

THE GENERAL ASSEMBLY OF PENNSYLVANIA

HOUSE BILL

No. 80

Session of 2009

INTRODUCED BY VITALI, ROSS, GEORGE, DePASQUALE, HARPER, FREEMAN, M. O'BRIEN, GOODMAN, CREIGHTON, MOUL, O'NEILL, MANDERINO, BELFANTI, MELIO, SANTONI, HARHART, READSHAW, GIBBONS, ADOLPH, HORNAMAN, CARROLL, MYERS, JOSEPHS, LENTZ, DeWEESE, CONKLIN, PETRI, GINGRICH, CURRY, DRUCKER, MICOZZIE, GERBER, SABATINA, KULA, MAHONEY, BARBIN, SEIP, WALKO AND CALTAGIRONE, MARCH 12, 2009

AS RE-REPORTED FROM COMMITTEE ON APPROPRIATIONS, HOUSE OF REPRESENTATIVES, AS AMENDED, JUNE 30, 2009

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 providing for definitions and for alternative energy
9 portfolio standards; and providing for sequestration facility
10 permitting and for title to carbon dioxide, immunity and
11 transfer of liability; establishing the Carbon Dioxide
12 Indemnification Fund; providing for Commonwealth owned carbon
13 dioxide sequestration facility and transportation pipeline ON
14 COMMONWEALTH STATE FOREST LANDS; establishing the Carbon
15 Sequestration Fund; and providing for application of the
16 Public Utility Code to transporters of carbon dioxide.



17 The General Assembly of the Commonwealth of Pennsylvania
18 hereby enacts as follows:

19 Section 1. The definition of "alternative energy sources"
20 and "Tier II alternative energy source" in section 2 of the act
21 of November 30, 2004 (P.L.1672, No.213), known as the
22 Alternative Energy Portfolio Standards Act, are amended by

1 adding paragraphs and the section is amended by adding
2 definitions to read:

3 Section 2. Definitions.

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

7 * * *

8 "Alternative energy sources." The term shall include the
9 following existing and new sources for the production of
10 electricity:

11 * * *

12 (14) Advanced coal combustion with limited carbon
13 emissions, which means the production of electric power from
14 a generation facility that is fueled by coal, waste coal or
15 gas derived from an advanced coal gasification plant OR A ←
16 PLANT THAT IS RETROFITTED TO CAPTURE CARBON that:

17 (i) Begins commercial operation after January 1,
18 2009, and captures, either in the advanced coal
19 gasification plant or in the electrical generation
20 facility, and delivers to a carbon dioxide sequestration
21 facility in this Commonwealth for permanent sequestration
22 at least the following amount of all carbon dioxide
23 produced:

24 (A) 40% from June 1, 2015, to May 31, 2019.

25 (B) 60% from June 1, 2019, to May 31, 2024.

26 (C) 90% from June 1, 2024, and thereafter.

27 (D) The requirement under clause (C) shall be
28 waived if commercially proven and project-financeable
29 technology is not available as determined by the
30 department.

1 (ii) Has been designed to accommodate the required
2 additional processing equipment to produce power with a
3 maximum of 1,000 pounds of carbon dioxide emissions per
4 megawatt hour or begins commercial operation before
5 January 1, 2009, and captures and delivers to a carbon
6 dioxide sequestration facility in this Commonwealth for
7 permanent sequestration no less than the following amount
8 of carbon dioxide produced:

9 (A) 40% from June 1, 2015, to May 31, 2019.

10 (B) 60% from June 1, 2019, to May 31, 2024.

11 (C) 90% from June 1, 2024, and thereafter. THE

12 REQUIREMENT UNDER THIS CLAUSE SHALL BE WAIVED IF
13 COMMERCIALY PROVEN AND PROJECT-FINANCEABLE
14 TECHNOLOGY IS NOT AVAILABLE, AS DETERMINED BY THE
15 DEPARTMENT.

16 (15) ADDITIONAL ENERGY GENERATED BY AN EXISTING NUCLEAR
17 UNIT AS A RESULT OF AN EXTENDED POWER UPRATE THAT HAS BEEN
18 COMPLETED AFTER THE EFFECTIVE DATE OF THIS PARAGRAPH AND
19 INCREASES A PLANT'S NAMEPLATE CAPACITY BY MORE THAN 7% OR BY
20 100 MEGAWATTS AND HAS A CAPITAL COST OF MORE THAN
21 \$150,000,000 AND HAS BEEN PERMITTED BY THE UNITED STATES
22 NUCLEAR REGULATORY COMMISSION.

23 * * *

24 "Carbon dioxide." Anthropogenically generated carbon dioxide
25 of sufficient purity and quality as to not compromise the
26 ability of the carbon dioxide transportation pipeline or
27 sequestration facility to safely and effectively transport and
28 sequester the carbon dioxide.

29 "Carbon dioxide sequestration facility." Geological
30 subsurface formations within this Commonwealth with suitable cap

1 rock, sealing faults and anticline for the permanent storage of
2 carbon dioxide from advanced coal combustion with limited carbon
3 emissions facilities or other sources within this Commonwealth
4 along with the facilities necessary to transport the carbon
5 dioxide from the surface to the subsurface formations and
6 monitor the permanent storage of the carbon dioxide in
7 subsurface formations. The term shall not include use of the
8 carbon dioxide for enhanced resource recovery or the carbon
9 dioxide transportation pipelines used to transport the carbon
10 dioxide to the sequestration facility.

11 ~~"Carbon dioxide sequestration network." Geological~~ ←
12 ~~subsurface formations within this Commonwealth with suitable cap~~
13 ~~rock, sealing faults and anticline used by the Department of~~
14 ~~Conservation and Natural Resources for the permanent storage of~~
15 ~~carbon dioxide from advanced coal combustion with limited carbon~~
16 ~~emissions plants or other sources within this Commonwealth along~~
17 ~~with the facilities necessary to transport the carbon dioxide~~
18 ~~from the surface to the subsurface formations and monitor the~~
19 ~~permanent storage of the carbon dioxide in subsurface~~
20 ~~formations. The term shall not include use of the carbon dioxide~~
21 ~~for enhanced resource recovery.~~

22 "Carbon dioxide transportation pipeline." A pipeline within
23 this Commonwealth used to transport carbon dioxide from a
24 facility within this Commonwealth to a carbon dioxide
25 sequestration facility.

26 * * *

27 "DCNR." The Department of Conservation and Natural Resources
28 of the Commonwealth.

29 * * *

30 "Enhanced resource recovery." The use of carbon dioxide

1 injection or other techniques for increasing the amount of oil,
2 natural gas or coal bed methane extracted from geologic
3 formations.

4 * * *

5 "Person." An individual, corporation, partnership,
6 association or other entity recognized by law as the subject of
7 rights, duties or obligations. The term includes the United
8 States, a Federal agency, the Commonwealth, an agency or
9 instrumentality of the Commonwealth and a political subdivision.

10 * * *

11 "SOLAR THERMAL ENERGY." TECHNOLOGY UTILIZING SOLAR ENERGY ←
12 FOR WATER HEATING OR FOR GENERATING ELECTRICITY.

13 * * *

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

15 * * *

16 (8) Advanced coal combustion with limited carbon
17 emissions.

18 "TIER III ALTERNATIVE ENERGY SOURCE." ENERGY DERIVED FROM: ←

19 (1) SOLAR PHOTOVOLTAIC AND SOLAR THERMAL ENERGY.

20 (2) WIND POWER.

21 (3) LOW-IMPACT HYDROPOWER.

22 (4) GEOTHERMAL ENERGY.

23 (5) BIOLOGICALLY DERIVED METHANE GAS.

24 (6) FUEL CELLS.

25 (7) BIOMASS ENERGY.

26 (8) COAL MINE METHANE.

27 (9) ADVANCED COAL COMBUSTION WITH LIMITED CARBON
28 EMISSIONS.

29 (10) INCREMENTAL NUCLEAR, AS DEFINED IN PARAGRAPH (15)
30 OF THE DEFINITION OF "ALTERNATIVE ENERGY SOURCES."

1 * * *

2 Section 2. Section 3(a), (b), (c), (E)(6) AND (7), (f) and ←
3 (g) of the act, amended July 17, 2007 (P.L.114, No.35), are
4 amended and the section is amended by adding subsections to
5 read:

6 Section 3. Alternative energy portfolio standards.

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

8 (1) From the effective date of this act through and
9 including the 15th year after enactment of this act and each
10 year thereafter, the electric energy sold by an electric
11 distribution company or electric generation supplier to
12 retail electric customers in this Commonwealth shall be
13 comprised of electricity generated from alternative energy
14 sources and in the percentage amounts as described under
15 subsections [(b) and (c)] (b), (c) and (e.1), (C.1) AND (I). ←

16 (2) Electric distribution companies and electric
17 generation suppliers shall satisfy both requirements set
18 forth in subsections [(b) and (c)] (b), (c) and (e.1), (C.1) ←
19 AND (I), provided, however, that an electric distribution
20 company or an electric generation supplier shall be excused
21 from its obligations under this section to the extent that
22 the commission determines that force majeure exists.

23 (3) All costs for:

24 (i) the purchase of electricity generated from
25 alternative energy sources, including the costs of the
26 regional transmission organization, in excess of the
27 regional transmission organization real-time locational
28 marginal pricing, or its successor, at the delivery point
29 of the alternative energy source for the electrical
30 production of the alternative energy sources; and

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

26 (b) Tier I and solar [photovoltaic] shares.--

27 (1) [Two years after the effective date of this act, at
28 least 1.5% of the electric energy sold by an electric
29 distribution company or electric generation supplier to
30 retail electric customers in this Commonwealth shall be



1 generated from Tier I alternative energy sources. Except as
2 provided in this section, the minimum percentage of electric
3 energy required to be sold to retail electric customers from
4 alternative energy sources shall increase to 2% three years
5 after the effective date of this act. The minimum percentage
6 of electric energy required to be sold to retail electric
7 customers from alternative energy sources shall increase by
8 at least 0.5% each year so that at least 8% of the electric
9 energy sold by an electric distribution company or electric
10 generation supplier to retail electric customers in that
11 certificated territory in the 15th year after the effective
12 date of this subsection is sold from Tier I alternative
13 energy resources.] ←

14 ~~(1.1) After the 15th year of the effective date of this~~ ←
15 ~~subsection, the~~ THE minimum percentage of electric energy ←
16 ~~required to be sold to retail electric customers from Tier I~~ ←
17 ~~alternative energy sources is:~~

18 ~~(i) 10% for June 1, 2021, through May 31, 2022.~~ ←

19 ~~(ii) 12% for June 1, 2022, through May 31, 2023.~~

20 ~~(iii) 14% for June 1, 2023, through May 31, 2024.~~

21 ~~(iv) 16% for June 1, 2024, through May 31, 2025.~~

22 ~~(v) 18% for June 1, 2025, through May 31, 2026.~~

23 ~~(vi) 20% for June 1, 2026, and thereafter.~~

24 (I) 1.5013% FOR JUNE 1, 2006, THROUGH MAY 31, 2007. ←

25 (II) 1.503% FOR JUNE 1, 2007, THROUGH MAY 31, 2008.

26 (III) 2.0063% FOR JUNE 1, 2008, THROUGH MAY 31,

27 2009.

28 (IV) 2.512% FOR JUNE 1, 2009, THROUGH MAY 31, 2010.

29 (V) 3.0203% FOR JUNE 1, 2010, THROUGH MAY 31, 2011.

30 (VI) 3.5504% FOR JUNE 1, 2011, THROUGH MAY 31, 2012.

- 1 (VII) 4.0752% FOR JUNE 1, 2012, THROUGH MAY 31,
2 2013.
- 3 (VIII) 4.6218% FOR JUNE 1, 2013, THROUGH MAY 31,
4 2014.
- 5 (IX) 5.7016% FOR JUNE 1, 2014, THROUGH MAY 31, 2015.
6 (X) 6.80% FOR JUNE 1, 2015, THROUGH MAY 31, 2016.
7 (XI) 7.91% FOR JUNE 1, 2016, THROUGH MAY 31, 2017.
8 (XII) 9.00% FOR JUNE 1, 2017, THROUGH MAY 31, 2018.
9 (XIII) 10.12% FOR JUNE 1, 2018, THROUGH MAY 31,
10 2019.
- 11 (XIV) 11.25% FOR JUNE 1, 2019, THROUGH MAY 31, 2020.
12 (XV) 12.47% FOR JUNE 1, 2020, THROUGH MAY 31, 2021.
13 (XVI) 13.85% FOR JUNE 1, 2021, THROUGH MAY 31, 2022.
14 (XVII) 15.40% FOR JUNE 1, 2022, THROUGH MAY 31,
15 2023.
- 16 (XVIII) 16.95% FOR JUNE 1, 2023, THROUGH MAY 31,
17 2024.
- 18 (XIX) 18.00% FOR JUNE 1, 2024, AND THEREAFTER.

19 (1.1) THE COMMISSION SHALL COMPLY WITH THE REQUIREMENTS
20 OF 66 PA.C.S. § 2814 (RELATING TO ADDITIONAL ALTERNATIVE
21 ENERGY SOURCES) BY ANNUALLY INCREASING THE PERCENTAGE SHARE
22 OF TIER I ALTERNATIVE ENERGY SOURCES REQUIRED TO BE SOLD BY
23 AN ELECTRIC DISTRIBUTION COMPANY OR ELECTRIC GENERATION
24 SUPPLIER UNDER PARAGRAPH (1) TO REFLECT ANY NEW ALTERNATIVE
25 ENERGY SOURCE PROVIDED FOR BY 66 PA.C.S. § 2814. ANY ANNUAL
26 INCREASE WILL BE APPLIED TO THE NEXT COMPLIANCE YEAR
27 REQUIREMENT.

28 (2) The total percentage of the electric energy sold by
29 an electric distribution company or electric generation
30 supplier to retail electric customers in this Commonwealth

1 that must be sold from solar photovoltaic AND SOLAR THERMAL
2 ENERGY technologies is:

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

4 (ii) 0.0030% for June 1, 2007, through May 31, 2008.

5 (iii) 0.0063% for June 1, 2008, through May 31,
6 2009.

7 (iv) 0.0120% for June 1, 2009, through May 31, 2010.

8 (v) 0.0203% for June 1, 2010, through May 31, 2011.

9 [(vi) 0.0325% for June 1, 2011, through May 31,
10 2012.

11 (vii) 0.0510% for June 1, 2012, through May 31,
12 2013.

13 (viii) 0.0840% for June 1, 2013, through May 31,
14 2014.

15 (ix) 0.1440% for June 1, 2014, through May 31, 2015.

16 (x) 0.2500% for June 1, 2015, through May 31, 2016.

17 (xi) 0.2933% for June 1, 2016, through May 31, 2017.

18 (xii) 0.3400% for June 1, 2017, through May 31,
19 2018.

20 (xiii) 0.3900% for June 1, 2018, through May 31,
21 2019.

22 (xiv) 0.4433% for June 1, 2019, through May 31,
23 2020.

24 (xv) 0.5000% for June 1, 2020, [and thereafter.]
25 through May 31, 2021.

26 ~~(xvi) 0.9000% for June 1, 2021, through May 31,~~
27 ~~2022.~~

28 ~~(xvii) 1.3000% for June 1, 2022, through May 31,~~
29 ~~2023.~~

30 ~~(xviii) 1.7000% for June 1, 2023, through May 31,~~

1 2024.
2 ~~(xix) 2.1000% for June 1, 2024, through May 31,~~
3 2025.
4 ~~(xx) 2.5000% for June 1, 2025, through May 31, 2026.~~
5 ~~(xxi) 3.000% for June 1, 2026, and thereafter.~~
6 (VI) 0.0504% FOR JUNE 1, 2011, THROUGH MAY 31, 2012. ←
7 (VII) 0.0752% FOR JUNE 1, 2012, THROUGH MAY 31,
8 2013.
9 (VIII) 0.1218% FOR JUNE 1, 2013, THROUGH MAY 31,
10 2014.
11 (IX) 0.2016% FOR JUNE 1, 2014, THROUGH MAY 31, 2015.
12 (X) 0.3% FOR JUNE 1, 2015, THROUGH MAY 31, 2016.
13 (XI) 0.41% FOR JUNE 1, 2016, THROUGH MAY 31, 2017.
14 (XII) 0.5% FOR JUNE 1, 2017, THROUGH MAY 31, 2018.
15 (XIII) 0.62% FOR JUNE 1, 2018, THROUGH MAY 31, 2019.
16 (XIV) 0.75% FOR JUNE 1, 2019, THROUGH MAY 31, 2020.
17 (XV) 0.97% FOR JUNE 1, 2020, THROUGH MAY 31, 2021.
18 (XVI) 1.35% FOR JUNE 1, 2021, THROUGH MAY 31, 2022.
19 (XVII) 1.9% FOR JUNE 1, 2022, THROUGH MAY 31, 2023.
20 (XVIII) 2.45% FOR JUNE 1, 2023, THROUGH MAY 31,
21 2024.
22 (XIX) 3% FOR JUNE 1, 2024, AND THEREAFTER.

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

1 results of this review to recommend to the General Assembly
2 additional compliance goals beyond year [15] 21. The
3 commission shall work with the department in evaluating the
4 future alternative energy resource potential.

5 (4) Electric energy from solar photovoltaic AND SOLAR ←
6 THERMAL ENERGY technologies supplied to retail customers
7 shall be generated from solar photovoltaic AND SOLAR THERMAL ←
8 ENERGY systems located within this Commonwealth in meeting
9 the requirements of paragraph (2).

10 (5) Notwithstanding the other provisions of this act,
11 credits generated from solar photovoltaic AND SOLAR THERMAL ←
12 ENERGY technologies outside this Commonwealth may be used to
13 demonstrate compliance under this act provided the credit was
14 acquired prior to the effective date of this subsection.

15 (c) Tier II share.--Of the electrical energy required to be
16 sold from alternative energy sources identified in Tier II, the
17 percentage that must be from these technologies is for:

- 18 (1) Years 1 through 4 - 4.2%.
19 (2) Years 5 through 9 - 6.2%.
20 (3) Years 10 through 14 - [8.2%] 11.2%.
21 (4) Years 15 and thereafter - [10.0%] 13.0%.

22 (c.1) Retail sales from advanced coal combustion.--The total
23 electric energy sold by an electric distribution company or
24 electric generation supplier to retail electric customers in
25 this Commonwealth that shall be sold from advanced coal
26 combustion with limited carbon emissions is all of the electric
27 energy available from advanced coal combustion with limited
28 carbon emissions up to a maximum of 3.0% of the total electric
29 energy sold by an electric distribution company or electric
30 generation supplier to retail electric customers in this

1 Commonwealth for the reporting period which begins June 1, 2015,
2 and for each reporting period thereafter pursuant to subsection
3 (c). If at any time on or after June 1, 2015, ~~the A carbon~~ ←
4 dioxide sequestration facility ~~provided for under section 12, or~~ ←
5 ~~other sequestration facility~~ permitted to permanently sequester
6 carbon dioxide in this Commonwealth, is not operating and
7 capable of receiving carbon dioxide for sequestration through no
8 fault of an advanced coal combustion with limited carbon
9 emissions facility, a facility need not sequester carbon dioxide
10 in order to generate alternative energy credits provided:

11 (1) The facility is capable of capturing to the
12 department's satisfaction the amount of carbon dioxide
13 required by paragraph ~~(14)(ii)~~ (14) of the definition of ←
14 "alternative energy sources" in section 2.

15 (2) The total value of the alternative energy credits
16 sold by the advanced coal combustion with limited carbon
17 emissions facility during times when the carbon dioxide
18 emissions from the facility are not sequestered shall not
19 exceed the costs that the facility incurred in installing
20 carbon capture equipment ~~and in installing additional,~~ ←
21 equipment necessary to process coal for carbon capture
22 purposes, EQUIPMENT NECESSARY TO TRANSPORT THE CARBON DIOXIDE ←
23 TO THE CARBON DIOXIDE SEQUESTRATION FACILITY AND COSTS
24 INCURRED IN CONNECTION WITH THE OPERATION OF THE FACILITY
25 THAT ARE DUE TO THE CAPTURE AND TRANSPORTATION OF CARBON
26 DIOXIDE, as determined by the department. Costs incurred ~~in~~ ←
27 ~~installing carbon capture equipment~~ BY AN ADVANCED COAL ←
28 COMBUSTION WITH LIMITED CARBON EMISSIONS FACILITY shall not
29 include Federal or State financial assistance received by the
30 facility.

1 (c.2) Force majeure.--On or after December 31, 2015, if the
2 commission determines that construction of an advanced coal
3 combustion with limited carbon emissions facility has not been
4 commenced DURING A REPORTING PERIOD, this determination shall ←
5 constitute force majeure, and electric distribution companies
6 and electric generation suppliers shall be excused from all or
7 part of their obligation under subsection (c.1) DURING THAT ←
8 REPORTING PERIOD, PROVIDED THE REQUIREMENTS IN THE DEFINITION OF
9 "FORCE MAJEURE" IN SECTION 2 HAVE BEEN MET, as determined by the
10 commission.

11 (c.3) Long-term contracts.--Upon review and approval of the
12 commission, an electric distribution company may enter into a
13 long-term contract of up to 25 years to purchase the energy,
14 capacity or alternative energy credits of an advanced coal
15 combustion with limited carbon emissions facility. The contract
16 shall provide for the recovery of costs associated with carbon
17 capture, including, but not limited to, any fees charged by the
18 owner or operator of the carbon dioxide sequestration facility
19 or a carbon dioxide transportation pipeline. The commission
20 shall determine whether the contract is reasonable, taking into
21 consideration the following:

22 (1) The price of the energy purchased under the long-
23 term contract. THE CONTRACT SHALL PROVIDE THAT IF THE CARBON ←
24 DIOXIDE SEQUESTRATION FACILITY IS NOT OPERATING AND CAPABLE
25 OF RECEIVING CARBON DIOXIDE FOR SEQUESTRATION FOR A PERIOD OF
26 NO LESS THAN 90 DAYS, THE PRICE OF ENERGY UNDER THE CONTRACT
27 SHALL BE REDUCED TO ACCOUNT FOR THE ADVANCED COAL COMBUSTION
28 WITH LIMITED CARBON EMISSIONS FACILITY'S REDUCED OPERATING
29 COSTS.

30 (2) The price of capacity purchased under the long-term

1 contract.

2 (3) The price of alternative energy credits, provided
3 that the cost of an alternative energy credit purchased from
4 advanced coal combustion with limited carbon emissions shall
5 not exceed \$45 per megawatt hour (MWh).

6 (4) Prior to the effective date of the contract, the
7 value of any carbon emission credits or other credits that
8 the seller obtains from the advanced coal combustion with
9 limited carbon emissions facility.

10 (5) After the effective date of the contract, the value
11 of any additional Federal or State carbon credits, allowances
12 or other financial benefits shall be reflected in the price
13 of the resource in a manner which recognizes savings to
14 customers and does not reduce the economic return to the
15 seller, provided that the seller demonstrates that it has
16 made a commercially reasonable effort to distribute any
17 economic incentives it has realized to electric distribution
18 companies. A contract approved by the commission under this
19 subsection shall be deemed to meet the requirements of 66
20 Pa.C.S. § 2807(e) (relating to duties of electric
21 distribution companies).

22 * * *

23 (E) ALTERNATIVE ENERGY CREDITS.--

24 * * *

25 (6) AN ELECTRIC DISTRIBUTION COMPANY AND ELECTRIC
26 GENERATION SUPPLIER MAY BANK OR PLACE IN RESERVE ALTERNATIVE
27 ENERGY CREDITS PRODUCED IN ONE REPORTING YEAR FOR COMPLIANCE
28 IN [EITHER OR BOTH] ANY OF THE [TWO] FOUR SUBSEQUENT
29 REPORTING YEARS, SUBJECT TO THE LIMITATIONS SET FORTH IN THIS
30 SUBSECTION AND PROVIDED THAT THE ELECTRIC DISTRIBUTION



1 COMPANY AND ELECTRIC GENERATION SUPPLIER ARE IN COMPLIANCE
2 FOR ALL PREVIOUS REPORTING YEARS. IN ADDITION, THE ELECTRIC
3 DISTRIBUTION COMPANY AND ELECTRIC GENERATION SUPPLIER SHALL
4 DEMONSTRATE TO THE SATISFACTION OF THE COMMISSION THAT SUCH
5 CREDITS:

6 (I) WERE IN EXCESS OF THE ALTERNATIVE ENERGY CREDITS
7 NEEDED FOR COMPLIANCE IN THE YEAR IN WHICH THEY WERE
8 GENERATED AND THAT SUCH EXCESS CREDITS HAVE NOT
9 PREVIOUSLY BEEN USED FOR COMPLIANCE UNDER THIS ACT;

10 (II) WERE PRODUCED BY THE GENERATION OF ELECTRICAL
11 ENERGY BY ALTERNATIVE ENERGY SOURCES AND SOLD TO RETAIL
12 CUSTOMERS DURING THE YEAR IN WHICH THEY WERE GENERATED;

13 AND

14 (III) HAVE NOT OTHERWISE BEEN NOR WILL BE SOLD,
15 RETIRED, CLAIMED OR REPRESENTED AS PART OF SATISFYING
16 COMPLIANCE WITH ALTERNATIVE OR RENEWABLE ENERGY PORTFOLIO
17 STANDARDS IN OTHER STATES.

18 (7) AN ELECTRIC DISTRIBUTION COMPANY OR AN ELECTRIC
19 GENERATION SUPPLIER WITH SALES THAT ARE EXEMPTED UNDER
20 SUBSECTION (D) MAY BANK CREDITS FOR RETAIL SALES OF
21 ELECTRICITY GENERATED FROM TIER I AND TIER II SOURCES MADE
22 PRIOR TO THE END OF THE COST-RECOVERY PERIOD AND AFTER THE
23 EFFECTIVE DATE OF THIS ACT. BANKABLE CREDITS SHALL BE LIMITED
24 TO CREDITS ASSOCIATED WITH ELECTRICITY SOLD FROM TIER I AND
25 TIER II SOURCES DURING A REPORTING YEAR WHICH EXCEEDS THE
26 VOLUME OF SALES FROM SUCH SOURCES BY AN ELECTRIC DISTRIBUTION
27 COMPANY OR ELECTRIC GENERATION SUPPLIER DURING THE 12-MONTH
28 PERIOD IMMEDIATELY PRECEDING THE EFFECTIVE DATE OF THIS ACT.
29 ALL CREDITS BANKED UNDER THIS SUBSECTION SHALL BE AVAILABLE
30 FOR COMPLIANCE WITH SUBSECTIONS (B) AND (C) FOR NO MORE THAN

1 [TWO] FOUR REPORTING YEARS FOLLOWING THE CONCLUSION OF THE
2 COST-RECOVERY PERIOD.

3 * * *

4 (f) Alternative compliance payment.--

5 (1) At the end of each program year, the program
6 administrator shall provide a report to the commission and to
7 each covered electric distribution company showing their
8 status level of alternative energy acquisition.

9 (2) The commission shall conduct a review of each
10 determination made under subsections [(b) and (c)] (b), (c)
11 and (c.1), (C.1) AND (I). If, after notice and hearing, the ←
12 commission determines that an electric distribution company
13 or electric generation supplier has failed to comply with
14 subsections [(b) and (c)] (b), (c) and (c.1), (C.1) AND (I), ←
15 the commission shall impose an alternative compliance payment
16 on that company or supplier.

17 (3) The alternative compliance payment, with the
18 exception of the solar [photovoltaic] share compliance ←
19 requirement set forth in subsection (b)(2), shall be \$45
20 times the number of additional alternative energy credits
21 needed in order to comply with subsection (b) or (c).

22 (4) [The alternative compliance payment for the solar
23 photovoltaic share shall be 200% of the average market value
24 of solar renewable energy credits sold during the reporting
25 period within the service region of the regional transmission
26 organization, including, where applicable, the levelized up-
27 front rebates received by sellers of solar renewable energy
28 credits in other jurisdictions in the PJM Interconnection,
29 L.L.C. transmission organization (PJM) or its successor.] The
30 alternative compliance payment for the solar photovoltaic ←

1 alternative share shall be established by the commission in
2 an amount and for a period of years necessary to promote the
3 market for solar ~~photovoltaic~~ alternative energy credits. The ←
4 alternative compliance payment for the solar ~~photovoltaic~~ ←
5 share may vary over the time period established by the
6 commission but shall be at least 200% of the average market
7 value for solar ~~photovoltaic~~ alternative energy credits sold ←
8 within the service region of the PJM Interconnection, L.L.C.
9 transmission organization in the year prior to the
10 establishment of the alternative compliance payment schedule.
11 The commission shall review the solar ~~photovoltaic~~ ←
12 alternative compliance payment schedule at least once per
13 year and shall establish an alternative compliance payment
14 schedule for additional years as needed to promote the market
15 for solar ~~photovoltaic~~ alternative energy credits. ←

16 (5) The commission shall establish a process to provide
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 (g) Transfer to sustainable development funds.--

28 (1) Notwithstanding the provisions of 66 Pa.C.S. §§ 511
29 (relating to disposition, appropriation and disbursement of
30 assessments and fees) and 3315 (relating to disposition of

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

11 (2) The alternative compliance payments shall be
12 utilized solely for projects that will increase the amount of
13 electric energy generated from alternative energy resources
14 for purposes of compliance with subsections [(b) and (c)]
15 (b), (c) and (c.1), (C.1) AND (I). ←

16 * * *

17 (I) TIER III SHARE.--THE REQUIREMENTS OF THIS SUBSECTION ARE ←
18 SEPARATE AND ADDITIONAL TO THE REQUIREMENTS OF SUBSECTIONS (B),
19 (C) AND (C.1).

20 (1) THE PERCENTAGE OF THE ELECTRIC ENERGY REQUIRED TO BE
21 SOLD BY AN ELECTRIC DISTRIBUTION COMPANY OR ELECTRIC
22 GENERATION SUPPLIER TO RETAIL ELECTRIC CUSTOMERS IN THIS
23 COMMONWEALTH THAT SHALL BE SOLD FROM ALTERNATIVE ENERGY
24 SOURCES IDENTIFIED IN TIER III IS:

25 (I) 3% FOR JUNE 1, 2015, THROUGH MAY 31, 2016.

26 (II) 3.5% FOR JUNE 1, 2016, THROUGH MAY 31, 2017.

27 (III) 4% FOR JUNE 1, 2017, THROUGH MAY 31, 2018.

28 (IV) 4.5% FOR JUNE 1, 2018, THROUGH MAY 31, 2019.

29 (V) 5% FOR JUNE 1, 2019, THROUGH MAY 31, 2020.

30 (VI) 5.5% FOR JUNE 1, 2020, THROUGH MAY 31, 2021.

1 (VII) 6% FOR JUNE 1, 2021, THROUGH MAY 31, 2022.

2 (VIII) 6.5% FOR JUNE 1, 2022, THROUGH MAY 31, 2023.

3 (IX) 7% FOR JUNE 1, 2023, THROUGH MAY 31, 2024.

4 (X) 7% FOR JUNE 1, 2024, AND THEREAFTER.

5 (2) INCREMENTAL NUCLEAR ENERGY SHALL SUPPLY NOT MORE
6 THAN 50% OF THE ELECTRIC ENERGY REQUIRED BY TIER III IN ANY
7 COMPLIANCE YEAR.

8 (3) ELECTRIC DISTRIBUTION COMPANIES AND ELECTRIC
9 GENERATION SUPPLIERS SHALL BE EXCUSED FROM THEIR OBLIGATIONS
10 UNDER THIS SUBSECTION TO THE EXTENT THAT THE COMMISSION
11 DETERMINES THAT FORCE MAJEURE EXISTS, PROVIDED THE
12 REQUIREMENTS IN THE DEFINITION OF "FORCE MAJEURE" IN SECTION
13 2 HAVE BEEN MET.

14 Section 3. The act is amended by adding sections to read:
15 Section 8.1. Sequestration facility permitting.

16 (a) Prohibition.--No person may operate a carbon dioxide
17 sequestration facility without a permit from the department.

18 (b) Facility sites.--The Environmental Quality Board shall,
19 by regulation, establish the conditions under which a carbon
20 dioxide sequestration facility may be located, developed and
21 operated. The regulations promulgated by the board shall provide
22 for the protection of public health, safety and environment and
23 shall include, but not be limited to, the following:

24 (1) Geologic site characterization.

25 (2) Sequestration facility performance standards.

26 (3) Well location restrictions and well construction
27 standards, including operation and mechanical integrity
28 testing.

29 (4) Risk assessment, corrective action and emergency
30 response requirements.

1 (5) Monitoring, recordkeeping and reporting
2 requirements.

3 (6) Facility closure, postclosure and final closure
4 certification requirements.

5 (7) Financial assurance requirements, including bonding
6 or insurance, in amounts sufficient to ensure the carbon
7 sequestration facility will be constructed, operated, closed
8 and monitored during the postclosure period in accordance
9 with regulations promulgated under this section.

10 (8) Fees in an amount sufficient to recover the
11 department's cost of administering this section.

12 (9) Fees for every ton of carbon dioxide accepted by a
13 carbon dioxide sequestration facility in an amount sufficient
14 to monitor and maintain the facility after final closure of
15 the facility and take remedial actions if necessary after
16 final closure of the facility. The fees shall be paid by the
17 operator of a carbon dioxide sequestration facility to the
18 department on a quarterly basis.

19 (10) Public notice requirements, including notification
20 of a release.

21 (11) Criteria used to determine that carbon dioxide has
22 been permanently sequestered.

23 (12) Other requirements necessary to evaluate the
24 proposed carbon dioxide sequestration facility and to ensure
25 safe and environmentally protective operation of the
26 facility.

27 (c) Powers, duties and enforcement authority of
28 department.--The department shall have the same powers, duties
29 and enforcement authority provided by the act of July 7, 1980
30 (P.L.380, No.97), known as the Solid Waste Management Act, to

1 carry out the purposes of this section. Operators of a carbon
2 dioxide sequestration facility shall have the same rights and be
3 subject to the same penalties as provided by the Solid Waste
4 Management Act; however, an administrative penalty assessed by
5 the department for a violation of this section shall not exceed
6 \$50,000 per day per violation.

7 Section 8.2. Title to carbon dioxide, immunity and transfer of
8 liability.

9 (a) Title to carbon dioxide.--The right, title and interest
10 in and to carbon dioxide delivered to a carbon dioxide
11 sequestration facility by the advanced coal combustion with
12 limited carbon emission facilities that, individually or
13 collectively, first meet the maximum requirements of section
14 3(c.1), as determined by the department, shall be transferred to
15 the carbon dioxide sequestration facility and the facility shall
16 accept and receive the right, title and interest in and to such
17 carbon dioxide, including, but not limited to, liabilities
18 associated with the carbon dioxide, current or future
19 environmental benefits, marketing claims, associated voluntary
20 or compliance-based emissions allocations or offsets, but not
21 alternative energy credits provided by section 3(e).

22 (b) Immunity.--Upon and after transfer and conveyance of
23 carbon dioxide as provided under subsection (a), the owner of an
24 advanced coal combustion plant with limited carbon emissions
25 shall be immune from liabilities regarding the storage of carbon
26 dioxide within and the release, escape or migration of carbon
27 dioxide from the carbon dioxide sequestration facility.

28 (c) Transfer of liability.--Upon final closure of a carbon
29 dioxide sequestration facility, as determined by the department,
30 the right, title or interest in the carbon dioxide and liability

1 for any release from the facility shall be transferred to and
2 accepted by the Commonwealth provided the operator of the carbon
3 dioxide sequestration facility has paid the appropriate fees
4 under section 8.1.

5 Section 8.3. Carbon Dioxide Indemnification Fund.

6 (a) Establishment.--There is hereby established in the State
7 Treasury a nonlapsing fund to be known as the Carbon Dioxide
8 Indemnification Fund. Money collected by the department under
9 section 8.1(b)(9) shall be deposited in the fund and shall only
10 be expended by the department to monitor and maintain carbon
11 dioxide sequestration facilities after final closure and to take
12 remedial actions, if necessary, after final closure.

13 (b) Money collected under section 8.1.--Fines, civil
14 penalties and permit fees collected by the department under
15 section 9 are hereby appropriated to the department to carry out
16 the purposes of section 8.1.

17 Section 8.4. ~~Commonwealth owned carbon~~ CARBON dioxide ←
18 sequestration facility and transportation pipeline ON ←
19 COMMONWEALTH STATE FOREST LANDS.

20 ~~(a) Development and operation.--DCNR may develop and operate~~ ←
21 LEASE STATE FOREST LAND OWNED BY THE COMMONWEALTH TO ANY PERSON, ←
22 ON TERMS AND CONDITIONS AS DCNR MAY CONSIDER APPROPRIATE, FOR
23 THE DEVELOPMENT AND OPERATION OF a carbon dioxide sequestration
24 facility and carbon dioxide transportation pipeline necessary to
25 deliver carbon dioxide to the facility, which may be located on ←
26 State forest land or on other land acquired by DCNR, on behalf
27 of the Commonwealth, for such purpose by purchase, gift, lease
28 or condemnation. A carbon dioxide sequestration facility or
29 carbon dioxide transportation pipeline developed and operated by ←
30 DCNR ON COMMONWEALTH STATE FOREST LANDS shall only be utilized ←

1 to store carbon dioxide generated within this Commonwealth. ALL ←
2 RENTS AND OTHER PAYMENTS FROM ANY LEASE OF COMMONWEALTH STATE
3 FOREST LAND UNDER THIS SECTION SHALL BE DEPOSITED INTO THE
4 ENVIRONMENTAL STEWARDSHIP FUND ESTABLISHED IN 27 PA.C.S. § 6104
5 (RELATING TO FUND).

6 (b) Fees. DCNR shall collect reasonable fees from entities ←
7 that deposit in or otherwise utilize a carbon dioxide
8 sequestration facility or a carbon dioxide transportation
9 pipeline owned by the Commonwealth. DCNR shall enter into an
10 agreement with entities seeking to use the Commonwealth facility
11 or pipeline establishing the terms and conditions for such use
12 and the payment of appropriate fees prior to the deposit of any
13 carbon dioxide into the carbon dioxide transportation pipeline
14 or sequestration facility. Fees shall be established to recover
15 the total cost, less nonreimbursable Federal funding, of
16 developing and operating the carbon dioxide sequestration
17 facility or transportation pipeline. Recoverable costs shall
18 include, but are not limited to, the cost to acquire or obtain
19 the right to use geologic formations or facilities required for
20 the carbon dioxide sequestration facility or rights of way for
21 the carbon dioxide transportation pipeline, construction costs,
22 insurance costs and other costs to operate and maintain the
23 sequestration facility or transportation pipeline.

24 (c) Establishment of fund. Prior to the receipt of fees by
25 DCNR for the delivery of carbon dioxide through a carbon dioxide
26 transportation pipeline or deposit of carbon dioxide into a
27 carbon dioxide sequestration facility, the State Treasury shall
28 establish a nonlapsing fund to be known as the Carbon
29 Sequestration Fund. Money deposited into this fund is
30 specifically appropriated to DCNR to carry out activities

1 ~~related to any Commonwealth owned carbon dioxide transportation~~
2 ~~pipeline or carbon dioxide sequestration facility performed by~~
3 ~~DCNR at the discretion of the Secretary of Conservation and~~
4 ~~Natural Resources.~~

5 ~~(d) Contracting and insuring. DCNR may enter into contracts~~
6 ~~for the development and operation of the carbon dioxide~~
7 ~~sequestration facility or transportation pipeline. DCNR and the~~
8 ~~Department of General Services shall determine the appropriate~~
9 ~~method to insure the operation of the carbon dioxide~~
10 ~~sequestration facility or transportation pipeline and shall~~
11 ~~insure the operation as deemed appropriate. In no event,~~
12 ~~however, shall the Commonwealth indemnify the developer or~~
13 ~~operator of the carbon dioxide sequestration facility or~~
14 ~~transportation pipeline from liability where the actions of the~~
15 ~~developer or operator constitute gross negligence or intentional~~
16 ~~misconduct.~~

17 Section 8.5. Application of the Public Utility Code to
18 transporters of carbon dioxide.

19 Entities transporting or conveying carbon dioxide by pipeline
20 or conduit for compensation under this act shall be considered a
21 public utility under 66 Pa.C.S. § 102 (relating to definitions)
22 and subject to the provisions of 66 Pa.C.S. (relating to public
23 utilities).

24 Section 4. The provisions of this act are severable. If any
25 provision of this act or its application to any person or
26 circumstance is held invalid, the invalidity shall not affect
27 other provisions or applications of this act which can be given
28 effect without the invalid provision or application.

29 Section 5. This act shall take effect immediately.