compliance payments. (4) The status of the alternative energy marketplace within this Commonwealth. (5) Recommendations for program improvements. 	<p>Reports about implementation of this Act are required in §3(b)(3), §3(f)(5) and §7(a) and §7(c). These reporting requirements should be combined, with meaningful opportunities for public input, for public comment on the draft report(s) and with posting the report(s) on the Commission website.</p>

Act 213 Language	SDF Staff Comments
Section 8. Rural electric cooperatives.	
<p>Each rural electric cooperative operating within this Commonwealth shall offer to its retail customers a voluntary program of energy efficiency and demand-side management programs, as a means to satisfy compliance with the requirements of this act.</p>	<p>Rural electric cooperative members should also have the option of purchasing blocks of clean energy, similar to the PECO Wind program. We would like to see the Commission direct rural electric cooperatives to open their billing to a clean energy block program.</p>
Section 9. Effective date.	
<p>This act shall take effect in 90 days.</p>	