

THE GENERAL ASSEMBLY OF PENNSYLVANIA

HOUSE BILL

No. 1195 Session of  
2019

INTRODUCED BY COMMITTEE ON CONSUMER AFFAIRS, APRIL 29, 2019  
 INTRODUCED BY COMITTA, McCARTER, DERMODY, VITALI, STURLA,  
 T. DAVIS, ZABEL, KINSEY, KOSIEROWSKI, ISAACSON, MADDEN,  
 SCHLOSSBERG, SANCHEZ, WARREN, SHUSTERMAN, RAVENSTAHL,  
 DONATUCCI, ULLMAN, DAWKINS, BURGOS, WHEATLEY, McCLINTON,  
 DeLISSIO, FREEMAN, HOHENSTEIN, WEBSTER, HANBIDGE, HILL-EVANS,  
 SCHWEYER, HOWARD AND D. MILLER, APRIL 29, 2019

REFERRED TO COMMITTEE ON CONSUMER AFFAIRS, APRIL 29, 2019

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.

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

4 \* \* \*

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

9 \* \* \*

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

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

18 (2) The system is owned or operated by any of the  
19 following:

20 (i) A customer-generator.

21 (ii) An electric generation supplier.

22 (iii) An electric distribution company.

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

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

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

1 The 12-month period from June 1 through May 31. A reporting year  
2 shall be numbered according to the calendar year in which it  
3 begins and ends.

4 \* \* \*

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

8 Section 3. Alternative energy portfolio standards.

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

10 \* \* \*

11 (3) All costs for:

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

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

1 recovery period, any direct or indirect costs for the  
2 purchase by electric distribution companies of resources  
3 to comply with this section, including, but not limited  
4 to, the purchase of electricity generated from  
5 alternative energy sources, payments for alternative  
6 energy credits, cost of credits banked, payments to any  
7 third party administrators for performance under this act  
8 and costs levied by a regional transmission organization  
9 to ensure that alternative energy sources are reliable,  
10 shall be recovered on a full and current basis pursuant  
11 to an automatic energy adjustment clause under 66 Pa.C.S.  
12 § 1307 as a cost of generation supply under 66 Pa.C.S. §  
13 2807.

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

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

1 effective date of this subsection is sold from Tier I  
2 alternative energy resources.

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

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

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

10 (iii) 0.0063% for June 1, 2008, through May 31,  
11 2009.

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

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

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

15 (vii) 0.0510% for June 1, 2012, through May 31,  
16 2013.

17 (viii) 0.0840% for June 1, 2013, through May 31,  
18 2014.

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

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

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

22 (xii) 0.3400% for June 1, 2017, through May 31,  
23 2018.

24 (xiii) 0.3900% for June 1, 2018, through May 31,  
25 2019.

26 (xiv) 0.4433% for June 1, 2019, through May 31,  
27 2020.

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

30 (3) Upon commencement of the beginning of the 6th

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

11 (b.1) Tier I and solar photovoltaic shares beginning in the  
12 16th reporting year.--

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

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

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

28 (iii) 15.332% for June 1, 2023, through May 31,  
29 2024.

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

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

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

3 (vii) 25.108% for June 1, 2027, through May 31,  
4 2028.

5 (viii) 27.552% for June 1, 2028, through May 31,  
6 2029.

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

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

16 (A) 0.65% for June 1, 2021, through May 31,  
17 2022.

18 (B) 0.82% for June 1, 2022, through May 31,  
19 2023.

20 (C) 0.98% for June 1, 2023, through May 31,  
21 2024.

22 (D) 1.13% for June 1, 2024, through May 31,  
23 2025.

24 (E) 1.30% for June 1, 2025, through May 31,  
25 2026.

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

27 (G) 1.78% for June 1, 2027, through May 31,  
28 2028.

29 (H) 2.11% for June 1, 2028, through May 31,  
30 2029.

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

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

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

11                   (B) Solar photovoltaic technologies that qualify  
12                   as customer-generators certified under subsection (b)  
13                   (2).

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

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



1 paragraph (1).

2 (5) Beginning in the 16th reporting year commencing on  
3 June 1, 2021, the minimum percentage of the electric energy  
4 sold by an electric distribution company or electric  
5 generation supplier to retail electric customers in this  
6 Commonwealth that must be sold from solar photovoltaic  
7 technologies from non-customer-generators is:

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

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

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

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

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

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

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

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

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

17 and thereafter.

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

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

1           (8) This subsection shall apply to a contract for the  
2 sale and purchase of alternative energy credits derived from  
3 solar photovoltaic energy sources entered into or renewed for  
4 reporting years commencing after May 31, 2021.

5 \* \* \*

6 (f) Alternative compliance payment.--

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

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

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

25           (4) [The] Through May 31, 2021, the alternative  
26 compliance payment for the solar photovoltaic share required  
27 under subsection (b) (2) shall be 200% of the average market  
28 value of solar renewable energy credits sold during the  
29 reporting period within the service region of the regional  
30 transmission organization, including, where applicable, the

1 levelized up-front rebates received by sellers of solar  
2 [renewable] alternative energy credits in other jurisdictions  
3 in the PJM Interconnection, L.L.C. transmission organization  
4 (PJM) or its successor.

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

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

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

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

23 (iii) Beginning with the reporting year commencing  
24 on June 1, 2030, and each reporting year thereafter, the  
25 alternative compliance payment required for solar  
26 photovoltaic energy systems under subsection (b.1)(2)  
27 shall decrease by \$5 from the previous reporting year  
28 until the alternative compliance payment is  
29 \$45.

30 (5) The commission shall establish a process to provide

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

11 (g) Transfer [to sustainable development funds] of  
12 alternative compliance payments.--

13 \* \* \*

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

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

20 (ii) Workforce development programs to train workers  
21 in renewable energy industries.

22 \* \* \*

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

24 Section 3.1. Solar photovoltaic technology requirements.

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

30 (1) Directly deliver the electricity that the solar

1 photovoltaic system generates to a retail customer of an  
2 electric distribution company or to the distribution system  
3 operated by an electric distribution company operating in  
4 this Commonwealth and currently obligated to meet the  
5 compliance requirements specified under section 3.

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

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

12 (b) Construction.--

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

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

21 (ii) A certification of a solar photovoltaic system  
22 with a binding written contract for the sale and purchase  
23 of alternative energy credits derived from solar  
24 photovoltaic energy sources entered into before October  
25 30, 2017.

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

28 Section 3.2. Contract requirements for solar photovoltaic  
29 energy system sources.

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

1       (1) To assure the lowest-cost procurement, two-thirds of  
2 the annual total percentage requirement from solar  
3 photovoltaic sources as specified under section 3(b.1)(5)  
4 shall be procured through contracts of no less than 12 years  
5 and no more than 20 years for both energy and alternative  
6 energy credits required under this subsection.

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

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

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

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

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

28           (i) If contracts executed to meet the requirements  
29 of this section fail to deliver the quantities required  
30 in any given year, the electric distribution company

1 shall procure alternative energy credits during the true-  
2 up period established under section 3(e)(5).

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

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

16 (i) Competitive contract procurement.

17 (ii) Alternative energy credit retirement.

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

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

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

29 (vi) Alternative energy credit true-up of  
30 procurement shortfalls in subsequent year contract

1           procurements.

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

3           (1) No later than December 1, 2020, the commission shall  
4           establish regulations providing for competitive procurement  
5           of at least one-sixth of the nonsolar Tier I alternative  
6           energy required under section 3(b.1)(1) under contracts with  
7           a term of no less than 10 years and no more than 15 years  
8           beginning with the reporting year commencing on June 1, 2021.  
9           The competitive procurements under this subsection shall  
10           result in contracts for both energy and alternative energy  
11           credits for nonsolar Tier I alternative energy resources for  
12           the purpose of satisfying the requirements under section  
13           (3)(b.1)(1). The requirements under this paragraph shall not  
14           apply to the solar photovoltaic share requirements under  
15           section 3(b.1)(2) or (5).

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

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

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

28           (iii) The parties to the contracts.

29           (iv) The design of the competitive procurement  
30           process.



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

4 Section 3.3. Renewable energy storage report.

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

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

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

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

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

23               (i) Deferred investments in generation, transmission  
24 and distribution facilities.

25               (ii) Reduced ancillary services costs.

26               (iii) Reduced transmission and distribution  
27 congestion.

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

29               (v) Reduced costs for emergency power supplies  
30 during outages.

1           (vi) Curtailment of nonrenewable energy generators  
2 to meet peak demand.

3           (vii) Reduced greenhouse gas emissions.

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

5           (i) The ability to integrate renewable energy  
6 resources with energy storage systems.

7           (ii) The benefits of coupling the storage to meet  
8 peak demand.

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

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

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

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

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

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

30           (8) Determine the optimum points of entry into the

1 electric distribution system for distributed energy  
2 resources.

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

6 Section 3.4. Energy storage deployment targets.

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

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

14 (2) Adopting specific subcategories of deployment by  
15 point of interconnection.

16 (3) Adopting requirements or processes for all of the  
17 following:

18 (i) The competitive deployment of energy storage  
19 services from third parties.

20 (ii) The direct purchase of storage devices.

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

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

29 (i) Demand response technology or energy storage  
30 that is paired solely with a Tier I alternative energy

1 source that generates, dispatches or discharges energy to  
2 an electric distribution system during seasonal peak  
3 periods as determined by the commission or reduce load on  
4 the system.

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

11 (b) Definitions.--As used in this section, the term  
12 "procure" shall mean to acquire by ownership a renewable  
13 energy storage system or a contractual right to use the energy  
14 from, or the capacity of, a renewable energy storage system.

15 Section 3.5. Contracts for solar photovoltaic technologies by  
16 Commonwealth agencies.

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

26 (b) Exception.--The requirement under subsection (a) shall  
27 not apply if the head of the Commonwealth agency, in writing,  
28 determines that the solar photovoltaic technologies are not  
29 manufactured in the United States in sufficient quantities to  
30 meet the requirements of the contract.

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

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

6 Section 4. Portfolio requirements in other states.

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

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

16 Section 5. Repeals are as follows:

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

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

23 Section 6. This act shall take effect immediately.