## THE GENERAL ASSEMBLY OF PENNSYLVANIA

## HOUSE BILL No. 11 Session of 2019

INTRODUCED BY MEHAFFIE, HICKERNELL, MILLARD, TOOHIL, RADER, HERSHEY, YOUNGBLOOD, BARRAR, ZIMMERMAN, HILL-EVANS, GILLESPIE, KAUFER, PASHINSKI, NEILSON, DEASY, DIGIROLAMO, SOLOMON, KORTZ, GREGORY AND MARSHALL, MARCH 12, 2019

REFERRED TO COMMITTEE ON CONSUMER AFFAIRS, MARCH 12, 2019

## AN ACT

1 2 3	Amending the act of November 30, 2004 (P.L.1672, No.213), entitled, "An act providing for the sale of electric energy generated from renewable and environmentally beneficial
4	sources, for the acquisition of electric energy generated
5	from renewable and environmentally beneficial sources by
6	electric distribution and supply companies and for the powers
7	and duties of the Pennsylvania Public Utility Commission,"
8	further providing for definitions, for alternative energy
9	portfolio standards, for portfolio requirements in other
10	states, for health and safety standards and for interagency
11 12	responsibilities; and providing for Tier III alternative energy sources and for capacity payments to alternative
13	energy sources.
10	energy bourceb.
14	The General Assembly of the Commonwealth of Pennsylvania
15	hereby enacts as follows:
16	Section 1. The definitions of "alternative energy credit,"
17	"alternative energy sources," "force majeure" and "reporting
18	period" in section 2 of the act of November 30, 2004 (P.L.1672,
19	No.213), known as the Alternative Energy Portfolio Standards
20	Act, are amended and the section is amended by adding
21	definitions to read:

22 Section 2. Definitions.

1 The following words and phrases when used in this act shall 2 have the meanings given to them in this section unless the 3 context clearly indicates otherwise:

"Alternative energy credit." A tradable instrument that is 4 used to establish, verify and monitor compliance with this act. 5 6 A unit of credit shall equal one megawatt hour of electricity 7 from an alternative energy source and shall only be used to 8 satisfy the requirement to purchase Tier I, Tier II or Tier III alternative energy credits. The alternative energy credit shall 9 10 remain the property of the alternative energy system until the 11 alternative energy credit is voluntarily transferred by the 12 alternative energy system.

13 \* \* \*

14 "Alternative energy sources." The term shall include the 15 following existing and new sources for the production of 16 electricity:

17 (1) Solar photovoltaic or other solar electric energy.

18

(2) Solar thermal energy.

19

(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:

29 (i) does not adversely change existing impacts to
 30 aquatic systems;

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(ii) meets the certification standards established
 by the Low Impact Hydropower Institute and American
 Rivers, Inc., or their successors;

4 (iii) provides an adequate water flow for protection
5 of aquatic life and for safe and effective fish passage;

6

(iv) protects against erosion; and

7

(v) protects cultural and historic resources.

8 (6) Geothermal energy, which shall mean electricity 9 produced by extracting hot water or steam from geothermal 10 reserves in the earth's crust and supplied to steam turbines 11 that drive generators to produce electricity.

12 (7) Biomass energy, which shall mean the generation of13 electricity utilizing the following:

14 organic material from a plant that is grown for (i) 15 the purpose of being used to produce electricity or is 16 protected by the Federal Conservation Reserve Program 17 (CRP) and provided further that crop production on CRP 18 lands does not prevent achievement of the water quality 19 protection, soil erosion prevention or wildlife 20 enhancement purposes for which the land was primarily set 21 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-ofway 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

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leaves, food waste, animal waste and sewage sludge. The term
 also includes landfill methane gas.

3 (9) Fuel cells, which shall mean any electrochemical
4 device that converts chemical energy in a hydrogen-rich fuel
5 directly into electricity, heat and water without combustion.

Waste coal, which shall include the combustion of 6 (10)waste coal in facilities in which the waste coal was disposed 7 8 or abandoned prior to July 31, 1982, or disposed of 9 thereafter in a permitted coal refuse disposal site regardless of when disposed of, and used to generate 10 11 electricity, or such other waste coal combustion meeting 12 alternate eligibility requirements established by regulation. 13 Facilities combusting waste coal shall use at a minimum a 14 combined fluidized bed boiler and be outfitted with a 15 limestone injection system and a fabric filter particulate 16 removal system. Alternative energy credits shall be 17 calculated based upon the proportion of waste coal utilized 18 to produce electricity at the facility.

19 (11) Coal mine methane, which shall mean methane gas20 emitting from abandoned or working coal mines.

21 (12) Demand-side management consisting of the management 22 of customer consumption of electricity or the demand for 23 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

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government customers that shift electric load from
 periods of higher demand to periods of lower demand; or

3 (iii) industrial by-product technologies consisting
4 of the use of a by-product from an industrial process,
5 including the reuse of energy from exhaust gases or other
6 manufacturing by-products that are used in the direct
7 production of electricity at the facility of a customer.

8 (13) Distributed generation system, which shall mean the 9 small-scale power generation of electricity and useful 10 thermal energy.

11 <u>(14) Energy from nuclear fission used to generate</u> 12 <u>electricity.</u>

13 \* \* \*

14 "Force majeure." Upon its own initiative or upon a request 15 of an electric distribution company or an electric generator 16 supplier, the Pennsylvania Public Utility Commission, within 60 days, shall determine if alternative energy resources are 17 18 reasonably available in the marketplace in sufficient quantities 19 for the electric distribution companies and electric generation 20 suppliers to meet their obligations for that reporting period 21 under this act. In making this determination, the commission shall consider whether electric distribution companies or 22 23 electric generation suppliers have made a good faith effort to 24 acquire sufficient alternative energy to comply with their 25 obligations. Such good faith efforts shall include, but are not 26 limited to, banking alternative energy credits during their 27 transition periods, seeking alternative energy credits through 28 competitive solicitations and seeking to procure alternative 29 energy credits or alternative energy through long-term contracts. In further making its determination, the commission 30

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shall assess the availability of alternative energy credits in 1 2 the Generation Attributes Tracking System (GATS) or its 3 successor and the availability of alternative energy credits generally in Pennsylvania and other jurisdictions in [the PJM 4 Interconnection, L.L.C. regional transmission organization (PJM) 5 or its successor] <u>PJM</u>. The commission may also require 6 7 solicitations for alternative energy credits as part of default 8 service before requests of force majeure can be made. If the commission further determines that alternative energy resources 9 10 are not reasonably available in sufficient quantities in the 11 marketplace for the electric distribution companies and electric 12 generation suppliers to meet their obligations under this act, 13 then the commission shall modify the underlying obligation of 14 the electric distribution company or electric generation 15 supplier or recommend to the General Assembly that the 16 underlying obligation be eliminated. Commission modification of 17 the electric distribution company or electric generation 18 supplier obligations under this act shall be for that compliance 19 period only. Commission modification shall not automatically 20 reduce the obligation for subsequent compliance years. If the 21 commission modifies the electric distribution company or 22 electric generation supplier obligations under this act, the 23 commission may require the electric distribution company or 24 electric generation supplier to acquire additional alternative 25 energy credits in subsequent years equivalent to the obligation 26 reduced due to a force majeure declaration if the commission 27 determines that sufficient alternative energy credits exist in 28 the marketplace.

29

"Load-serving entities." As follows:

30 (1) Entities or the duly designated agents of the

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1	entities, including load aggregators or power marketers,
2	<u>that:</u>
3	(i) serve end users within the PJM region; and
4	(ii) have been granted the authority or have an
5	obligation under a State law, local ordinance, regulation
6	or franchise to sell electric energy to end users located
7	within the PJM region.
8	(2) The term shall include end use customers that
9	qualify under State rules or utility retail tariffs to manage
10	directly their own supply of electric power and energy and
11	use of transmission and ancillary services.
12	* * *
13	"PJM." The PJM Interconnection, L.L.C. regional transmission
14	organization or its successor.
15	* * *
16	["Reporting period."] <u>"Reporting period" or "reporting year."</u>
17	The 12-month period from June 1 through May 31. A reporting year
18	shall be numbered according to the calendar year in which it
19	begins and ends.
20	* * *
21	"Tier I projected price." The Tier I projected price shall
22	equal the average of the Tier I futures price for the current
23	reporting year and the subsequent two reporting years. For the
24	purposes of calculating the Tier I projected price, the Tier I
25	futures price for each reporting year shall be the average of
26	the closing price on each trade date during the calendar year
27	that ends immediately prior to the start of the current
28	reporting year for alternative energy credits that are eligible
29	to meet the Tier I renewable energy requirement in this
30	Commonwealth.

1	"Tier III alternative energy credit reporting period price."
2	<u>As follows:</u>
3	(1) Except as provided under paragraph (2), the Tier III
4	alternative energy credit reporting period price shall be
5	determined by the commission 60 days before the start of each
6	reporting year.
7	(2) For the first reporting period for the Tier III
8	program, the commission may determine the Tier III
9	alternative energy credit reporting period price no later
10	than 60 days after the start of the reporting year.
11	(3) The Tier III alternative energy credit reporting
12	period price shall be equal to the Tier I projected price and
13	shall not be less than the Tier III price floor or greater
14	than the Tier III price cap.
15	"Tier III alternative energy source." A zero-emission
16	alternative energy source that:
16 17	<u>alternative energy source that:</u> (1) Is derived from:
17	(1) Is derived from:
17 18	(1) Is derived from: (i) Solar photovoltaic and solar thermal energy.
17 18 19	(1) Is derived from: (i) Solar photovoltaic and solar thermal energy. (ii) Wind power.
17 18 19 20	(1) Is derived from: (i) Solar photovoltaic and solar thermal energy. (ii) Wind power. (iii) Low-impact hydropower.
17 18 19 20 21	<pre>(1) Is derived from: (i) Solar photovoltaic and solar thermal energy. (ii) Wind power. (iii) Low-impact hydropower. (iv) Geothermal energy.</pre>
17 18 19 20 21 22	<pre>(1) Is derived from: (i) Solar photovoltaic and solar thermal energy. (ii) Wind power. (iii) Low-impact hydropower. (iv) Geothermal energy. (v) Nuclear fission.</pre>
17 18 19 20 21 22 23	<pre>(1) Is derived from: (i) Solar photovoltaic and solar thermal energy. (ii) Wind power. (iii) Low-impact hydropower. (iv) Geothermal energy. (v) Nuclear fission. (2) Satisfies all of the following:</pre>
17 18 19 20 21 22 23 24	<pre>(1) Is derived from: (i) Solar photovoltaic and solar thermal energy. (ii) Wind power. (iii) Low-impact hydropower. (iv) Geothermal energy. (v) Nuclear fission. (2) Satisfies all of the following: (i) The alternative energy source is interconnected</pre>
17 18 19 20 21 22 23 24 25	<pre>(1) Is derived from: (i) Solar photovoltaic and solar thermal energy. (ii) Wind power. (iii) Low-impact hydropower. (iv) Geothermal energy. (v) Nuclear fission. (2) Satisfies all of the following: (i) The alternative energy source is interconnected with capacity injection rights within the regional</pre>
17 18 19 20 21 22 23 24 25 26	<pre>(1) Is derived from: (i) Solar photovoltaic and solar thermal energy. (ii) Wind power. (iii) Low-impact hydropower. (iv) Geothermal energy. (v) Nuclear fission. (2) Satisfies all of the following: (i) The alternative energy source is interconnected with capacity injection rights within the regional transmission organization with responsibility for this</pre>
17 18 19 20 21 22 23 24 25 26 27	<pre>(1) Is derived from: (i) Solar photovoltaic and solar thermal energy. (ii) Wind power. (iii) Low-impact hydropower. (iv) Geothermal energy. (v) Nuclear fission. (2) Satisfies all of the following: (i) The alternative energy source is interconnected with capacity injection rights within the regional transmission organization with responsibility for this Commonwealth.</pre>

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1	(A) The ability of this Commonwealth or regions
2	<u>of this Commonwealth to maintain or decrease existing</u>
3	<u>levels of volatile organic compounds or to comply</u>
4	with Federal or State air pollution control programs,
5	standards or goals is reduced.
6	(B) The carbon dioxide emissions that result
7	from electricity consumed in this Commonwealth are
8	negatively impacted.
9	(C) The ability of this Commonwealth to maintain
10	or decrease existing levels of carbon monoxide, lead,
11	ground-level ozone, particulate matter, nitrogen
12	oxide or sulfur dioxide is negatively impacted.
13	(3) On or after January 1, 2017, satisfies any of the
14	following:
15	(i) Regardless of the alternative energy source's
16	location, did not receive tax exemptions, deferrals,
17	exclusions, allowances, payments, credits, deductions or
18	reimbursements from another state calculated in whole or
19	in part using a metric that provides value for emissions
20	not produced by the alternative energy source.
21	(ii) Is not wholly owned by a municipal or
22	cooperative corporation or a group, association or
23	consortium of a municipal or cooperative corporations.
24	(iii) Did not, at any point during the Tier III
25	program, recover some or all of the capital or operating
26	costs of the resource through cost-based rates regulated
27	<u>by a state.</u>
28	<u>"Tier III price cap." As follows:</u>
29	(1) Except as provided under paragraph (2), the Tier III
30	price cap shall be initially equal to the product of 65% and

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1 the weighted average price of credits that were retired for 2 Tier I compliance for the reporting year ending May 31, 2017, as reflected in the commission's 2017 Annual Report of 3 Alternative Energy Portfolio Standards Act of 2004. 4 5 (2) If the Commonwealth participates in a Statewide emissions fee program or a regional multistate greenhouse gas 6 7 program, the initial Tier III price cap shall be adjusted 8 annually by the ratio of the average price for allowances 9 under the program for the previous reporting year in price per ton divided by \$15 per ton. 10 "Tier III price floor." As follows: 11 12 (1) Except as provided under paragraph (2), the Tier III 13 price floor shall be initially equal to the product of 50% 14 and the weighted average price of credits that were retired for Tier I compliance for the reporting year ending May 31, 15 2017, as reflected in the commission's 2017 Annual Report of 16 17 Alternative Energy Portfolio Standards Act of 2004. 18 (2) If the Commonwealth participates in a Statewide 19 emissions fee program or a regional multistate greenhouse gas 20 program, the initial Tier III price floor shall be adjusted 21 annually by the ratio of the average price for allowances 22 under the program for the previous reporting year in price 23 per ton divided by \$15 per ton. 24 "Tier III program." The period commencing at the beginning of the 14th reporting year on June 1, 2019, to May 31, 2020. 25 \* \* \* 26 27 Section 2. Section 3(a), (b), (e), (f) and (q) of the act 28 are amended and the section is amended by adding a subsection to 29 read: Section 3. Alternative energy portfolio standards. 30 20190HB0011PN0864 - 10 -

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

(1)2 From the effective date of this act through and 3 including the 15th year after enactment of this act and each year thereafter, the electric energy sold by an electric 4 5 distribution company or electric generation supplier to 6 retail electric customers in this Commonwealth shall be 7 comprised of electricity generated from alternative energy 8 sources and in the percentage amounts as described under 9 subsections (b) and (c).

10 (2) Electric distribution companies and electric 11 generation suppliers shall satisfy both requirements set 12 forth in subsections (b) and (c), provided, however, that an 13 electric distribution company or an electric generation 14 supplier shall be excused from its obligations under this 15 section to the extent that the commission determines that 16 force majeure exists.

17 (2.1) Beginning June 1, 2019, and each year thereafter, 18 Tier III alternative energy credits shall be purchased by 19 electric distribution companies as described under subsection 20 (c.1), provided, however, that an electric distribution 21 company shall be excused from its obligations under this 22 section to the extent that the commission determines that 23 force majeure exists.

24

(3) All costs for:

(i) the purchase of electricity generated from <u>Tier</u>
<u>I and Tier II</u> alternative energy sources, including the
costs of the regional transmission organization, in
excess of the regional transmission organization realtime locational marginal pricing, or its successor, at
the delivery point of the alternative energy source for

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the electrical production of the alternative energy
 sources; and

3 (ii) payments for <u>Tier I and Tier II</u> alternative energy credits[, in both cases] that are voluntarily 4 5 acquired by an electric distribution company during the cost recovery period on behalf of its customers shall be 6 7 deferred as a regulatory asset by the electric 8 distribution company and fully recovered, with a return 9 on the unamortized balance, pursuant to an automatic 10 energy adjustment clause under 66 Pa.C.S. § 1307 11 (relating to sliding scale of rates; adjustments) as a 12 cost of generation supply under 66 Pa.C.S. § 2807 13 (relating to duties of electric distribution companies) 14 in the first year after the expiration of its cost-15 recovery period. After the cost-recovery period, any 16 direct or indirect costs for the purchase by electric 17 distribution companies of resources to comply with this section, including, but not limited to, the purchase of 18 19 electricity generated from <u>Tier I and Tier II</u> alternative 20 energy sources, payments for alternative energy credits, 21 cost of credits banked, payments to any third party 22 administrators for performance under this act and costs 23 levied by a regional transmission organization to ensure 24 that Tier I and Tier II alternative energy sources are 25 reliable, shall be recovered on a full and current basis 26 pursuant to an automatic energy adjustment clause under 27 66 Pa.C.S. § 1307 as a cost of generation supply under 66 Pa.C.S. § 2807. 28

29 (4) Any direct and indirect costs incurred by electric
 30 distribution companies to comply with subsection (c.1) and

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sections 8.1 and 8.2, 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.--

7 Two years after the effective date of this act, at (1)8 least 1.5% of the electric energy sold by an electric 9 distribution company or electric generation supplier to 10 retail electric customers in this Commonwealth shall be generated from Tier I alternative energy sources. Except as 11 12 provided in this section, the minimum percentage of electric 13 energy required to be sold to retail electric customers from 14 alternative energy sources shall increase to 2% three years 15 after the effective date of this act. The minimum percentage of electric energy required to be sold to retail electric 16 17 customers from alternative energy sources shall increase by 18 at least 0.5% each year so that at least 8% of the electric energy sold by an electric distribution company or electric 19 20 generation supplier to retail electric customers in that 21 certificated territory in the 15th year after the effective 22 date of this subsection is sold from Tier I alternative 23 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:

28 (i) 0.0013% for June 1, 2006, through May 31, 2007.
29 (ii) 0.0030% for June 1, 2007, through May 31, 2008.
30 (iii) 0.0063% for June 1, 2008, through May 31,

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2009.

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2 0.0120% for June 1, 2009, through May 31, 2010. (iv) 0.0203% for June 1, 2010, through May 31, 2011. 3 (V) 0.0325% for June 1, 2011, through May 31, 2012. 4 (vi) 5 0.0510% for June 1, 2012, through May 31, (vii) 6 2013. 7 (viii) 0.0840% for June 1, 2013, through May 31, 2014. 8 9 0.1440% for June 1, 2014, through May 31, 2015. (ix) 10 0.2500% for June 1, 2015, through May 31, 2016. (X) 0.2933% for June 1, 2016, through May 31, 2017. 11 (xi) 12 (xii) 0.3400% for June 1, 2017, through May 31, 2018. 13 14 (xiii) 0.3900% for June 1, 2018, through May 31, 15 2019. 16 (xiv) 0.4433% for June 1, 2019, through May 31, 2020. 17 18 (xv) 0.5000% for June 1, 2020, and thereafter. 19 Upon commencement of the beginning of the 6th (3) 20 reporting year, the commission shall undertake a review of 21 the compliance by electric distribution companies and 22 electric generation suppliers with the requirements of this 23 act. The review shall also include the status of alternative 24 energy technologies within this Commonwealth and the capacity 25 to add additional alternative energy resources. The 26 commission shall use the results of this review to recommend 27 to the General Assembly additional compliance goals beyond year 15 <u>for Tier I and Tier II shares</u>. The commission shall 28 29 work with the department in evaluating the future alternative 30 energy resource potential.

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## 2 (c.1) Tier III share.--(1) During the Tier III program, electric distribution 3 companies shall purchase Tier III alternative energy credits 4 equal to 50% of the total electric energy, net of system 5 losses, sold in a reporting period in a service territory by 6 the electric distribution companies and electric generation 7 suppliers in accordance with section 8.1(c)(3). 8 9 Notwithstanding any other provision of law, the obligations 10 of electric distribution companies under this subsection shall not be subject to 66 Pa.C.S. § 2807(e)(3.5) or (3.7). 11 12 Nothing in this subsection shall be construed to obligate an 13 electric distribution company to purchase electric energy 14 from a Tier III alternative energy source. (2) This subsection shall expire after an effective cost 15 of carbon emissions exists in this Commonwealth that is equal 16 to no less than an average of \$15 per ton over three 17 consecutive reporting periods as a result of the enactment of 18 19 a Statewide emissions fee program or participation by the 20 Commonwealth in a regional multistate greenhouse gas program. 21 (3) Upon the enactment of a Statewide emissions fee 22 program or participation by the Commonwealth in a regional multistate greenhouse gas program, the commission shall 23 24 submit a notice to the Legislative Reference Bureau for 25 publication in the Pennsylvania Bulletin. 26 (4) This subsection shall expire on the date the notice 27 under paragraph (3) is published in the Pennsylvania 28 Bulletin. \* \* \* 29 30 (e) Alternative energy credits. --

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1 (1) The commission shall establish an alternative energy 2 credits program as needed to implement this act. The 3 provision of services pursuant to this section shall be 4 exempt from the competitive procurement procedures of 62 5 Pa.C.S. (relating to procurement).

6 (2) The commission shall approve an independent entity 7 to serve as the alternative energy credits program 8 administrator. The administrator shall have those powers and 9 duties assigned by commission regulations. Such powers and 10 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.

17 (ii) To submit reports to the commission at such
18 times and in such manner as the commission shall direct.

19 (3) All qualifying alternative energy systems must 20 include a qualifying meter to record the cumulative electric 21 production to verify the [advanced] <u>alternative</u> energy credit 22 value. Qualifying meters will be approved by the commission 23 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.

29 (ii) For purposes of this subsection, one
30 alternative energy credit shall represent one megawatt

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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.

The alternative energy credits program shall include 6 (5) 7 provisions requiring a reporting period as defined in section 8 2 for all covered entities under this act. The alternative 9 energy credits program shall also include a true-up period as 10 defined in section 2. The true-up period shall provide entities covered under this act the ability to obtain the 11 12 required number of alternative energy credits or to make up 13 any shortfall of the alternative energy credits they may be 14 required to obtain to comply with this act. A force majeure 15 provision shall also be provided for under the true-up period 16 provisions.

17 (6) An electric distribution company and electric 18 generation supplier may bank or place in reserve Tier I and 19 Tier II alternative energy credits produced in one reporting 20 year for compliance in either or both of the two subsequent 21 reporting years, subject to the limitations set forth in this 22 subsection and provided that the electric distribution 23 company and electric generation supplier are in compliance 24 for all previous reporting years. In addition, the electric 25 distribution company and electric generation supplier shall demonstrate to the satisfaction of the commission that such 26 27 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

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previously been used for compliance under this act;

2 (ii) were produced by the generation of electrical
3 energy by alternative energy sources and sold to retail
4 customers during the year in which they were generated;
5 and

6 (iii) have not otherwise been nor will be sold, 7 retired, claimed or represented as part of satisfying 8 compliance with alternative or renewable energy portfolio 9 standards in other states.

10 (7) An electric distribution company or an electric 11 generation supplier with sales that are exempted under 12 subsection (d) may bank credits for retail sales of 13 electricity generated from Tier I and Tier II sources made 14 prior to the end of the cost-recovery period and after the 15 effective date of this act. Bankable credits shall be limited to credits associated with electricity sold from Tier I and 16 17 Tier II sources during a reporting year which exceeds the 18 volume of sales from such sources by an electric distribution 19 company or electric generation supplier during the 12-month 20 period immediately preceding the effective date of this act. All credits banked under this subsection shall be available 21 22 for compliance with subsections (b) and (c) for no more than two reporting years following the conclusion of the cost-23 24 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

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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.

The commission may impose an administrative fee on 6 (9) 7 an alternative energy credit transaction. The amount of this 8 fee may not exceed the actual direct cost of processing the 9 transaction by the alternative energy credits administrator. The commission is authorized to utilize up to 5% of the 10 11 alternative compliance fees generated under subsection (f) 12 for administrative expenses directly associated with this 13 act.

14 (10)The commission shall establish regulations 15 governing the verification and tracking of energy efficiency 16 and demand-side management measures pursuant to this act, 17 which shall include benefits to all utility customer classes. 18 When developing regulations, the commission must give 19 reasonable consideration to existing and proposed regulations 20 and rules in existence in the regional transmission 21 organizations that manage the transmission system in any part 22 of this Commonwealth. All verified reductions shall accrue 23 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

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1 for a 60-day public comment period and shall issue final 2 standards within 30 days of the close of the public comment 3 period.

4 (12)Unless a contractual provision explicitly assigns 5 alternative energy credits in a different manner, the owner 6 of the alternative energy system or a customer-generator owns 7 any and all alternative energy credits associated with or 8 created by the production of electric energy by such facility 9 or customer, and the owner or customer shall be entitled to sell, transfer or take any other action to which a legal 10 11 owner of property is entitled to take with respect to the 12 credits.

13 (f) Alternative compliance payment.--

14 (1) At the end of each program year, the program
15 administrator shall provide a report to the commission and to
16 each covered electric distribution company showing their
17 status level of alternative energy acquisition.

18 (2)The commission shall conduct a review of each 19 determination made under subsections (b) [and], (c) and 20 (c.1). If, after notice and hearing, the commission 21 determines that an electric distribution company or electric 22 generation supplier has failed to comply with subsections (b) [and], (c) and (c.1), as applicable, the commission shall 23 24 impose an alternative compliance payment on that electric 25 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] subsections (b)(2) and
(c.1), shall be \$45 times the number of additional
alternative energy credits needed in order to comply with

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1 subsection (b) or (c).

2 (4) The alternative compliance payment for the solar photovoltaic share shall be 200% of the average market value 3 of solar renewable energy credits sold during the reporting 4 5 period within the service region of the regional transmission 6 organization, including, where applicable, the levelized up-7 front rebates received by sellers of solar renewable energy 8 credits in other jurisdictions in the PJM [Interconnection, 9 L.L.C. transmission organization (PJM) or its successor.] 10 region.

11 <u>(4.1) The alternative compliance payment for the Tier</u> 12 <u>III share shall be 200% of the Tier III alternative energy</u> 13 <u>credit reporting period price for the applicable reporting</u> 14 <u>period times the number of additional alternative energy</u> 15 <u>credits needed in order to comply with subsection (c.1).</u>

The commission shall establish a process to provide 16 (5) 17 for, at least annually, a review of the alternative energy 18 market within this Commonwealth and the service territories 19 of the regional transmission organizations that manage the 20 transmission system in any part of this Commonwealth. The 21 commission will use the results of this study to identify any 22 needed changes to the cost associated with the alternative 23 compliance payment program. If the commission finds that the 24 costs associated with the alternative compliance payment 25 program must be changed, the commission shall present these 26 findings to the General Assembly for legislative enactment. 27 Transfer to sustainable development funds .--(a)

(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

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1 fines and penalties), alternative compliance payments imposed 2 pursuant to this act for failure to comply with subsections 3 (b) and (c) shall be paid into Pennsylvania's Sustainable Energy Funds created under the commission's restructuring 4 5 orders under 66 Pa.C.S. Ch. 28 (relating to restructuring of 6 electric utility industry). Alternative compliance payments 7 shall be paid into a special fund of the Pennsylvania 8 Sustainable Energy Board, established by the commission under 9 Docket M-00031715, and made available to the Regional 10 Sustainable Energy Funds under procedures and guidelines 11 approved by the Pennsylvania Energy Board.

12 (2) The alternative compliance payments <u>for failure to</u> 13 <u>comply with subsections (b) and (c)</u> shall be utilized solely 14 for projects that will increase the amount of electric energy 15 generated from alternative energy resources for purposes of 16 compliance with subsections (b) and (c).

17 (3) The alternative compliance payments for failure to
18 comply with subsection (c.1) shall be divided as follows:
19 (i) Fifty percent shall be paid consistent with
20 paragraphs (1) and (2).
21 (ii) Fifty percent shall be utilized by the

22alternative energy credits program administrator to pay23Tier III alternative energy sources for Tier III24alternative energy credits that were otherwise not

25 <u>purchased due to the failure to comply with subsection</u>

26 <u>(c.1).</u>

27 \* \* \*

28 Section 3. Sections 4 and 6 of the act are amended to read:29 Section 4. Portfolio requirements in other states.

30 If an electric distribution [supplier] <u>company</u> or electric

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1 generation company [provider] <u>supplier</u> sells electricity in any 2 other state and is subject to renewable energy portfolio 3 requirements in that state, they shall list any such requirement and shall indicate how it satisfied those renewable energy 4 portfolio requirements. To prevent double-counting, the electric 5 distribution [supplier] <u>company</u> or electric generation company 6 7 shall not satisfy Pennsylvania's alternative energy portfolio 8 requirements using alternative energy used to satisfy another state's portfolio requirements or alternative energy credits 9 already purchased by individuals, businesses or government 10 bodies that do not have a compliance obligation under this act 11 12 unless the individual, business or government body sells those 13 credits to the electric distribution company or electric 14 generation supplier. Energy derived from alternative energy 15 sources inside the geographical boundaries of this Commonwealth 16 shall be eligible to meet the compliance requirements under this 17 act. Energy derived from alternative energy sources located 18 outside the geographical boundaries of this Commonwealth but 19 within the service territory of a regional transmission 20 organization that manages the transmission system in any part of 21 this Commonwealth shall only be eligible to meet the compliance 22 requirements of electric distribution companies or electric 23 generation suppliers located within the service territory of the 24 same regional transmission organization. For purposes of 25 compliance with this act, alternative energy sources located in 26 [the PJM Interconnection, L.L.C. regional transmission 27 organization (PJM) or its successor] <u>PJM's</u> service territory 28 shall be eligible to fulfill compliance obligations of all 29 Pennsylvania electric distribution companies and electric 30 generation suppliers. Energy derived from alternative energy 20190HB0011PN0864 - 23 -

1 sources located outside the service territory of a regional 2 transmission organization that manages the transmission system 3 in any part of this Commonwealth shall not be eligible to meet 4 the compliance requirements of this act. Electric distribution 5 companies and electric generation suppliers shall document that 6 this energy was not used to satisfy another state's renewable 7 energy portfolio standards.

8 Section 6. Health and safety standards.

9 The department shall cooperate with the Department of Labor 10 and Industry as necessary in developing health and safety standards, as needed, regarding facilities generating energy 11 12 from Tier I and Tier II alternative energy sources. The department shall establish appropriate and reasonable health and 13 safety standards to ensure uniform and proper compliance with 14 15 this act by owners and operators of facilities generating energy 16 from Tier I and Tier II alternative energy sources as defined in 17 this act.

18 Section 4. Section 7 of the act is amended by adding a 19 subsection to read:

20 Section 7. Interagency responsibilities.

21 \* \* \*

22 (d) Enforcement.--In addition to any powers expressly

23 specified under this act, the commission may enforce the

24 provisions of this act in accordance with the commission's

25 regulations and orders and the commission may modify or rescind

26 the regulations or orders. Nothing in this subsection shall be

27 <u>construed to exclude any authority which the commission would</u>

28 <u>otherwise have under this act or 66 Pa.C.S.</u> (relating to public 29 utilities).

30 Section 5. The act is amended by adding sections to read:

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1	Section 8.1. Tier III alternative energy sources.
2	(a) ParticipationAn alternative energy source seeking to
3	apply for participation in the Tier III program shall file a
4	written notice with the commission. The written notice shall
5	contain all of the following information:
6	(1) The alternative energy source's qualifications as a
7	<u>Tier III alternative energy source.</u>
8	(2) The estimated generation of the alternative energy
9	resources consistent with subsection (b)(2).
10	(3) The alternative energy source's commitment to sell
11	the entire output of the alternative energy source as Tier
12	III credits for at least six reporting periods with the
13	<u>commission no later than 90 days after the start of the first</u>
14	<u>Tier III program reporting period. The provisions of</u>
15	subsection (b) shall apply for the entire first reporting
16	period if the alternative energy source is designated as a
17	Tier III alternative energy source by the commission.
18	(b) Review
19	(1) The alternative energy source shall submit the
20	notice filed under subsection (a) to the Legislative
21	<u>Reference Bureau for publication in the Pennsylvania Bulletin</u>
22	in the first available issue after filing the notice with the
23	commission. Any comments in response to the notice filed
24	<u>under subsection (a) shall be submitted no later than 20 days</u>
25	after the notice is published in the Pennsylvania Bulletin
26	and any reply comments shall be submitted no later than 10
27	days after the initial comments are submitted.
28	(2) The commission shall review each notice filed under
29	subsection (a) and all comments submitted under this
30	paragraph and rank each applicant for participation in the

1	<u>Tier III program from first to last based on how well the</u>
2	alternative energy source satisfies the criteria specified
3	under this act. No later than 90 days after reviewing each
4	notice filed under subsection (a), the commission shall
5	select the applicants that will participate in the Tier III
6	program according to their ranking. Beginning with the top-
7	ranked applicant and continuing in rank order, the commission
8	shall select applicants up to the point at which the combined
9	sum of megawatt hours of estimated generation by all selected
10	applicants equals approximately 50% of the total number of
11	megawatt hours of electricity distributed by electric
12	distribution companies in this Commonwealth, net of system_
13	losses, for the latest calendar year reported in the most
14	recent Electric Power Outlook or other report reviewing the
15	generation, transmission and distribution capacity in this
16	Commonwealth published by the commission. For the purposes of
17	this calculation, the estimated generation shall be as
18	follows:
19	(i) For existing alternative energy resources fueled
20	by nuclear fission, the estimated generation shall be
21	equal to the product of 77% multiplied by 8,760 hours per
22	year multiplied by the nameplate capacity of the plant.
23	(ii) For existing alternative energy resources not
24	fueled by nuclear fission, the estimated generation shall
25	be equal to the generation output of the resources in the
26	calendar year which concludes immediately prior to the
27	date upon which qualification applications are due.
28	(iii) For new alternative energy resources, the
29	estimated generation is equal to the product of 8,760
30	hours per year multiplied by the nameplate capacity of

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1	the resource multiplied by the average capacity factor of
2	<u>similar existing resources.</u>
3	(3) The commission shall select the marginal applicant
4	to participate in the Tier III program if the addition of 50%
5	of the estimated generation produced by the marginal
6	applicant does not cause the combined sum of megawatt hours
7	of estimated generation from all selected applicants,
8	including the marginal unit, to exceed 50% of the total
9	number of megawatt hours of electricity distributed by
10	electric distribution companies in this Commonwealth in the
11	calendar year which concludes immediately prior to the date
12	upon which qualification applications are due.
13	(4) Once designated as a Tier III alternative energy
14	source, an alternative energy source shall continue to be
15	considered a Tier III alternative energy source as long as
16	the alternative energy source continues to meet the criteria
17	specified under this act.
18	(c) Transfers and payments
19	(1) No later than 35 days after the close of each
20	reporting period, each Tier III alternative energy source
21	shall transfer all Tier III alternative energy credits for
22	the reporting period to the alternative energy credit program
23	administrator. The program administrator shall hold the Tier
24	III alternative energy credits on behalf of the Tier III
25	alternative energy sources for the sole purpose of
26	administering the Tier III program.
27	(2) No later than seven days after all Tier III
28	alternative energy sources have transferred the credits under
29	paragraph (1), each electric distribution company shall
30	purchase Tier III alternative energy credits from the

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1	alternative energy credit program administrator at the Tier
2	III alternative energy credit reporting period price for the
3	reporting period to satisfy each electric distribution
4	company's Tier III obligations.
5	(3) No later than seven days after each electric
6	distribution company purchases Tier III alternative energy
7	credits under paragraph (2), the alternative energy credit
8	program administrator shall pay each Tier III alternative
9	energy source for the Tier III alternative energy credits
10	transferred to the alternative energy credit program
11	administrator under paragraph (1) in accordance with the
12	<u>following:</u>
13	(i) If the total quantity of Tier III alternative
14	energy credits transferred to the alternative energy
15	credit program administrator is less than the sum of the
16	<u>Tier III shares for all electric distribution companies</u>
17	in this Commonwealth, then each electric distribution
18	company's Tier III share for that delivery year shall be
19	each electric distribution company's proportional share
20	of transferred Tier III credits. An electric distribution
21	company's proportional share shall be a percentage equal
22	to the total electric energy sold in a service territory
23	by the electric distribution company and electric
24	generation suppliers divided by the total electric energy
25	sold by all electric distribution companies and electric
26	generation suppliers in this Commonwealth.
27	(ii) If the sum of Tier III alternative energy
28	credits transferred to the alternative energy credit
29	program administrator from all Tier III alternative
30	energy sources is greater than the sum of the Tier III

1	shares for all electric distribution companies in this
2	Commonwealth, then each Tier III alternative energy_
3	source shall be paid for each of the Tier III alternative
4	energy source's prorated share of transferred Tier III
5	credits. Tier III alternative energy credits transferred
6	to the program administrator that exceed the sum of the
7	Tier III shares for all electric distribution companies
8	in this Commonwealth shall be retired. An alternative
9	energy source's prorated share shall be a percentage
10	equal to the sum of Tier III shares for all electric
11	distribution companies in this Commonwealth divided by
12	the sum of Tier III alternative energy credits
13	transferred to the program administrator from all Tier
14	III alternative energy sources. Credits purchased by
15	electric distribution companies may not be transferred,
16	sold or assigned to any other entity.
17	(d) Suspension of operations
18	(1) A designated Tier III alternative energy source
19	shall be excused from the designated Tier III alternative
20	energy source's commitment to operate for at least six
21	reporting periods and shall no longer receive Tier III
22	alternative energy credits if any of the following apply:
23	(i) The designated Tier III alternative energy
24	source suspends or ceases operations, despite the
25	designated Tier III alternative energy source's
26	reasonable efforts to continue operations, due to an
27	event beyond the designated Tier III alternative energy
28	source's control, including, but not limited to, acts of
29	<u>God, flood, drought, earthquake, storm, fire, lightning,</u>
30	epidemic, war, riot, labor or material shortage, sabotage

1	or explosion. The designated Tier III alternative energy
2	source shall no longer be excused from performance and
3	payment of Tier III alternative credits after the
4	conclusion of an event specified under this subparagraph.
5	(ii) The General Assembly enacts a new law imposing
6	a material new tax, special assessment or fee on the
7	generation of electricity, the ownership or leasehold of
8	a generating unit or the privilege or occupation of the
9	generation, ownership or leasehold of generation units by
10	a designated Tier III alternative energy source.
11	(iii) The Congress of the United States or General
12	Assembly enacts a law that materially reduces the Tier
13	III alternative energy credit reporting period price.
14	(iv) The Federal Government or the Commonwealth
15	takes final action relating to the provision of Tier III
16	alternative energy credits that has the effect of
17	eliminating a material portion of a designated Tier III
18	alternative energy source's anticipated future revenue,
19	taking into account the benefits to be provided to a
20	designated Tier III alternative energy source under the
21	<u>Tier III program.</u>
22	(v) The designated Tier III alternative energy
23	source requires capital expenditures in excess of
24	\$40,000,000 that were not known or reasonably foreseeable
25	at the time of the submission of the alternative energy
26	source's qualifications under subsection (a) as a Tier
27	III alternative energy source and the capital
28	expenditures are expenditures that a prudent owner or
29	operator of a designated Tier III alternative energy
30	source would not undertake.

1	(vi) The United States Nuclear Regulatory Commission
2	terminates the designated Tier III alternative energy
3	source's license.
4	<u>(e) Expiration</u>
5	(1) This section shall expire after an effective cost of
6	carbon emissions exists in this Commonwealth that is equal to
7	<u>no less than an average of \$15 per ton over three consecutive</u>
8	reporting periods as a result of the enactment of a Statewide
9	emissions fee program or participation by the Commonwealth in
10	<u>a regional multistate greenhouse gas program. Tier III</u>
11	alternative energy sources shall receive payments for Tier
12	III alternative energy credits as provided under subsection
13	(c) for credits generated prior to the effective date of the
14	<u>enactment of a Statewide emissions fee program or</u>
15	participation by the Commonwealth in a regional multistate
16	greenhouse gas program.
17	(2) Upon the enactment of a Statewide emissions fee
18	program or participation by the Commonwealth in a regional
19	multistate greenhouse gas program, the commission shall
20	submit a notice to the Legislative Reference Bureau for
21	publication in the Pennsylvania Bulletin.
22	(3) This section shall expire on the date the notice
23	under paragraph (2) is published in the Pennsylvania
24	Bulletin.
25	Section 8.2. Capacity payments to alternative energy sources.
26	(a) ProgramThe alternative energy credits program
27	administrator shall establish and administer a program in which
28	alternative energy systems may opt to supply and be paid for
29	capacity through a means other than the centralized base
30	residual auction for capacity operated by PJM as authorized by
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1 the Federal Energy Regulatory Commission. The duties of the program administrator shall include, but not be limited to, all 2 3 of the following: (1) Establishing a process by which an alternative 4 5 energy system is permitted to notify PJM, consistent with requirements approved by the Federal Energy Regulatory 6 7 Commission, of the decision to opt out of the centralized base residual auction for capacity and sell the alternative 8 9 energy system's capacity through other mechanisms. (2) Providing any determinations required by PJM with 10 respect to an alternative energy system, including a 11 12 calculation of the commensurate amount of customer load that 13 will not participate in the centralized base residual auction 14 for capacity as a result of an alternative energy system's decision to sell the alternative energy system's capacity 15 though other mechanisms. If consistent with requirements 16 approved by the Federal Energy Regulatory Commission, the 17 18 alternative energy system's capacity shall be calculated pro 19 rata across all load-serving entities in this Commonwealth. 20 (3) Determining the amount that will be paid for the 21 capacity of an alternative energy system that opts out of the 22 centralized base residual auction for capacity for each applicable reporting period, which shall be equal to the 23 24 generation capacity of the alternative energy system as 25 determined in accordance with PJM requirements multiplied by 26 the locational delivery area price established by PJM in the centralized base residual auction for capacity or successor 27 28 mechanism approved by the Federal Energy Regulatory 29 Commission for the location where the alternative energy 30 system is located.

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1	(b) PaymentsIn the event that PJM does not operate a
2	settlement mechanism under which alternative energy systems that
3	make elections under subsection (a) can receive payments from
4	load-serving entities, the alternative energy credits program
5	administrator shall calculate the total amount due to the
6	alternative energy system under subsection (a)(3) and notify the
7	electric distribution company of the electric distribution
8	company's share of the amount based upon the electric
9	distribution company's pro rata share of the electric energy
10	sold to retail electric customers in this Commonwealth during
11	the applicable reporting period. No later than seven days after
12	the electric distribution company receives the notice under this
13	subsection, the electric distribution company shall pay the
14	amount to the program administrator. The electric distribution
15	company shall then forward the amount due to the alternative
16	energy system under subsection (a)(3).
17	(c) DeadlineThe alternative energy credits program
18	administrator shall establish the program under subsection (a)
19	within 90 days after the later of the following:
20	(1) The effective date of this section.
21	(2) The date when PJM rules that allow alternative
22	energy systems to opt out of the centralized base residual
23	auction are authorized by the Federal Energy Regulatory
24	Commission.

25 Section 6. This act shall take effect in 60 days.

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