

LEGISLATIVE REFERENCE BUREAU

AMENDMENTS TO HOUSE BILL NO. 1580

Sponsor:

Printer's No. 2593

1 Amend Bill, page 1, line 8, by inserting after "for"
2 definitions, for

3 Amend Bill, page 1, lines 12 through 14; page 2, line 1, by
4 striking out all of said lines on said pages and inserting

5 Section 1. The definitions of "alternative energy credit,"
6 "alternative energy sources," "alternative energy system,"
7 "force majeure" and "Tier 1 alternative energy source" in
8 section 2 of the act of November 30, 2004 (P.L.1672, No.213),
9 known as the Alternative Energy Portfolio Standards Act, amended
10 July 17, 2007 (P.L.114, No.35), are amended and the section is
11 amended by adding a definition to read:

12 Section 2. Definitions.

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

16 "Alternative energy credit." A tradable instrument that is
17 used to establish, verify and monitor compliance with this act.
18 A unit of credit shall equal one megawatt hour of electricity or
19 3,413,000 British thermal units (3,413 MMBtu) of solar thermal
20 energy from an alternative energy source. The alternative energy
21 credit shall remain the property of the alternative energy
22 system until the alternative energy credit is voluntarily
23 transferred by the alternative energy system.

24 * * *

25 "Alternative energy sources." The term shall include the
26 following existing and new sources for the production of
27 electricity:

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

29 (2) Solar thermal energy which shall mean solar
30 equipment that generates energy that is equivalent to the
31 generation of electricity and is eligible for solar renewable
32 energy credits by using solar radiation for the purpose of
33 heating, and shall exclude systems used for a hot tub or
34 swimming pool.

35 (3) Wind power.

36 (4) Large-scale hydropower, which shall mean the

1 production of electric power by harnessing the hydroelectric
2 potential of moving water impoundments, including pumped
3 storage that does not meet the requirements of low-impact
4 hydropower under paragraph (5).

5 (5) Low-impact hydropower consisting of any technology
6 that produces electric power and that harnesses the
7 hydroelectric potential of moving water impoundments,
8 provided such incremental hydroelectric development:

9 (i) does not adversely change existing impacts to
10 aquatic systems;

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

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

16 (iv) protects against erosion; and

17 (v) protects cultural and historic resources.

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

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

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

32 (ii) any solid nonhazardous, cellulosic waste
33 material that is segregated from other waste materials,
34 such as waste pallets, crates and landscape or right-of-
35 way tree trimmings or agricultural sources, including
36 orchard tree crops, vineyards, grain, legumes, sugar and
37 other crop by-products or residues.

38 (8) Biologically derived methane gas, which shall
39 include methane from the anaerobic digestion of organic
40 materials from yard waste, such as grass clippings and
41 leaves, food waste, animal waste and sewage sludge. The term
42 also includes landfill methane gas.

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

46 (10) Waste coal, which shall include the combustion of
47 waste coal in facilities in which the waste coal was disposed
48 or abandoned prior to July 31, 1982, or disposed of
49 thereafter in a permitted coal refuse disposal site
50 regardless of when disposed of, and used to generate
51 electricity, or such other waste coal combustion meeting

1 alternate eligibility requirements established by regulation.
2 Facilities combusting waste coal shall use at a minimum a
3 combined fluidized bed boiler and be outfitted with a
4 limestone injection system and a fabric filter particulate
5 removal system. Alternative energy credits shall be
6 calculated based upon the proportion of waste coal utilized
7 to produce electricity at the facility.

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

10 (12) Demand-side management consisting of the management
11 of customer consumption of electricity or the demand for
12 electricity through the implementation of:

13 (i) energy efficiency technologies, management
14 practices or other strategies in residential, commercial,
15 institutional or government customers that reduce
16 electricity consumption by those customers;

17 (ii) load management or demand response
18 technologies, management practices or other strategies in
19 residential, commercial, industrial, institutional and
20 government customers that shift electric load from
21 periods of higher demand to periods of lower demand; or

22 (iii) industrial by-product technologies consisting
23 of the use of a by-product from an industrial process,
24 including the reuse of energy from exhaust gases or other
25 manufacturing by-products that are used in the direct
26 production of electricity at the facility of a customer.

27 (13) Distributed generation system, which shall mean the
28 small-scale power generation of electricity and useful
29 thermal energy.

30 "Alternative energy system." A facility or energy system
31 that:

32 (1) uses a form of alternative energy source to generate
33 electricity and delivers the electricity it generates to the
34 distribution system of an electric distribution company or to
35 the transmission system operated by a regional transmission
36 organization[.]; or

37 (2) qualifies as a solar thermal energy system.

38 * * *

39 "Force majeure." Upon its own initiative or upon a request
40 of an electric distribution company or an electric generator
41 supplier, the Pennsylvania Public Utility Commission, within 60
42 days, shall determine if alternative energy resources are
43 reasonably available in the marketplace in sufficient quantities
44 for the electric distribution companies and electric generation
45 suppliers to meet their obligations for that reporting period
46 under this act. The commission shall declare a force majeure for
47 any reporting period if the commission determines that the price
48 of available alternative energy credits exceeds the cost-
49 applicable alternative energy compliance payments established
50 under this act. In making this determination, the commission
51 shall consider whether electric distribution companies or

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

37 * * *

38 "Solar technology." The term includes solar photovoltaic and
39 solar thermal energy technology.

40 "Tier I alternative energy source." Energy derived from:

- 41 (1) Solar photovoltaic [and solar thermal] energy.
- 42 (2) Wind power.
- 43 (3) Low-impact hydropower.
- 44 (4) Geothermal energy.
- 45 (5) Biologically derived methane gas.
- 46 (6) Fuel cells.
- 47 (7) Biomass energy.
- 48 (8) Coal mine methane.
- 49 (9) Solar thermal energy.

50 * * *

51 Section 2. Section 3(b)(2), (e)(3), (4), (7) and (12), (f)

1 (4) and (g) (2) of the act are amended and subsection (f) is
2 amended by adding a paragraph to read:

3 Amend Bill, page 2, line 4, by inserting after "photovoltaic"
4 solar technology

5 Amend Bill, page 2, line 29, by inserting a bracket before
6 "0.4433%"

7 Amend Bill, page 2, line 29, by inserting after "0.4433%"
8] 0.4200%

9 Amend Bill, page 2, by inserting after line 30

10 (xv) 0.4323% for June 1, 2020, through May 31, 2021.

11 (xvi) 0.4458% for June 1, 2021, through May 31,
12 2022.

13 (xvii) 0.4594% for June 1, 2022, through May 31,
14 2023.

15 (xviii) 0.4729% for June 1, 2023, through May 31,
16 2024.

17 (xix) 0.4865% for June 1, 2024, through May 31,
18 2025.

19 Amend Bill, page 3, line 1, by inserting a bracket before
20 "(xv) "

21 Amend Bill, page 3, line 1, by inserting after "(xv) "

22] (xx)

23 Amend Bill, page 3, line 1, by inserting a bracket before
24 "2020,"

25 Amend Bill, page 3, line 1, by inserting after "2020"

26] 2025

27 Amend Bill, page 3, by inserting between lines 2 and 3

28 (e) Alternative energy credits.--

29 * * *

30 (3) All qualifying alternative energy systems must
31 include a qualifying meter to record the cumulative electric
32 or solar thermal energy production to verify the advanced
33 energy credit value. Qualifying meters will be approved by
34 the commission as defined in paragraph (4).

35 (4) (i) An electric distribution company or electric
36 generation supplier shall comply with the applicable
37 requirements of this section by purchasing sufficient

1 alternative energy credits and submitting documentation
2 of compliance to the program administrator.

3 (ii) For purposes of this subsection, one
4 alternative energy credit shall represent one megawatt
5 hour of qualified alternative electric or 3,413,000
6 British thermal units (3,413 MMBtu) of solar thermal
7 energy generation, whether self-generated, purchased
8 along with the electric commodity or separately through a
9 tradable instrument and otherwise meeting the
10 requirements of commission regulations and the program
11 administrator.

12 * * *

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

28 * * *

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

38 (f) Alternative compliance payment.--

39 * * *

40 (4) [The] Except as otherwise provided in paragraph
41 (4.1), the alternative compliance payment for the solar
42 photovoltaic share shall be 200% of the average market value
43 of solar renewable energy credits sold during the reporting
44 period within the service region of the regional transmission
45 organization, including, where applicable, the levelized up-
46 front rebates received by sellers of solar renewable energy
47 credits in other jurisdictions in the PJM Interconnection,
48 L.L.C. transmission organization (PJM) or its successor.

49 (4.1) Beginning June 1, 2012, the alternative compliance
50 payment for the solar technology share shall be set at \$325
51 and shall be reduced by 2% each year thereafter. This shall

1 be effective only in the absence of a declaration of a force
2 majeure by the commission.

3 * * *

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

5 * * *

6 (2) The alternative compliance payments shall be
7 utilized solely for projects that will increase the amount of
8 electric energy or solar thermal energy generated from
9 alternative energy resources for purposes of compliance with
10 subsections (b) and (c).

11 * * *

12 Section 3. Section 4 of the act, amended July 17, 2007
13 (P.L.114, No.35), is amended to read:

14 Amend Bill, page 4, line 12, by striking out "photovoltaic"

15 Amend Bill, page 4, line 13, by striking out "photovoltaic"

16 Amend Bill, page 4, line 14, by striking out "after January
17 1, 2012, shall directly deliver" and inserting

18 after the effective date of this subsection shall be
19 connected to

20 Amend Bill, page 4, by inserting between lines 18 and 19

21 Section 4. This act shall apply only prospectively and may
22 not be applied or interpreted to have any effect on, or
23 application to, any contract or registration of solar technology
24 existing before the effective date of this section.

25 Amend Bill, page 4, line 19, by striking out "2" and
26 inserting

27 5