

73 P.S. § 1648.2

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, and shall only be used to satisfy the requirement to procure one of the following: Tier I, Tier II, or Tier III alternative energy credits. The alternative energy credit shall remain the property of the alternative energy system until the alternative energy credit is voluntarily transferred by the alternative energy system.

“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:

- (1) Solar photovoltaic or other solar electric energy.
- (2) Solar thermal energy.
- (3) Wind power.
- (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).
- (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:
 - (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.

- (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.
- (7) Biomass energy, which shall mean the generation of electricity utilizing the following:
 - (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.
- (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.
- (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.
- (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.
- (11) Coal mine methane, which shall mean methane gas emitting from abandoned or working coal mines.
- (12) Demand-side management consisting of the management of customer consumption of electricity or the demand for electricity through the implementation of:
 - (i) energy efficiency technologies, management practices or other strategies in residential, commercial, institutional or government customers that reduce electricity consumption by those customers;

- (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
 - (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.
- (13) Distributed generation system, which shall mean the small-scale power generation of electricity and useful thermal energy.
- (14) Energy from nuclear fission used to generate electricity.

“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.

“Commission.” The Pennsylvania Public Utility Commission.

“Cost-recovery period.” The longer of:

- (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
- (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.

“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 3,000 kilowatts at other customer service locations, except for customers whose systems are above three megawatts and up to five 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 primary or secondary 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.

“Department.” The Department of Environmental Protection of the Commonwealth.

“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).

“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).

“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. In making this determination, the commission shall consider whether electric distribution companies or electric generation suppliers have made a good faith effort to acquire sufficient alternative energy to comply with their obligations. Such good faith efforts shall include, but are not limited to, banking alternative energy credits during their transition periods, seeking alternative energy credits through competitive solicitations and seeking to procure alternative energy credits or alternative energy through long-term contracts. In further making its determination, the commission shall assess the availability of alternative energy credits in the Generation Attributes Tracking System (GATS) or its successor and the availability of alternative energy credits generally in Pennsylvania and other jurisdictions in the PJM Interconnection, L.L.C. regional transmission organization (PJM) or its successor. The commission may also require solicitations for alternative energy credits as part of default service before requests of force majeure can be made. If the commission further 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. Commission modification of the electric distribution company or electric generation supplier obligations under this act shall be for that compliance period only. Commission modification shall not automatically reduce the obligation for subsequent compliance years. If the commission modifies the electric distribution company or electric generation supplier obligations under this act, the commission may require the electric distribution company or electric generation supplier to acquire additional alternative energy credits in subsequent years equivalent to the obligation reduced due to a force majeure declaration if the commission determines that sufficient alternative energy credits exist in the marketplace.

“Load serving entity” shall mean any entity (or the duly designated agent of such an entity), including a load aggregator or power marketer, (i) serving end-users within the PJM region, and (ii) that has been granted the authority or has an obligation pursuant to state or local law, regulation or franchise to sell electric energy to end-users located within the PJM region. Load serving entity shall include any end-use customer that qualifies under state rules or a utility retail tariff to manage directly its own supply of electric power and energy and use of transmission and ancillary services.

“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.

“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 any portion of the electricity generated by the alternative energy generating system is used to offset part or all of the customer-generator’s requirements for electricity. Virtual meter aggregation on properties owned or leased and operated by a customer-generator and located within two miles of the boundaries of the customer-generator’s property and within a single electric distribution company’s service territory shall be eligible for net metering.

“Nuclear generating station.” One or more electric generation units at a single site location that uses nuclear power as its fuel source and is licensed by the Nuclear Regulatory Commission.

“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.

“Reporting period.” or Reporting year.” 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.

“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).

“Tier I alternative energy source.” Energy derived from:

- (1) Solar photovoltaic and solar thermal 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.

“Tier II alternative energy source.” Energy derived from:

- (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.

“Tier III alternative energy source.”

- (1) Zero-emission energy derived from:
 - (i) Solar photovoltaic and solar thermal energy.
 - (ii) Wind power.
 - (iii) Low-impact hydropower.
 - (iv) Geothermal energy.
 - (v) Nuclear fission.
- (2) Where the zero-emission alternative energy source satisfies all of the following:
 - (i) The alternative energy source is interconnected with capacity injection rights within the regional transmission organization with responsibility for Pennsylvania.
 - (ii) If the alternative energy source were to cease operation or fail to come in-service:
 - (a) The ability of Pennsylvania, or regions of Pennsylvania, to maintain or decrease existing levels of volatile organic compounds or to comply with one or more state or federal air pollution control programs, standards or goals is reduced.
 - (b) The carbon dioxide emissions that result from electricity consumed in the Commonwealth are negatively impacted.
 - (c) The ability of Pennsylvania to maintain or decrease existing levels of carbon monoxide, lead, ground-level ozone, particulate matter, nitrogen oxide, or sulfur dioxide is negatively impacted.
 - (iii) The alternative energy source, on or after January 1, 2017:

(a) Did not receive from another state, regardless of the Tier III alternative energy source's location, tax exemptions, deferrals, exclusions, allowances, payments, credits, deductions, or reimbursements calculated in whole or in part using a metric that provides value for emissions not produced by the alternative energy source;

(b) Is not wholly owned by a municipal or cooperative corporation or a group, association, or consortium of those corporations; or

(c) Did not, at any point during the Tier III program, recover some or all of the capital or operating costs of the resource through cost-based rates regulated by a state.

"Tier III alternative energy credit reporting period price." The Tier III alternative energy credit price shall be determined by the commission 60 days prior to the start of each reporting year provided, however, that for the first reporting period for the Tier III program, the commission may determine the Tier III alternative energy credit price no later than 60 days after the start of the reporting year. The Tier III alternative energy credit price shall be equal to the Tier I projected price, but in no event shall the Tier III price be less than the Tier III price floor or greater than the Tier III price cap.

"Tier III program." The period commencing at the beginning of the fourteenth reporting year [June 1, 2019-May 31, 2020].

"Tier III price cap." The Tier III price cap shall be equal to the product of 115% and the Tier III price for the fourteenth reporting year.

"Tier III price floor." The Tier III price floor shall be equal to the product of 85% and the Tier III price for the fourteenth reporting year.

"Tier I projected price." The Tier I projected price shall equal the average of the Tier I futures prices for the current reporting year and the subsequent two reporting years. The Tier I futures price for each reporting year in this calculation shall be the average of the closing price on each trade date during the calendar year that ends immediately prior to the start of the current reporting year. The futures price shall be based on the Pennsylvania Compliance Alternative Energy Certificate Class I future published by the Intercontinental Exchange, or its successor.

"True-up period." The period each year from the end of the reporting year until September 1.

73 P.S. § 1648.3

§ 1648.3. Alternative energy portfolio standards

(a) **General compliance and cost recovery.--**

- (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).
- (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.
- (3) Beginning June 1, 2019 and each year thereafter, Tier III alternative energy credits shall be purchased by electric distribution companies as described under subsection (d) of this section, provided, however, that an electric distribution company shall be excused from its obligations under this section to the extent that the commission determines that force majeure exists.

~~(3)~~(4) All costs for:

- (i) the purchase of electricity generated from Tier I and Tier II 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
- (ii) payments for Tier I and Tier II 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 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 companies of resources to comply with this section, including, but not limited to, the purchase of electricity generated from Tier I and Tier II 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 Tier I and Tier II 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; and

(iii) Any and all direct and indirect costs incurred by electric distribution companies to comply with subsection (d) of this section and sections 1648.9 and 1648.10 of this chapter, including, but not limited to, the purchase of Tier III alternative energy credits and payments to any third party administrators for performance under this act shall be recovered on a full and current basis pursuant to a nonbypassable adjustment clause under 66 Pa.C.S. § 1307.

(b) Tier I and solar photovoltaic shares.--

- (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 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.
- (2) The total percentage of the electric energy sold by an electric distribution company or electric generation supplier to retail electric customers in this Commonwealth that must be sold from solar photovoltaic technologies is:
 - (i) 0.0013% for June 1, 2006, through May 31, 2007.
 - (ii) 0.0030% for June 1, 2007, through May 31, 2008.
 - (iii) 0.0063% for June 1, 2008, through May 31, 2009.
 - (iv) 0.0120% for June 1, 2009, through May 31, 2010.
 - (v) 0.0203% for June 1, 2010, through May 31, 2011.
 - (vi) 0.0325% for June 1, 2011, through May 31, 2012.
 - (vii) 0.0510% for June 1, 2012, through May 31, 2013.
 - (viii) 0.0840% for June 1, 2013, through May 31, 2014.
 - (ix) 0.1440% for June 1, 2014, through May 31, 2015.

- (x) 0.2500% for June 1, 2015, through May 31, 2016.
- (xi) 0.2933% for June 1, 2016, through May 31, 2017.
- (xii) 0.3400% for June 1, 2017, through May 31, 2018.
- (xiii) 0.3900% for June 1, 2018, through May 31, 2019.
- (xiv) 0.4433% for June 1, 2019, through May 31, 2020.
- (xv) 0.5000% for June 1, 2020, and thereafter.

- (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: for Tier I and Tier II shares. The commission shall work with the department in evaluating the future alternative energy resource potential.

(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:

- (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%.

(d) Tier III share.— During the Tier III program, each electric distribution company shall purchase Tier III alternative energy credits equal to 50% of the total electric energy sold in a service territory by the electric distribution company and electric generation suppliers. Notwithstanding any provision of law, the obligations of electric distribution companies under this subsection shall not be subject to 66 Pa. C.S. § 2807(e)(3.5) or (3.7).

(d)(e) 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 (ef)(7).

(e)(f) Alternative energy credits.--

- (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).
- (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:
 - (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.
 - (ii) To submit reports to the commission at such times and in such manner as the commission shall direct.
- (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).
- (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.
 - (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.
- (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.
- (6) An electric distribution company and electric generation supplier may bank or place in reserve Tier I and Tier II 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:

- (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.
- (7) An electric distribution company or an electric generation supplier with sales that are exempted under subsection (de) 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.
- (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.
- (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 (fg) for administrative expenses directly associated with this act.
- (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.

- (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.
- (12) Unless a contractual provision explicitly assigns alternative energy credits in a different manner, the owner of the alternative energy system or a customer-generator owns any and all alternative energy credits associated with or created by the production of electric energy by such facility or customer, and the owner or customer shall be entitled to sell, transfer or take any other action to which a legal owner of property is entitled to take with respect to the credits.

(f)(g) 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.
- (2) The commission shall conduct a review of each determination made under subsections (b), (c) and (ed). 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 (e)~~, (c), or (d) of this section, as applicable, the commission shall impose an alternative compliance payment on that electric distribution company or electric generation supplier.
- (3) The alternative compliance payment, with the exception of the solar photovoltaic share compliance requirement set forth in subsection (b)(2), and the requirement set forth in subsection (d) of this section, shall be \$45 times the number of additional alternative energy credits needed in order to comply with subsection (b) or (c).
- (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, including, where applicable, the levelized up-front rebates received by sellers of solar renewable energy credits in other jurisdictions in the PJM Interconnection, L.L.C. transmission organization (PJM) or its successor.
- (5) The alternative compliance payment for the Tier III share shall be equal to twice the Tier III alternative energy credit reporting period price for the applicable reporting period times the number of additional alternative energy credits needed in order to comply with subsection (d) of this section.

~~(5)~~(6) 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 the alternative compliance payment program must be changed, the commission shall present these findings to the General Assembly for legislative enactment.

~~(g)~~(h) **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 for failure to comply with subsections (b) and (c) 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.
- (2) The alternative compliance payments for failure to comply with subsections (b) and (c) 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).
- (3) Alternative compliance payments imposed pursuant to this act for failure to comply with subsection (d) shall be divided, with one-half paid consistent with subparagraphs (1) and (2) of this subsection and one-half used by the alternative energy credits program administrator to pay Tier III alternative energy sources for Tier III alternative energy credits that were otherwise not purchased due to the failure to comply with subsection (d).

~~(h)~~(i) **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.

73 P.S. § 1648.4

§ 1648.4. Portfolio requirements in other states

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 or alternative energy credits already purchased by individuals, businesses or government bodies that do not have a compliance obligation under this act unless the individual, business or government body sells those credits to the electric distribution company or electric generation supplier. Energy derived from alternative energy sources inside the geographical boundaries of this Commonwealth shall be eligible to meet the compliance requirements under this act. Energy derived from alternative energy sources located outside the geographical boundaries of this Commonwealth but within the service territory of a regional transmission organization that manages the transmission system in any part of this Commonwealth shall only be eligible to meet the compliance requirements of electric distribution companies or electric generation suppliers located within the service territory of the same regional transmission organization. For purposes of compliance with this act, alternative energy sources located in the PJM Interconnection, L.L.C. regional transmission organization (PJM) or its successor service territory shall be eligible to fulfill compliance obligations of all Pennsylvania electric distribution companies and electric generation suppliers. Energy derived from alternative energy sources located outside the service territory of a regional transmission organization that manages the transmission system in any part of this Commonwealth shall not be eligible to meet the compliance requirements of 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.

73 P.S. § 1648.5

§ 1648.5. Interconnection standards for customer-generator facilities

Excess generation from net-metered customer-generators shall receive full retail value for all energy produced on an annual basis. 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.

73 P.S. § 1648.6

§ 1648.6. Health and safety standards

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 Tier I and Tier II 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 Tier I and Tier II alternative energy sources as defined in this act.

73 P.S. § 1648.7

§ 1648.7. Interagency responsibilities

(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.

(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.

(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:

- (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.

(d) **Enforcement of provisions of chapter.**--In addition to any powers expressly enumerated in this chapter, the commission shall have full power and authority, and it shall be its duty to enforce, execute and carry out, by its regulations, orders, or otherwise, all and singular, the provisions of this chapter, and the full intent thereof; and shall have the power to rescind or modify any such regulations or orders. The express enumeration of the powers of the commission in this chapter shall not exclude any power which the commission would otherwise have under any of the provisions of this chapter or the Pennsylvania Public Utility Code (66 Pa.C.S. § 101 et seq.).

73 P.S. § 1648.8

§ 1648.8. Rural electric cooperatives

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.

73 P.S. § 1648.9

§ 1648.9. Tier III Alternative Energy Sources

(a) Selection of Tier III alternative energy sources. An alternative energy source seeking to participate in the Tier III program shall file written notice of its qualifications as a Tier III alternative energy source and its commitment to sell the entire output of the alternative energy source as Tier III credits for at least six reporting periods with the commission no later than 120 days prior to the start of the Tier III program reporting period, provided however, that for the first Tier III program reporting period, an alternative energy source may file written notice of its qualifications and commitment to sell Tier III credits no later than 90 days after the start of the first Tier III program reporting period and the provisions in subsection (b) below shall apply for the entire first reporting period if the resource is designated as a Tier III alternative energy source by the commission. The written notice of qualifications shall be published in the Pennsylvania Bulletin in the first available issue following the filing, with any comments in response to the notice filed with the commission no later than 20 days after publication and any reply comments filed within 10 days thereafter. The commission will accept new notices of qualifications and commitments to sell on the date that is 120 days prior to the end of the Tier III reporting period that is six years after the Tier III reporting period during which qualifications and commitments were last submitted.

The commission shall review the notice of qualifications and all comments and rank each application from first to last, based on how well the alternative energy source satisfies the criteria outlined in section 1648.2 of this chapter. No later than 90 days after filing of the notice of qualifications, the commission shall select the applicants that will participate in the Tier III program according to their ranking. Beginning with the top-ranked applicant and continuing in rank order, the commission shall continue to select applicants up to the point at which the combined sum of megawatt-hours of estimated generation by all selected applicants equals roughly 50 percent of the total number of megawatt-hours of electricity distributed by electric distribution companies in the Commonwealth in the calendar year which concludes immediately prior to the date upon which qualification applications are due. The estimated generation for the purposes of this calculation is as follows:

- (i) For existing alternative energy resources fueled by nuclear fission, the estimated generation is equal to the product of 80% multiplied by 8,760 hours per year multiplied by the summer capacity of the plant as reported in the most recent EIA-923 report published on the US Energy Information Administration website.
- (ii) For existing alternative energy resources not fueled by nuclear fission, the estimated generation is equal to the resource's generation level in the calendar year which concludes immediately prior to the date upon which qualification applications are due.
- (iii) For new alternative energy resources, the estimated generation is equal to the product of 8760 hours per year multiplied by the summer capacity of the resource multiplied by the average capacity factor of similar existing resources in PJM.

The commission shall select the marginal applicant to participate in Tier III if the addition of half of the estimated generation produced by the marginal applicant does not cause the combined sum of megawatt-hours of estimated generation from all selected applicants, including the marginal unit, to exceed 50 percent of the total number of megawatt-hours of electricity distributed by electric distribution companies in the Commonwealth in the calendar year which concludes immediately prior to the date upon which qualification applications are due.

Once designated, an alternative energy source shall continue to be considered a Tier III alternative energy source for six successive reporting periods as long as the alternative energy source continues to meet the criteria outlined in section 1648.2 of this chapter.

(b) Transfer and payment for Tier III alternative energy credits. Not later than 35 days following the close of each reporting period, each Tier III alternative energy source shall transfer all of its Tier III alternative energy credits for that reporting period to the alternative energy credit program administrator, which shall hold the Tier III alternative energy credits on behalf of the Tier III alternative energy sources for the sole purpose of administering the program. Not later than 7 days after all Tier III alternative energy sources have transferred their credits, each electric distribution company shall purchase Tier III alternative energy credits from the alternative energy credit program administrator at the Tier III alternative energy credit reporting period price for the reporting period to satisfy its Tier III obligations, and not later than 7 days thereafter, the alternative energy credit program administrator shall pay each Tier III alternative energy source for the Tier III alternative energy credits it transferred to the alternative energy credit administrator subject to the following:

(1) If the total quantity of Tier III alternative energy credits transferred to the program administrator is less than the sum of the Tier III shares for all electric distribution companies in the Commonwealth, then each electric distribution company's Tier III share for that delivery year shall be its proportional share of transferred Tier III credits. An electric distribution company's proportional share shall be a percentage equal to the total electric energy sold in a service territory by the electric distribution company and electric generation suppliers divided by the total electric energy sold by all electric distribution companies and electric generation suppliers in the Commonwealth.

(2) If the sum of Tier III alternative energy credits transferred to the program administrator from all Tier III alternative energy sources is greater than the sum of the Tier III shares for all electric distribution companies in the Commonwealth, then each Tier III alternative energy source shall be paid for its prorated share of transferred Tier III credits. An alternative energy source's prorated share shall be a percentage equal to the sum of the Tier III shares for all electric distribution companies in the Commonwealth divided by the sum of Tier III alternative energy credits transferred to the program administrator from all Tier III alternative energy sources.

Credits purchased by electric distribution companies may not be transferred, sold or assigned to any other entity. A Tier III alternative energy credit reporting period price shall include a reduction for payments received under any federal or regional transmission organization program that values the zero-emissions attributes of Tier III alternative energy sources during the applicable reporting period.

(c) Suspension of operations of a Tier III alternative energy source.

(1) A designated Tier III alternative energy source shall be excused from its commitment to operate for at least six reporting periods and shall no longer receive Tier III alternative energy credits, if:

(i) the designated Tier III alternative energy source suspends or ceases operations, despite the designated nuclear generating station's reasonable efforts to continue operations, due to an event beyond its control, including but not limited to acts of God, flood, drought, earthquake, storm, fire, lightning, epidemic, war, riot, labor dispute, labor or material shortage, sabotage, or explosion. The designated Tier III alternative energy source shall no longer be excused from performance, and payment of Tier III alternative credits shall resume, after conclusion of the event;

(ii) the Commonwealth enacts a new law imposing a material new tax, special assessment, or fee on the generation of electricity, the ownership or leasehold of a generating unit, or the privilege or occupation of the generation, ownership, or leasehold of generation units by a designated Tier III alternative energy source;

(iii) the Commonwealth or the federal government enacts a law that materially reduces the Tier III alternative energy credit reporting period price;

(iv) the designated Tier III alternative energy source requires capital expenditures in excess of \$40,000,000 that were neither known nor reasonably foreseeable at the time it submitted its qualifications as a Tier III alternative energy source, and the capital expenditures are expenditures that a prudent owner or operator of a designated Tier III alternative energy source would not undertake; or

(v) The Nuclear Regulatory Commission terminates a designated Tier III alternative energy source's license.

(d) Sunset provision. The obligations under this section and subsection 1648.3(d) shall cease after an effective cost of carbon emissions exists in Pennsylvania that is equal to no less than an average of \$15 per ton over three consecutive reporting periods as a result of the enactment of a statewide emissions fee program or participation by the Commonwealth in a regional multi-state greenhouse gas program, provided that Tier III alternative energy sources shall receive payments for Tier III alternative energy credits as provided in subsection (b) of this section for credits generated prior to the effective date of such enactment or participation.

73 P.S. § 1648.10

§ 1648.10. Capacity Payments to Alternative Energy Sources

(a) Election to participate in fixed resource requirement program. The administrator shall create and administer a program in which alternative energy systems may opt to supply and be paid for capacity through a means other than the centralized base residual auction for capacity operated by PJM Interconnection, L.L.C (PJM) or its successor, as permitted by the Federal Energy Regulatory Commission. The responsibilities of the administrator shall include, but not be limited to:

(1) establishing a process whereby an alternative energy system is permitted to notify PJM, consistent with requirements approved by the Federal Energy Regulatory Commission, of the decision to opt out of the centralized base residual auction for capacity and sell its capacity through other mechanisms;

(2) providing any determinations required by PJM with respect to such alternative energy systems, including a calculation of the commensurate amount of customer load that will not participate in the centralized base residual auction for capacity as a result of the alternative energy system's decision to sell its capacity through other mechanisms, which, if consistent with requirements approved by the Federal Energy Regulatory Commission, shall be calculated pro-rata across all load serving entities in the Commonwealth; and

(3) determining the amount that will be paid for the capacity of each such alternative energy system that opts out of the PJM centralized base residual auction for capacity for each applicable reporting period, which shall be equal to the generation capacity of the system as determined in accordance with PJM requirements multiplied by the locational delivery area price established by PJM in the base residual auction for capacity (or successor mechanism approved by the Federal Energy Regulatory Commission) for the location in which the system is located.

(b) Payments. In the event that PJM does not operate a settlement mechanism under which alternative energy systems that make elections under subsection (a) of this section can receive payments from PJM load serving entities, the administrator shall calculate the total amount due to each system under subsection (a)(3) and notify each electric distribution company of its share of that amount based upon the electric distribution company's pro rata share of the electric energy sold to retail electric customers in this Commonwealth during the applicable reporting period. Not later than 7 days of such notification, each electric distribution company shall pay such amount to the administrator, who shall then forward the amount due each alternative energy system under subsection (a)(3).

(c) Timing. The administrator shall create the program set forth in sections (a) and (b) above within 90 days after the later to occur of (1) the date of enactment of this Section or (2) the date on which PJM rules that allow alternative energy systems to opt out of the centralized base residual auction are accepted or approved by the Federal Energy Regulatory Commission.

