## THE GENERAL ASSEMBLY OF PENNSYLVANIA

## SENATE BILL

No. 1350 Session of 2012

INTRODUCED BY ARGALL, ERICKSON, BLAKE, RAFFERTY, FONTANA, SCHWANK, LEACH, ALLOWAY, GREENLEAF, BREWSTER, DINNIMAN, FERLO, COSTA, TARTAGLIONE, STACK, FARNESE, McILHINNEY, HUGHES AND BROWNE, AUGUST 14, 2012

REFERRED TO CONSUMER PROTECTION AND PROFESSIONAL LICENSURE, AUGUST 14, 2012

## AN ACT

- 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 sources, for the acquisition of electric energy generated from renewable and environmentally beneficial sources by 5 electric distribution and supply companies and for the powers 7 and duties of the Pennsylvania Public Utility Commission," further providing for definitions and for alternative energy 8 portfolio standards; and providing for sale and installation 9 of customer-generator alternative energy systems. 10 11 The General Assembly of the Commonwealth of Pennsylvania 12 hereby enacts as follows: 13 Section 1. The definitions of "alternative energy credit," "alternative energy sources," "alternative energy system," 14 15 "force majeure" and "Tier 1 alternative energy source" in section 2 of the act of November 30, 2004 (P.L.1672, No.213), 16 17 known as the Alternative Energy Portfolio Standards Act, amended 18 July 17, 2007 (P.L.114, No.35), are amended and the section is 19 amended by adding a definition to read:
- 20 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:
- 4 "Alternative energy credit." A tradable instrument that is
- 5 used to establish, verify and monitor compliance with this act.
- 6 A unit of credit shall equal one megawatt hour of electricity or
- 7 3,413,000 British thermal units (3,413 MMBtu) of solar thermal
- 8 <u>energy</u> from an alternative energy source. The alternative energy
- 9 credit shall remain the property of the alternative energy
- 10 system until the alternative energy credit is voluntarily
- 11 transferred by the alternative energy system.
- 12 \* \* \*
- "Alternative energy sources." The term shall include the
- 14 following existing and new sources for the production of
- 15 electricity:
- 16 (1) Solar photovoltaic or other solar electric energy.
- 17 (2) Solar thermal energy[.] which shall mean solar\_
- 18 equipment that generates energy that is equivalent to the
- 19 generation of electricity and is eligible for solar renewable
- 20 energy credits by using solar radiation for the purpose of
- 21 heating, and shall exclude systems used for a hot tub or
- 22 swimming pool.
- 23 (3) Wind power.
- 24 (4) Large-scale hydropower, which shall mean the
- 25 production of electric power by harnessing the hydroelectric
- 26 potential of moving water impoundments, including pumped
- storage that does not meet the requirements of low-impact
- 28 hydropower under paragraph (5).
- 29 (5) Low-impact hydropower consisting of any technology
- 30 that produces electric power and that harnesses the

- 1 hydroelectric potential of moving water impoundments,
- provided such incremental hydroelectric development:
- 3 (i) does not adversely change existing impacts to 4 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.
- 2 (8) Biologically derived methane gas, which shall
  3 include methane from the anaerobic digestion of organic
  4 materials from yard waste, such as grass clippings and
  5 leaves, food waste, animal waste and sewage sludge. The term
  6 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 11 12 or abandoned prior to July 31, 1982, or disposed of 13 thereafter in a permitted coal refuse disposal site 14 regardless of when disposed of, and used to generate 15 electricity, or such other waste coal combustion meeting 16 alternate eligibility requirements established by regulation. 17 Facilities combusting waste coal shall use at a minimum a 18 combined fluidized bed boiler and be outfitted with a 19 limestone injection system and a fabric filter particulate 20 removal system. Alternative energy credits shall be 21 calculated based upon the proportion of waste coal utilized 22 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:
- 28 (i) energy efficiency technologies, management
  29 practices or other strategies in residential, commercial,
  30 institutional or government customers that reduce

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1 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

(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.

periods of higher demand to periods of lower demand; or

- 12 (13) Distributed generation system, which shall mean the 13 small-scale power generation of electricity and useful 14 thermal energy.
- 15 "Alternative energy system." A facility or energy system
  16 that:
- (1) 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[.]; or
- 22 (2) qualifies as a solar thermal energy system.
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- "Force majeure." Upon its own initiative or upon a request
- 25 of an electric distribution company or an electric generator
- 26 supplier, the Pennsylvania Public Utility Commission, within 60
- 27 days, shall determine if alternative energy resources are
- 28 reasonably available in the marketplace in sufficient quantities
- 29 for the electric distribution companies and electric generation
- 30 suppliers to meet their obligations for that reporting period

- 1 under this act. The commission shall declare a force majeure for
- 2 any reporting period if the commission determines that the price
- 3 of available alternative energy credits exceeds the cost of the
- 4 <u>alternative energy compliance payments established under this</u>
- 5 <u>act.</u> In making this determination, the commission shall consider
- 6 whether electric distribution companies or electric generation
- 7 suppliers have made a good faith effort to acquire sufficient
- 8 alternative energy to comply with their obligations. Such good
- 9 faith efforts shall include, but are not limited to, banking
- 10 alternative energy credits during their transition periods,
- 11 seeking alternative energy credits through competitive
- 12 solicitations and seeking to procure alternative energy credits
- 13 or alternative energy through long-term contracts. In further
- 14 making its determination, the commission shall assess the
- 15 availability of alternative energy credits in the Generation
- 16 Attributes Tracking System (GATS) or its successor and the
- 17 availability of alternative energy credits generally in
- 18 Pennsylvania and other jurisdictions in the PJM Interconnection,
- 19 L.L.C. regional transmission organization (PJM) or its
- 20 successor. The commission may also require solicitations for
- 21 alternative energy credits as part of default service before
- 22 requests of force majeure can be made. If the commission further
- 23 determines that alternative energy resources are not reasonably
- 24 available in sufficient quantities in the marketplace for the
- 25 electric distribution companies and electric generation
- 26 suppliers to meet their obligations under this act, then the
- 27 commission shall modify the underlying obligation of the
- 28 electric distribution company or electric generation supplier or
- 29 recommend to the General Assembly that the underlying obligation
- 30 be eliminated. Commission modification of the electric

- 1 distribution company or electric generation supplier obligations
- 2 under this act shall be for that compliance period only.
- 3 Commission modification shall not automatically reduce the
- 4 obligation for subsequent compliance years. If the commission
- 5 modifies the electric distribution company or electric
- 6 generation supplier obligations under this act, the commission
- 7 may require the electric distribution company or electric
- 8 generation supplier to acquire additional alternative energy
- 9 credits in subsequent years equivalent to the obligation reduced
- 10 due to a force majeure declaration if the commission determines
- 11 that sufficient alternative energy credits exist in the
- 12 marketplace.
- 13 \* \* \*
- 14 "Solar technology." The term includes solar photovoltaic and
- 15 <u>solar thermal energy technology.</u>
- "Tier I alternative energy source." Energy derived from:
- 17 (1) Solar photovoltaic [and solar thermal] energy.
- 18 (2) Wind power.
- 19 (3) Low-impact hydropower.
- 20 (4) Geothermal energy.
- 21 (5) Biologically derived methane gas.
- 22 (6) Fuel cells.
- 23 (7) Biomass energy.
- 24 (8) Coal mine methane.
- 25 <u>(9) Solar thermal energy.</u>
- 26 \* \* \*
- 27 Section 2. Section 3(b)(2), (e)(3), (4), (7) and (12), (f)
- 28 (4) and (g)(2) of the act, amended or added July 17, 2007
- 29 (P.L.114, No.35), are amended and subsection (f) is amended by
- 30 adding a paragraph to read:

- 1 Section 3. Alternative energy portfolio standards.
- 2 \* \* \*
- 3 (b) Tier I and solar photovoltaic solar technology shares.--
- 4 \* \* \*
- 5 (2) The total percentage of the electric energy sold by
- an electric distribution company or electric generation
- 7 supplier to retail electric customers in this Commonwealth
- 8 that must be sold from solar photovoltaic technologies is:
- 9 (i) 0.0013% for June 1, 2006, through May 31, 2007.
- 10 (ii) 0.0030% for June 1, 2007, through May 31, 2008.
- 11 (iii) 0.0063% for June 1, 2008, through May 31,
- 12 2009.
- 13 (iv) 0.0120% for June 1, 2009, through May 31, 2010.
- 14 (v) 0.0203% for June 1, 2010, through May 31, 2011.
- 15 (vi) 0.0325% for June 1, 2011, through May 31, 2012.
- 16 (vii) [0.0510%] <u>0.1500%</u> for June 1, 2012, through
- 17 May 31, 2013.
- 18 (viii) [0.0840%] <u>0.1700%</u> for June 1, 2013, through
- 19 May 31, 2014.
- (ix) [0.1440%] <u>0.2041%</u> for June 1, 2014, through May
- 21 31, 2015.
- 22 (x) 0.2500% for June 1, 2015, through May 31, 2016.
- 23 (xi) 0.2933% for June 1, 2016, through May 31, 2017.
- 24 (xii) 0.3400% for June 1, 2017, through May 31,
- 25 2018.
- 26 (xiii) 0.3900% for June 1, 2018, through May 31,
- 27 2019.
- 28 (xiv) [0.4433%] 0.4200% for June 1, 2019, through
- 29 May 31, 2020.
- 30 [(xv) 0.5000% for June 1, 2020, and thereafter.]

1	(xv) 0.4323% for June 1, 2020, through May 31, 2021.
2	(xvi) 0.4458% for June 1, 2021, through May 31,
3	<u>2022.</u>
4	(xvii) 0.4594% for June 1, 2022, through May 31,
5	<u>2023.</u>
6	(xviii) 0.4729% for June 1, 2023, through May 31,
7	<u>2024.</u>
8	(xix) 0.4865% for June 1, 2024, through May 31,
9	<u>2025.</u>
_0	(xx) 0.5000% for June 1, 2025, and thereafter.
1	* * *
2	(e) Alternative energy credits
13	* * *
_4	(3) All qualifying alternative energy systems must
.5	include a qualifying meter to record the cumulative electric
. 6	or solar thermal energy production to verify the advanced
_7	energy credit value. Qualifying meters will be approved by
8 .	the commission as defined in paragraph (4).
_9	(4) (i) An electric distribution company or electric
20	generation supplier shall comply with the applicable
21	requirements of this section by purchasing sufficient
22	alternative energy credits and submitting documentation of
23	compliance to the program administrator.
24	(ii) For purposes of this subsection, one
25	alternative energy credit shall represent one megawatt
26	hour of qualified alternative electric or 3,413,000
27	British thermal units (3,413 MMBtu) of solar thermal
28	energy generation, whether self-generated, purchased
29	along with the electric commodity or separately through a
30	tradable instrument and otherwise meeting the

requirements of commission regulations and the program administrator.

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(7) An electric distribution company or an electric generation supplier with sales that are exempted under subsection (d) may bank credits for retail sales of electricity generated from Tier I and Tier II sources made prior to the end of the cost-recovery period and after the effective date of this act. Bankable credits shall be limited to credits associated with electricity or solar thermal energy 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.

\* \* \*

- (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 or solar thermal 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) Alternative compliance payment. --
- 30 \* \* \*

1 [The] Except as otherwise provided in paragraph 2 (4.1), the alternative compliance payment for the solar 3 photovoltaic share shall be 200% of the average market value 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,

L.L.C. transmission organization (PJM) or its successor.

(4.1) (i) The alternative compliance payment for the solar technology share for the 2012-2013 through 2018-2019 reporting periods shall be \$285. Thereafter, the amount of the alternative compliance payment for the solar technology share shall be reduced by two percent during each subsequent reporting period and the commission shall publish the reduced amount as a notice in the Pennsylvania Bulletin.

(ii) The alternative compliance payment under subparagraph (i) shall not apply in any reporting period that the commission declares a force majeure.

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21 (g) Transfer to sustainable development funds.--

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23 (2) The alternative compliance payments shall be
24 utilized solely for projects that will increase the amount of
25 electric energy or solar thermal energy generated from
26 alternative energy resources for purposes of compliance with
27 subsections (b) and (c).

28 \* \* \*

- 29 Section 3. The act is amended by adding a section to read:
- 30 <u>Section 5.1. Sale and installation of customer-generator</u>

- 1 <u>alternative energy systems.</u>
- 2 (a) Prohibited conduct. -- A person may not:
- 3 (1) engage in unfair or deceptive acts, practices or
- 4 <u>advertising in connection with the sale or installation of a</u>
- 5 <u>customer-generator alternative energy system; or</u>
- 6 (2) engage in any conduct in connection with the sale or
- 7 <u>installation of a customer-generator alternative energy</u>
- 8 system which creates the likelihood of confusion or
- 9 <u>misunderstanding by the purchaser of the financial risks or</u>
- benefits associated with alternative energy systems,
- including the creation, price or sale of alternative energy
- 12 <u>credits.</u>
- 13 (b) Penalty. -- A violation of this section shall be deemed a
- 14 violation of act of December 17, 1968 (P.L.1224, No.387), known
- 15 <u>as the Unfair Trade Practices and Consumer Protection Law.</u>
- 16 Section 4. This act shall apply only prospectively and may
- 17 not be applied or interpreted to have any effect on, or
- 18 application to, any contract or registration of solar technology
- 19 existing before the effective date of this section.
- 20 Section 5. This act shall take effect in 60 days.