
THE GENERAL ASSEMBLY OF PENNSYLVANIA

SENATE BILL

No. 25

Special Session No. 1 of
2007-2008

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SCARNATI, VANCE, REGOLA AND RHOADES, OCTOBER 16, 2007

AS REPORTED FROM COMMITTEE ON ENVIRONMENTAL RESOURCES AND
ENERGY, HOUSE OF REPRESENTATIVES, AS AMENDED, JUNE 27, 2008

AN ACT

1 Amending the act of November 30, 2004 (P.L.1672, No.213),
2 entitled, "An act providing for the sale of electric energy
3 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 defining "alternative energy sources" and "Tier II
9 alternative energy source"; and further providing for
10 alternative energy portfolio standards.

11 The General Assembly of the Commonwealth of Pennsylvania
12 hereby enacts as follows:

13 Section 1. The definitions of "alternative energy sources"
14 and "Tier II alternative energy source" in section 2 of the act
15 of November 30, 2004 (P.L.1672, No.213), known as the

16 Alternative Energy Portfolio Standards Act, are amended to read:

17 Section 2. Definitions.

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

1 * * *

2 "Alternative energy sources." The term shall include the
3 following existing and new sources for the production of
4 electricity:

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

6 (2) Solar thermal energy.

7 (3) Wind power.

8 (4) Large-scale hydropower, which shall mean the
9 production of electric power by harnessing the hydroelectric
10 potential of moving water impoundments, including pumped
11 storage that does not meet the requirements of low-impact
12 hydropower under paragraph (5).

13 (5) Low-impact hydropower consisting of any technology
14 that produces electric power and that harnesses the
15 hydroelectric potential of moving water impoundments,
16 provided THAT:

<—

17 (I) THE HYDROPOWER SOURCE HAS A FEDERAL ENERGY
18 REGULATORY COMMISSION LICENSED CAPACITY OF 21 MEGAWATTS
19 OR LESS; AND

20 (II) THE LICENSE FOR THE HYDROPOWER SOURCE WAS
21 ISSUED BY THE FEDERAL ENERGY REGULATORY COMMISSION ON OR
22 PRIOR TO JANUARY 1, 1984, AND HELD ON JULY 1, 2007, IN
23 WHOLE OR IN PART BY A MUNICIPALITY LOCATED WHOLLY WITHIN
24 THIS COMMONWEALTH OR BY AN ELECTRIC COOPERATIVE
25 INCORPORATED IN THIS COMMONWEALTH; OR

26 (III) such incremental hydroelectric development:

27 [(i)] (A) does not adversely change existing <—
28 impacts to aquatic systems;

29 [(ii)] (B) meets the certification standards <—
30 established by the Low Impact Hydropower Institute

1 and American Rivers, Inc., or their successors;

2 [(iii)] (C) provides an adequate water flow for <—
3 protection of aquatic life and for safe and effective
4 fish passage;

5 [(iv)] (D) protects against erosion; and <—

6 [(v)] (E) protects cultural and historic <—
7 resources.

8 ~~Notwithstanding the provisions of subparagraph (ii), the term <—
9 "low impact hydropower" shall also include a hydroelectric
10 development which has a nameplate capacity of 21 megawatts or
11 less and has a license issued by the Federal Energy
12 Regulatory Commission for the hydropower source on or prior
13 to January 1, 1984, and was held in whole or in part by a
14 municipality located wholly within this Commonwealth or by an
15 electric cooperative wholly within this Commonwealth on July
16 1, 2007.~~

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

21 (7) Biomass energy, which shall mean the generation of
22 electricity utilizing the following:

23 (i) organic material from a plant that is grown for
24 the purpose of being used to produce electricity or is
25 protected by the Federal Conservation Reserve Program
26 (CRP) and provided further that crop production on CRP
27 lands does not prevent achievement of the water quality
28 protection, soil erosion prevention or wildlife
29 enhancement purposes for which the land was primarily set
30 aside; or

1 (ii) any solid nonhazardous, cellulosic waste
2 material that is segregated from other waste materials,
3 such as waste pallets, crates and landscape or right-of-
4 way tree trimmings or agricultural sources, including
5 orchard tree crops, vineyards, grain, legumes, [sugar]
6 sugars and other crop by-products or residues. Biomass
7 energy shall also mean the generation of electricity
8 utilizing by-products of the pulping process and wood
9 manufacturing process, including bark, wood chips,
10 sawdust and lignins in spent pulping liquors, provided
11 the electricity is generated within this Commonwealth.

12 (8) Biologically derived methane gas, which shall
13 include methane from the anaerobic digestion of organic
14 materials from yard waste, such as grass clippings and
15 leaves, food waste, animal waste and sewage sludge. The term
16 also includes landfill methane gas.

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

20 (10) Waste coal, which shall include the combustion of
21 waste coal in facilities in which the waste coal was disposed
22 or abandoned prior to July 31, 1982, or disposed of
23 thereafter in a permitted coal refuse disposal site
24 regardless of when disposed of, and used to generate
25 electricity, or such other waste coal combustion meeting
26 alternate eligibility requirements established by regulation.
27 Facilities combusting waste coal shall use at a minimum a
28 combined fluidized bed boiler and be outfitted with a
29 limestone injection system and a fabric filter particulate
30 removal system. Alternative energy credits shall be

1 calculated based upon the proportion of waste coal utilized
2 to produce electricity at the facility.

3 (11) Coal mine methane, which shall mean methane gas
4 emitting from abandoned or working coal mines.

5 (12) Demand-side management consisting of the management
6 of customer consumption of electricity or the demand for
7 electricity through the implementation of:

8 (i) energy efficiency technologies, management
9 practices or other strategies in residential, commercial,
10 institutional or government customers that reduce
11 electricity consumption by those customers;

12 (ii) load management or demand response
13 technologies, management practices or other strategies in
14 residential, commercial, industrial, institutional and
15 government customers that shift electric load from
16 periods of higher demand to periods of lower demand; or

17 (iii) industrial by-product technologies consisting
18 of the use of a by-product from an industrial process,
19 including the reuse of energy from exhaust gases or other
20 manufacturing by-products that are used in the direct
21 production of electricity at the facility of a customer.

22 (13) Distributed generation system, which shall mean the
23 small-scale power generation of electricity and useful
24 thermal energy.

25 * * *

26 "Tier II alternative energy source." Energy derived from:

27 (1) Waste coal.

28 (2) Distributed generation systems.

29 (3) Demand-side management.

30 (4) Large-scale hydropower.

1 (5) Municipal solid waste.

2 (6) Generation of electricity utilizing by-products of
3 the pulping process and wood manufacturing process, including
4 bark, wood chips, sawdust and lignin in spent pulping liquors
5 if the electricity is generated outside of this Commonwealth.

6 (7) Integrated combined coal gasification technology.

7 * * *

8 Section 2. Section 3(b) of the act, amended July 17, 2007
9 (P.L.114, No.35), is amended to read:

10 Section 3. Alternative energy portfolio standards.

11 * * *

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

13 (1) Two years after the effective date of this act, at
14 least 1.5% of the electric energy sold by an electric
15 distribution company or electric generation supplier to
16 retail electric customers in this Commonwealth shall be
17 generated from Tier I alternative energy sources. Except as
18 provided in this section, the minimum percentage of electric
19 energy required to be sold to retail electric customers from
20 alternative energy sources shall increase to 2% three years
21 after the effective date of this act. The minimum percentage
22 of electric energy required to be sold to retail electric
23 customers from alternative energy sources shall increase by
24 at least 0.5% each year so that at least 8% of the electric
25 energy sold by an electric distribution company or electric
26 generation supplier to retail electric customers in that
27 certificated territory in the 15th year after the effective
28 date of this subsection AND AT LEAST 10% OF THE ELECTRIC
29 ENERGY SOLD BY AN ELECTRIC DISTRIBUTION COMPANY OR ELECTRIC
30 GENERATION SUPPLIER TO RETAIL ELECTRIC CUSTOMERS IN THAT

<—

1 CERTIFICATED TERRITORY IN THE 16TH YEAR AFTER THE EFFECTIVE
2 DATE OF THIS SUBSECTION is sold from Tier I alternative
3 energy resources.

4 ~~(1.1) In addition to any increase under paragraph (1),~~ <—
5 ~~the commission shall annually increase the percentage share~~
6 ~~of Tier I alternative energy sources required to be sold by~~
7 ~~an electric distribution company or electric generation~~
8 ~~supplier under paragraph (1), by an amount equal to the~~
9 ~~amount of additional Tier I alternative energy credits~~
10 ~~created under the provisions of the act adding this~~
11 ~~paragraph.~~

12 (1.1) THE COMMISSION SHALL AT LEAST QUARTERLY INCREASE <—
13 THE PERCENTAGE SHARE OF TIER I ALTERNATIVE ENERGY SOURCES
14 REQUIRED TO BE SOLD BY AN ELECTRIC DISTRIBUTION COMPANY OR
15 ELECTRIC GENERATION SUPPLIER UNDER PARAGRAPH (1) TO REFLECT
16 ANY NEW RESOURCES THAT QUALIFY AS A TIER I ALTERNATIVE ENERGY
17 SOURCE UNDER SUBPARAGRAPH (II) OF THE DEFINITION OF "BIOMASS
18 ENERGY" OR UNDER PARAGRAPH (5)(I) AND (II) OF THE DEFINITION
19 OF "LOW-IMPACT HYDROPOWER." NO NEW RESOURCE QUALIFYING UNDER
20 SUBPARAGRAPH (II) OF THE DEFINITION OF "BIOMASS ENERGY" OR
21 UNDER PARAGRAPH (5)(I) AND (II) OF THE DEFINITION OF "LOW-
22 IMPACT HYDROPOWER" SHALL BE ELIGIBLE TO GENERATE TIER I
23 ALTERNATIVE ENERGY CREDITS UNTIL THE COMMISSION HAS INCREASED
24 THE PERCENTAGE SHARE OF TIER I TO REFLECT THESE ADDITIONAL
25 RESOURCES.

26 (2) The total percentage of the electric energy sold by
27 an electric distribution company or electric generation
28 supplier to retail electric customers in this Commonwealth
29 that must be sold from solar photovoltaic technologies is:

30 (i) 0.0013% for June 1, 2006, through May 31, 2007.

- 1 (ii) 0.0030% for June 1, 2007, through May 31, 2008.
2 (iii) 0.0063% for June 1, 2008, through May 31,
3 2009.
4 (iv) 0.0120% for June 1, 2009, through May 31, 2010.
5 (v) 0.0203% for June 1, 2010, through May 31, 2011.
6 (vi) 0.0325% for June 1, 2011, through May 31, 2012.
7 (vii) 0.0510% for June 1, 2012, through May 31,
8 2013.
9 (viii) 0.0840% for June 1, 2013, through May 31,
10 2014.
11 (ix) 0.1440% for June 1, 2014, through May 31, 2015.
12 (x) [~~0.2500%~~] 0.3000% for June 1, 2015, through May <—
13 31, 2016.
14 (xi) [~~0.2933%~~] 0.4000% for June 1, 2016, through May <—
15 31, 2017.
16 (xii) [~~0.3400%~~] 0.6000% for June 1, 2017, through <—
17 May 31, 2018.
18 (xiii) [~~0.3900%~~] 0.7300% for June 1, 2018, through <—
19 May 31, 2019.
20 (xiv) [~~0.4433%~~] 0.8600% for June 1, 2019, through <—
21 May 31, 2020.
22 (xv) [~~0.5000%~~] 1.0000% for June 1, 2020, and <—
23 thereafter.

24 (3) Upon commencement of the beginning of the 6th
25 reporting year, the commission shall undertake a review of
26 the compliance by electric distribution companies and
27 electric generation suppliers with the requirements of this
28 act. The review shall also include the status of alternative
29 energy technologies within this Commonwealth and the capacity
30 to add additional alternative energy resources. The

1 commission shall use the results of this review to recommend
2 to the General Assembly additional compliance goals beyond
3 year 15. The commission shall work with the department in
4 evaluating the future alternative energy resource potential.

5 * * *

6 Section 3. This act shall take effect in 60 days.