

## 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, providing for solar photovoltaic  
10 technology requirements, for contract requirements for solar  
11 photovoltaic energy system sources, for renewable energy  
12 storage report, for energy storage deployment targets and for  
13 contracts for solar photovoltaic technologies by Commonwealth  
14 agencies and further providing for portfolio requirements in  
15 other states; and making a related repeal.

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

18 Section 1. The definition of "reporting period" in section 2  
19 of the act of November 30, 2004 (P.L.1672, No.213), known as the  
20 Alternative Energy Portfolio Standards Act, is amended and the  
21 section is amended by adding definitions to read:

22 Section 2. Definitions.

23 The following words and phrases when used in this act shall  
24 have the meanings given to them in this section unless the

1 context clearly indicates otherwise:

2 \* \* \*

3 "Deploy" or "deployment." To install a renewable energy  
4 storage system through a variety of mechanisms, including  
5 utility procurement, customer installation methods or other  
6 processes.

7 \* \* \*

8 "Renewable energy storage system." A commercially available  
9 technology, including, but not limited to, any electrochemical,  
10 thermal and electromechanical technology, that is capable of  
11 absorbing and storing electrical energy for a period of time for  
12 use at a later time, with all of the following characteristics:

13 (1) The system is co-located behind the meter with a  
14 Tier I alternative energy source or behind the point of  
15 interconnection of a Tier I alternative energy source.

16 (2) The system is owned or operated by any of the  
17 following:

18 (i) A customer-generator.

19 (ii) An electric generation supplier.

20 (iii) An electric distribution company.

21 (iv) A third party that is jointly owned by two or  
22 more entities specified under subparagraphs (i), (ii) and  
23 (iii).

24 (3) The system is able to demonstrate that the energy  
25 the system discharges at all hours in a given reporting year  
26 comes from the storage of electrical energy produced by the  
27 co-located Tier I alternative energy source.

28 ["Reporting period."] "Reporting period or reporting year."

29 The 12-month period from June 1 through May 31. A reporting year  
30 shall be numbered according to the calendar year in which it

1 begins and ends.

2 \* \* \*

3 Section 2. Section 3(a)(3), (b), (f) and (g)(2) of the act  
4 are amended and the section is amended by adding a subsection to  
5 read:

6 Section 3. Alternative energy portfolio standards.

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

8 \* \* \*

9 (3) All costs for:

10 (i) the purchase of electricity generated from  
11 alternative energy sources, including the costs of the  
12 regional transmission organization, in excess of the  
13 regional transmission organization real-time locational  
14 marginal pricing, or its successor, at the delivery point  
15 of the alternative energy source for the electrical  
16 production of the alternative energy sources; and

17 (ii) payments for alternative energy credits, in  
18 both cases that are voluntarily acquired by an electric  
19 distribution company during the cost recovery period on  
20 behalf of its customers shall be deferred as a regulatory  
21 asset by the electric distribution company and fully  
22 recovered, with a return on the unamortized balance,  
23 pursuant to an automatic energy adjustment clause under  
24 66 Pa.C.S. § 1307 (relating to sliding scale of rates;  
25 adjustments) as a cost of generation supply under 66  
26 Pa.C.S. § 2807 (relating to duties of electric  
27 distribution companies) in the first year after the  
28 expiration of its cost-recovery period. After the cost-  
29 recovery period, any direct or indirect costs for the  
30 purchase by electric distribution companies of resources

1 to comply with this section, including, but not limited  
2 to, the purchase of electricity generated from  
3 alternative energy sources, payments for alternative  
4 energy credits, cost of credits banked, payments to any  
5 third party administrators for performance under this act  
6 and costs levied by a regional transmission organization  
7 to ensure that alternative energy sources are reliable,  
8 shall be recovered on a full and current basis pursuant  
9 to an automatic energy adjustment clause under 66 Pa.C.S.  
10 § 1307 as a cost of generation supply under 66 Pa.C.S. §  
11 2807.

12 (b) Tier I and solar photovoltaic shares through the 15th  
13 reporting year.--

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

1 (2) [The] Through the 15th reporting year ending May 31,  
2 2021, the total percentage of the electric energy sold by an  
3 electric distribution company or electric generation supplier  
4 to retail electric customers in this Commonwealth that must  
5 be sold from solar photovoltaic technologies is:

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

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

8 (iii) 0.0063% for June 1, 2008, through May 31,  
9 2009.

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

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

12 (vi) 0.0325% for June 1, 2011, through May 31, 2012.

13 (vii) 0.0510% for June 1, 2012, through May 31,  
14 2013.

15 (viii) 0.0840% for June 1, 2013, through May 31,  
16 2014.

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

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

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

20 (xii) 0.3400% for June 1, 2017, through May 31,  
21 2018.

22 (xiii) 0.3900% for June 1, 2018, through May 31,  
23 2019.

24 (xiv) 0.4433% for June 1, 2019, through May 31,  
25 2020.

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

28 (3) Upon commencement of the beginning of the 6th  
29 reporting year, the commission shall undertake a review of  
30 the compliance by electric distribution companies and

1 electric generation suppliers with the requirements of this  
2 act. The review shall also include the status of alternative  
3 energy technologies within this Commonwealth and the capacity  
4 to add additional alternative energy resources. [The  
5 commission shall use the results of this review to recommend  
6 to the General Assembly additional compliance goals beyond  
7 year 15.] The commission shall work with the department in  
8 evaluating the future alternative energy resource potential.

9 (b.1) Tier I and solar photovoltaic shares beginning in the  
10 16th reporting year.--

11 (1) Each electric distribution company and electric  
12 generation supplier shall purchase, at a minimum, an amount  
13 of Tier I alternative energy credits equal to the percentage  
14 of electric energy required to be sold by an electric  
15 distribution company or electric generation supplier to  
16 retail electric customers from Tier I alternative energy  
17 sources for that reporting year and as provided under this  
18 subsection. Beginning in the 16th reporting year commencing  
19 on June 1, 2021, the minimum percentage of electric energy  
20 required to be sold by an electric distribution company or  
21 electric generation supplier to retail electric customers in  
22 this Commonwealth from Tier I alternative energy sources for  
23 each reporting year is:

24 (i) 10.444% for June 1, 2021, through May 31, 2022.

25 (ii) 12.888% for June 1, 2022, through May 31, 2023.

26 (iii) 15.332% for June 1, 2023, through May 31,  
27 2024.

28 (iv) 17.776% for June 1, 2024, through May 31, 2025.

29 (v) 20.220% for June 1, 2025, through May 31, 2026.

30 (vi) 22.664% for June 1, 2026, through May 31, 2027.

1 (vii) 25.108% for June 1, 2027, through May 31,  
2 2028.

3 (viii) 27.552% for June 1, 2028, through May 31,  
4 2029.

5 (ix) 30% for June 1, 2029, through May 31, 2030, and  
6 thereafter.

7 (2) (i) Beginning in the 16th reporting year commencing  
8 on June 1, 2021, the minimum percentage of the electric  
9 energy sold by an electric distribution company or  
10 electric generation supplier to retail electric customers  
11 in this Commonwealth that must be sold from solar  
12 photovoltaic technologies that are owned and operated by  
13 customer-generators is:

14 (A) 0.65% for June 1, 2021, through May 31,  
15 2022.

16 (B) 0.82% for June 1, 2022, through May 31,  
17 2023.

18 (C) 0.98% for June 1, 2023, through May 31,  
19 2024.

20 (D) 1.13% for June 1, 2024, through May 31,  
21 2025.

22 (E) 1.30% for June 1, 2025, through May 31,  
23 2026.

24 (F) 1.5% for June 1, 2026, through May 31, 2027.

25 (G) 1.78% for June 1, 2027, through May 31,  
26 2028.

27 (H) 2.11% for June 1, 2028, through May 31,  
28 2029.

29 (I) 2.5% for June 1, 2029, through May 31, 2030,  
30 and thereafter.

1           (ii) For purposes of the requirements under  
2 subparagraph (i), solar photovoltaic technologies that  
3 are owned and operated by customer-generators shall  
4 include any of the following:

5           (A) Solar photovoltaic technologies that were  
6 certified before or on May 31, 2021, under subsection  
7 (b) (2) and qualify to generate solar alternative  
8 energy credits in accordance with section 3.1.

9           (B) Solar photovoltaic technologies that qualify  
10 as customer-generators certified under subsection (b)  
11 (2).

12       (3) Beginning in the 16th reporting year commencing on  
13 June 1, 2021, and each reporting year thereafter, a solar  
14 photovoltaic system that is certified before or on May 31,  
15 2021, provided the system meets the requirements under  
16 section 3.1, shall be included in the percentage of the  
17 required solar photovoltaic energy systems owned and operated  
18 by customer-generators under paragraph (2).

19       (4) A solar photovoltaic energy system owned and  
20 operated by a customer-generator in accordance with paragraph  
21 (2) shall remain eligible to receive solar alternative energy  
22 credits for no more than 15 years beginning on June 1, 2021,  
23 or 15 years beginning on the date of the solar photovoltaic  
24 energy system's certification if the certification occurs  
25 after June 1, 2021. Upon expiration of the 15-year period  
26 specified under this paragraph, the solar photovoltaic energy  
27 system shall be eligible for alternative energy credits  
28 provided for Tier I alternative energy sources under  
29 paragraph (1).

30       (5) Beginning in the 16th reporting year commencing on



1 June 1, 2021, the minimum percentage of the electric energy  
2 sold by an electric distribution company or electric  
3 generation supplier to retail electric customers in this  
4 Commonwealth that must be sold from solar photovoltaic  
5 technologies from non-customer-generators is:

6 (i) 0.94% for June 1, 2021, through May 31, 2022.

7 (ii) 1.88% for June 1, 2022, through May 31, 2023.

8 (iii) 2.81% for June 1, 2023, through May 31, 2024.

9 (iv) 3.75% for June 1, 2024, through May 31, 2025.

10 (v) 4.50% for June 1, 2025, through May 31, 2026.

11 (vi) 5.25% for June 1, 2026, through May 31, 2027.

12 (vii) 6.00% for June 1, 2027, through May 31, 2028.

13 (viii) 6.75% for June 1, 2028, through May 31, 2029.

14 (ix) 7.5% for June 1, 2029, through May 31, 2030,

15 and thereafter.

16 (6) No later than one year after the effective date of  
17 this subsection, the commission shall establish regulations  
18 to ensure diversification across all customer-generators  
19 under paragraph (2), including, but not limited to, solar  
20 photovoltaic systems that are interconnected at residential  
21 or commercial locations or customer-generators whose systems  
22 are for virtual meter aggregation.

23 (7) This subsection shall not apply to the certification  
24 of a solar photovoltaic energy system with a contract for the  
25 sale and purchase of alternative energy credits derived from  
26 solar photovoltaic energy sources entered into before or on  
27 May 31, 2021, provided that the system meets the requirements  
28 under section 3.1.

29 (8) This subsection shall apply to a contract for the  
30 sale and purchase of alternative energy credits derived from

1 solar photovoltaic energy sources entered into or renewed for  
2 reporting years commencing after May 31, 2021.

3 \* \* \*

4 (f) Alternative compliance payment.--

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

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

17 (3) ~~[The]~~ Through May 31, 2021, the alternative  
18 compliance payment, with the exception of the solar  
19 photovoltaic share compliance requirement set forth in  
20 subsection (b)(2), shall be \$45 times the number of  
21 additional alternative energy credits needed in order to  
22 comply with subsection (b) or (c).

23 (4) ~~[The]~~ Through May 31, 2021, the alternative  
24 compliance payment for the solar photovoltaic share required  
25 under subsection (b)(2) shall be 200% of the average market  
26 value of solar renewable energy credits sold during the  
27 reporting period within the service region of the regional  
28 transmission organization, including, where applicable, the  
29 levelized up-front rebates received by sellers of solar  
30 ~~[renewable]~~ alternative energy credits in other jurisdictions

1 in the PJM Interconnection, L.L.C. transmission organization  
2 (PJM) or its successor.

3 (4.1) Beginning June 1, 2021, the alternative compliance  
4 payment, with the exception of the customer-generator solar  
5 photovoltaic share compliance requirement specified under  
6 subsection (b.1)(2), shall be \$45 multiplied by the number of  
7 additional alternative energy credits needed in order to  
8 comply with subsection (b.1) or (c).

9 (4.2) Beginning June 1, 2021, the alternative compliance  
10 payment for the customer-generator solar photovoltaic share  
11 compliance requirement specified under subsection (b.1)(2)  
12 shall be as follows:

13 (i) An amount equal to the product of \$125  
14 multiplied by the number of additional alternative energy  
15 credits required to comply with subsection (b.1)(2) from  
16 June 1, 2021, through May 31, 2026.

17 (ii) An amount equal to the product of \$100  
18 multiplied by the number of additional alternative energy  
19 credits required to comply with subsection (b.1)(2) from  
20 June 1, 2026, through May 31, 2030.

21 (iii) Beginning with the reporting year commencing  
22 on June 1, 2030, and each reporting year thereafter, the  
23 alternative compliance payment required for solar  
24 photovoltaic energy systems under subsection (b.1)(2)  
25 shall decrease by \$5 from the previous reporting year  
26 until the alternative compliance payment is  
27 \$45.

28 (5) The commission shall establish a process to provide  
29 for, at least annually, a review of the alternative energy  
30 market within this Commonwealth and the service territories

1 of the regional transmission organizations that manage the  
2 transmission system in any part of this Commonwealth. The  
3 commission will use the results of this study to identify any  
4 needed changes to the cost associated with the alternative  
5 compliance payment program. If the commission finds that the  
6 costs associated with the alternative compliance payment  
7 program must be changed, the commission shall present these  
8 findings to the General Assembly for legislative enactment.

9 (g) Transfer [~~to sustainable development funds~~] of  
10 alternative compliance payments.--

11 \* \* \*

12 (2) The alternative compliance payments shall be  
13 utilized solely for [~~projects~~] any of the following:

14 (i) Projects that will increase the amount of  
15 electric energy generated from alternative energy  
16 resources for purposes of compliance with subsections  
17 (b), (b.1) and (c).

18 (ii) Workforce development programs to train workers  
19 in renewable energy industries.

20 \* \* \*

21 Section 3. The act is amended by adding sections to read:

22 Section 3.1. Solar photovoltaic technology requirements.

23 (a) System requirements.--Notwithstanding section 4, in  
24 order to qualify as an alternative energy source eligible to  
25 meet the solar photovoltaic share of the compliance requirements  
26 under section 3, a solar photovoltaic system must do one of the  
27 following:

28 (1) Directly deliver the electricity that the solar  
29 photovoltaic system generates to a retail customer of an  
30 electric distribution company or to the distribution system

1 operated by an electric distribution company operating in  
2 this Commonwealth and currently obligated to meet the  
3 compliance requirements specified under section 3.

4 (2) Directly connect to the electric system of an  
5 electric cooperative or municipal electric system operating  
6 in this Commonwealth.

7 (3) Directly connect to the electric transmission system  
8 at a location within the service territory of an electric  
9 distribution company operating in this Commonwealth.

10 (b) Construction.--

11 (1) Nothing under this section or section 4 shall be  
12 construed to affect any of the following:

13 (i) A certification originating in this Commonwealth  
14 and granted before the effective date of this section of  
15 a solar photovoltaic energy generator as a qualifying  
16 alternative energy source eligible to meet the solar  
17 photovoltaic share of this Commonwealth's alternative  
18 energy portfolio compliance requirements under section 3.

19 (ii) A certification of a solar photovoltaic system  
20 with a binding written contract for the sale and purchase  
21 of alternative energy credits derived from solar  
22 photovoltaic energy sources entered into before October  
23 30, 2017.

24 (2) This section shall apply to contracts entered into  
25 or renewed on or after October 30, 2017.

26 Section 3.2. Contract requirements for solar photovoltaic  
27 energy system sources.

28 (a) Low-cost procurement for non-customer-generators.--

29 (1) To assure the lowest-cost procurement, two-thirds of  
30 the annual total percentage requirement from solar

1 photovoltaic sources as specified under section 3(b.1) (5)  
2 shall be procured through contracts of no less than 12 years  
3 and no more than 20 years for both energy and alternative  
4 energy credits required under this subsection. Energy  
5 procured to satisfy the requirements of this subsection may  
6 not be used to satisfy the procurement requirement under  
7 subsection (b).

8 (2) An electric distribution company with more than one  
9 million annual megawatt hours of retail load shall:

10 (i) procure energy and alternative energy credits  
11 based on the total electric energy sold to all customers  
12 in the electric distribution company's service territory,  
13 without regard to whether the supplier of the retail  
14 sales is the electric distribution company or an electric  
15 generation supplier;

16 (ii) issue annual requests for proposals for  
17 competitive long-term procurement of solar energy and  
18 alternative energy credits and enter into contracts in  
19 compliance with this subsection in accordance with  
20 regulations established by the commission; and

21 (iii) be entitled to a presumption of prudence and  
22 full cost recovery in distribution rates of payments for  
23 competitive procurements made under this subsection at a  
24 levelized price over the term of the contract of less  
25 than one-half of the applicable alternative compliance  
26 payment.

27 (3) For purposes of any true-up required under this  
28 subsection, the following apply:

29 (i) If contracts executed to meet the requirements  
30 of this section fail to deliver the quantities required

1 in any given year, the electric distribution company  
2 shall procure alternative energy credits during the true-  
3 up period established under section 3(e) (5).

4 (ii) Electric generation suppliers in the territory  
5 of the electric distribution company shall not have an  
6 obligation to purchase alternative energy credits for the  
7 share of the requirements under this section and shall  
8 not be responsible for true-up or the payment of any  
9 penalty for failure to comply with this section.

10 (4) No later than December 1, 2020, the commission shall  
11 establish regulations to implement the requirements under  
12 this subsection and provide for the issuance and execution of  
13 the first competitive procurement contracts for the supply of  
14 alternative energy credits beginning with the reporting year  
15 commencing on June 1, 2021. The regulations shall address,  
16 but not be limited to, all of the following:

17 (i) Competitive contract procurement.

18 (ii) Alternative energy credit retirement.

19 (iii) Guidance on the prudence of proposed  
20 purchases, including a presumption of prudence if the  
21 annualized cost of alternative energy credits is less  
22 than one-half of the applicable alternative compliance  
23 payment.

24 (iv) Competitiveness review using standard industry  
25 practices to ensure that each solicitation is competitive  
26 and providing for the prompt re-issuance of a  
27 solicitation deemed to be uncompetitive.

28 (v) Cost recovery for electric distribution  
29 companies for prudent and competitive contracts.

30 (vi) Alternative energy credit true-up of

1 procurement shortfalls in subsequent year contract  
2 procurements.

3 (b) Low-cost procurement for Tier I resources.--

4 (1) No later than December 1, 2020, the commission shall  
5 establish regulations providing for competitive procurement  
6 of at least one-sixth of the Tier I alternative energy  
7 required under section 3(b.1)(1), except for energy procured  
8 under subsection (a), under contracts with a term of no less  
9 than 10 years and no more than 15 years beginning with the  
10 reporting year commencing on June 1, 2021. The competitive  
11 procurements under this subsection shall result in contracts  
12 for both energy and alternative energy credits for Tier I  
13 alternative energy resources for the purpose of satisfying  
14 the requirements under section

15 (3)(b.1)(1). The requirements under this paragraph shall not  
16 apply to the solar photovoltaic share requirements under  
17 section 3(b.1)(2) or (5).

18 (2) In establishing regulations under paragraph (1), the  
19 commission shall collaborate with stakeholders, including,  
20 but not limited to, the department, energy generation  
21 suppliers, renewable energy developers and electric  
22 distribution companies, and determine the benefit to electric  
23 customers in this Commonwealth based on the following  
24 factors:

25 (i) The savings to electric customers resulting from  
26 the procurement of alternative energy credits under this  
27 section.

28 (ii) The preference for new generation resources  
29 with reduced emissions as determined by the department.

30 (iii) The parties to the contracts.



1           (iv) The design of the competitive procurement  
2           process.

3           (v) The terms to be included in the contracts based  
4           on commercial reasonableness for the parties to the  
5           contracts.

6 Section 3.3. Renewable energy storage report.

7       (a) Report.--No later than one year after the effective date  
8       of this section, the commission, in consultation with the PJM  
9       Interconnection, L.L.C. transmission organization (PJM) or its  
10       successor and stakeholders, including, but not limited to,  
11       third-party electric generation suppliers and electric  
12       utilities, shall conduct a renewable energy storage analysis and  
13       submit a report to the Governor and General Assembly concerning  
14       renewable energy storage needs and opportunities and costs and  
15       benefits in this Commonwealth.

16       (b) Contract.--The commission shall contract with an  
17       independent consultant selected through a competitive request  
18       for proposal process to produce the report under this section.

19       (c) Report.--At a minimum, the commission shall compile the  
20       report in the following manner:

21           (1) Use 2,000 megawatt hours of renewable energy storage  
22           as a benchmark target goal.

23           (2) Identify and measure the potential costs and  
24           benefits of deployment based on all of the following factors:

25               (i) Deferred investments in generation, transmission  
26               and distribution facilities.

27               (ii) Reduced ancillary services costs.

28               (iii) Reduced transmission and distribution  
29               congestion.

30               (iv) Reduced peak power costs and capacity costs.

1           (v) Reduced costs for emergency power supplies  
2 during outages.

3           (vi) Curtailment of nonrenewable energy generators  
4 to meet peak demand.

5           (vii) Reduced greenhouse gas emissions.

6           (3) Analyze and estimate all of the following:

7           (i) The ability to integrate renewable energy  
8 resources with energy storage systems.

9           (ii) The benefits of coupling the storage to meet  
10 peak demand.

11           (iii) The impact of renewable energy storage on grid  
12 reliability and power quality.

13           (iv) The impact on retail electric rates over the  
14 useful life of a renewable energy storage system compared  
15 to the same services using other facilities or resources.

16           (4) Consider whether the implementation of renewable  
17 electric energy storage systems would promote the use of  
18 electric vehicles in this Commonwealth and the potential  
19 impact on renewable energy production in this Commonwealth.

20           (5) Analyze the types of renewable energy storage  
21 technologies currently being implemented in this Commonwealth  
22 and other states.

23           (6) Consider the benefits and costs to retail electric  
24 customers in this Commonwealth, political subdivisions and  
25 electric public utilities associated with the development and  
26 implementation of additional renewable energy storage  
27 technologies.

28           (7) Determine the optimal amount of renewable energy  
29 storage that should be added in this Commonwealth during the  
30 next five years to provide the maximum benefit to retail

1 electric customers in this Commonwealth.

2 (8) Determine the optimum points of entry into the  
3 electric distribution system for distributed energy  
4 resources.

5 (9) Calculate the cost to retail electric customers in  
6 this Commonwealth of adding the optimal amount of renewable  
7 energy storage.

8 Section 3.4. Energy storage deployment targets.

9 (a) Determination.--No later than 90 days after completion  
10 of the report under section 3.3, the commission shall determine  
11 appropriate energy storage deployment targets that each electric  
12 distribution company needs to achieve by December 31, 2025,  
13 including any interim targets. In making the determination, the  
14 commission shall consider all of the following:

15 (1) The contents of the report under section 3.3.

16 (2) Adopting specific subcategories of deployment by  
17 point of interconnection.

18 (3) Adopting requirements or processes for all of the  
19 following:

20 (i) The competitive deployment of energy storage  
21 services from third parties.

22 (ii) The direct purchase of storage devices.

23 (4) Appropriate accountability mechanisms, including  
24 reporting requirements, for investor-owned electric utilities  
25 to procure energy storage in sufficient quantities to meet  
26 the targets established by the commission.

27 (5) If advised by the report under section 3.3, creating  
28 a renewable peak standard that would set targets for meeting  
29 peak demand with renewable energy co-located with storage,  
30 including all of the following:

1           (i) Demand response technology or energy storage  
2           that is paired solely with a Tier I alternative energy  
3           source that generates, dispatches or discharges energy to  
4           an electric distribution system during seasonal peak  
5           periods as determined by the commission or reduce load on  
6           the system.

7           (ii) Renewable energy storage systems that can be  
8           co-located with the Tier I alternative energy sources or  
9           paired virtually, as long as the storage facility is  
10           within the boundaries of the same electric distribution  
11           company's service territory and specifically located to  
12           reduce peak demand.

13           (b) Definitions.--As used in this section, the term  
14           "procure" shall mean to acquire by ownership a renewable  
15           energy storage system or a contractual right to use the energy  
16           from, or the capacity of, a renewable energy storage system.  
17           Section 3.5. Contracts for solar photovoltaic technologies by  
18           Commonwealth agencies.

19           (a) Public works.--Except as provided under subsection (b),  
20           a Commonwealth agency shall require that a contract for the  
21           construction, reconstruction, alteration, repair, improvement or  
22           maintenance of public works contain a provision that, if any  
23           solar photovoltaic technologies to be used or supplied in the  
24           performance of the contract, only solar photovoltaic  
25           technologies manufactured in the United States shall be used or  
26           supplied in the performance of the contract or any subcontracts  
27           under the contract.

28           (b) Exception.--The requirement under subsection (a) shall  
29           not apply if the head of the Commonwealth agency, in writing,  
30           determines that the solar photovoltaic technologies are not

1 manufactured in the United States in sufficient quantities to  
2 meet the requirements of the contract.

3 (c) Definitions.--As used in this section, the term "public  
4 work" shall have the same meaning given to it in section 2(5) of  
5 the act of August 15, 1961 (P.L.987, No.442), known as the  
6 Pennsylvania Prevailing Wage Act.

7 Section 4. Section 4 of the act is amended to read:

8 Section 4. Portfolio requirements in other states.

9 If an electric distribution [~~supplier~~] company or electric  
10 generation [~~company~~] supplier provider sells electricity in any  
11 other state and is subject to [~~renewable~~] alternative energy  
12 portfolio requirements in that state, they shall list any such  
13 requirement and shall indicate how it satisfied those  
14 [~~renewable~~] alternative energy portfolio requirements. To  
15 prevent double-counting, the electric distribution [~~supplier~~]  
16 company or electric generation [~~company~~] supplier shall not  
17 satisfy Pennsylvania's alternative energy portfolio requirements  
18 using alternative energy used to satisfy another state's  
19 portfolio requirements or alternative energy credits already  
20 purchased by individuals, businesses or government bodies that  
21 do not have a compliance obligation under this act unless the  
22 individual, business or government body sells those credits to  
23 the electric distribution company or electric generation  
24 supplier. Energy derived from alternative energy sources inside  
25 the geographical boundaries of this Commonwealth shall be  
26 eligible to meet the compliance requirements under this act.  
27 Energy derived from alternative energy sources located outside  
28 the geographical boundaries of this Commonwealth but within the  
29 service territory of a regional transmission organization that  
30 manages the transmission system in any part of this Commonwealth

1 shall only be eligible to meet the compliance requirements of  
2 electric distribution companies or electric generation suppliers  
3 located within the service territory of the same regional  
4 transmission organization. For purposes of compliance with this  
5 act, alternative energy sources located in the PJM  
6 Interconnection, L.L.C. regional transmission organization (PJM)  
7 or its successor service territory shall be eligible to fulfill  
8 compliance obligations of all Pennsylvania electric distribution  
9 companies and electric generation suppliers. Energy derived from  
10 alternative energy sources located outside the service territory  
11 of a regional transmission organization that manages the  
12 transmission system in any part of this Commonwealth shall not  
13 be eligible to meet the compliance requirements of this act.  
14 Electric distribution companies and electric generation  
15 suppliers shall document that this energy was not used to  
16 satisfy another state's [renewable] alternative energy portfolio  
17 standards.

18 Section 5. Repeals are as follows:

19 (1) The General Assembly declares that the repeal under  
20 paragraph (2) is necessary to effectuate the addition of  
21 section 3.1 of the act.

22 (2) Section 2804 of the act of April 9, 1929 (P.L.177,  
23 No.175), known as The Administrative Code of 1929, is  
24 repealed.

25 Section 6. This act shall take effect immediately.