THE GENERAL ASSEMBLY OF PENNSYLVANIA

SENATE BILL

No. 501

Session of 2021

INTRODUCED BY LAUGHLIN, HAYWOOD, SANTARSIERO, MENSCH AND COMITTA, APRIL 9, 2021

REFERRED TO CONSUMER PROTECTION AND PROFESSIONAL LICENSURE, APRIL 9, 2021

AN ACT

- Amending the act of November 30, 2004 (P.L.1672, No.213), 1 entitled, "An act providing for the sale of electric energy 2 generated from renewable and environmentally beneficial 3 sources, for the acquisition of electric energy generated from renewable and environmentally beneficial sources by 5 electric distribution and supply companies and for the powers and duties of the Pennsylvania Public Utility Commission," 7 further providing for definitions and for alternative energy 8 portfolio standards; providing for solar photovoltaic technology requirements, for contract requirements for solar 10 photovoltaic energy system sources, for energy storage 11 report, for energy storage deployment targets and for 12 contracts for solar photovoltaic technologies by Commonwealth 13 agencies; further providing for portfolio requirements in 14 other states; and making a related repeal. 15
- 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 "Deployment." To install an energy storage system through a
- 4 <u>variety of mechanisms, including utility procurement, customer</u>
- 5 <u>installation methods or other processes.</u>
- 6 * * *
- 7 <u>"Energy storage system." A commercially available</u>
- 8 technology, including, but not limited to, any electrochemical,
- 9 thermal and electromechanical technology, that is capable of
- 10 absorbing and storing electrical energy for any period of time
- 11 for use at a later time.
- 12 * * *
- ["Reporting period."] <u>"Reporting period" or "reporting year."</u>
- 14 The 12-month period from June 1 through May 31. A reporting year
- 15 shall be numbered according to the calendar year in which it
- 16 begins and ends.
- 17 * * *
- 18 Section 2. Section 3(a)(3), (b), (f) and (g)(2) of the act
- 19 are amended and the section is amended by adding a subsection to
- 20 read:
- 21 Section 3. Alternative energy portfolio standards.
- 22 (a) General compliance and cost recovery.--
- 23 * * *
- 24 (3) All costs for:
- 25 (i) the purchase of electricity generated from
- 26 alternative energy sources, including the costs of the
- 27 regional transmission organization, in excess of the
- regional transmission organization real-time locational
- 29 marginal pricing, or its successor, at the delivery point
- 30 of the alternative energy source for the electrical

1 production of the alternative energy sources; and

(ii) payments for alternative energy credits, in

both cases that are voluntarily acquired by an electric

distribution company during the cost recovery period on

behalf of its customers shall be deferred as a regulatory

asset by the electric distribution company and fully

recovered, with a return on the unamortized balance,

9 66 Pa.C.S. § 1307 (relating to sliding scale of rates;

adjustments) as a cost of generation supply under 66

Pa.C.S. § 2807 (relating to duties of electric

distribution companies) in the first year after the

expiration of its cost-recovery period. After the cost-

14 recovery period, any direct or indirect costs for the

purchase by electric distribution companies of resources

to comply with this section, including, but not limited

pursuant to an automatic energy adjustment clause under

to, the purchase of electricity generated from

18 alternative energy sources, payments for alternative

19 energy credits, cost of credits banked, payments to any

20 third party administrators for performance under this act

21 and costs levied by a regional transmission organization

22 to ensure that alternative energy sources are reliable,

shall be recovered on a full and current basis pursuant

to an automatic energy adjustment clause under 66 Pa.C.S.

§ 1307 as a cost of generation supply under 66 Pa.C.S. §

26 2807.

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27 (b) Tier I and solar photovoltaic shares <u>through the 15th</u>

28 <u>reporting year</u>.--

29 (1) Two years after the effective date of this act, at

least 1.5% of the electric energy sold by an electric

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

distribution company or electric generation supplier to

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

certificated territory in the 15th reporting year after the

effective date of this subsection is sold from Tier I

alternative energy resources.

- (i) 0.0013% for June 1, 2006, through May 31, 2007.
- 22 (ii) 0.0030% for June 1, 2007, through May 31, 2008.
- 23 (iii) 0.0063% for June 1, 2008, through May 31,
- 24 2009.

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- 25 (iv) 0.0120% for June 1, 2009, through May 31, 2010.
- 26 (v) 0.0203% for June 1, 2010, through May 31, 2011.
- 27 (vi) 0.0325% for June 1, 2011, through May 31, 2012.
- 28 (vii) 0.0510% for June 1, 2012, through May 31,
- 29 2013.
- 30 (viii) 0.0840% for June 1, 2013, through May 31,

- 1 2014.
- 2 (ix) 0.1440% for June 1, 2014, through May 31, 2015.
- 3 (x) 0.2500% for June 1, 2015, through May 31, 2016.
- 4 (xi) 0.2933% for June 1, 2016, through May 31, 2017.
- 5 (xii) 0.3400% for June 1, 2017, through May 31,
- 6 2018.
- 7 (xiii) 0.3900% for June 1, 2018, through May 31,
- 8 2019.
- 9 (xiv) 0.4433% for June 1, 2019, through May 31,
- 10 2020.
- 11 (xv) 0.5000% for June 1, 2020, [and thereafter]
- 12 <u>through May 31, 2021</u>.
- 13 (3) Upon commencement of the beginning of the 6th
- 14 reporting year, the commission shall undertake a review of
- the compliance by electric distribution companies and
- 16 electric generation suppliers with the requirements of this
- 17 act. The review shall also include the status of alternative
- 18 energy technologies within this Commonwealth and the capacity
- 19 to add additional alternative energy resources. [The
- commission shall use the results of this review to recommend
- 21 to the General Assembly additional compliance goals beyond
- 22 year 15.] The commission shall work with the department in
- 23 evaluating the future alternative energy resource potential.
- 24 (b.1) Tier I and solar photovoltaic shares beginning in the
- 25 16th reporting year.--
- 26 (1) Each electric distribution company and electric
- 27 <u>generation supplier shall purchase, at a minimum, an amount</u>
- of Tier I alternative energy credits equal to the percentage
- of electric energy required to be sold by an electric
- distribution company or electric generation supplier to

1	retail electric customers from Tier I alternative energy			
2	sources for that reporting year and as provided under this			
3	subsection. Beginning in the 16th reporting year commencing			
4	on June 1, 2021, the minimum percentage of electric energy			
5	required to be sold by an electric distribution company or			
6	electric generation supplier to retail electric customers in			
7	this Commonwealth from Tier I alternative energy sources for			
8	<pre>each reporting year is:</pre>			
9	(i) 10% for June 1, 2021, through May 31, 2022.			
10	(ii) 12% for June 1, 2022, through May 31, 2023.			
11	(iii) 14% for June 1, 2023, through May 31, 2024.			
12	(iv) 16% for June 1, 2024, through May 31, 2025.			
13	(v) 18% for June 1, 2025, through May 31, 2026, and			
14	thereafter.			
15	(2) An electric generation supplier with an existing			
16	written supply contract in effect prior to the effective date			
17	of this section shall be exempt from purchasing increased			
18	Tier I alternative energy credits under this subsection for			
19	the quantity of load supplied under the existing contract			
20	until the supply contract expires. The limited exemption for			
21	the quantity of load supplied under an existing contract			
22	shall not lead to a reallocation of exempt load requirements			
23	to any other electric generation supplier.			
24	(3) (i) Beginning in the 16th reporting year commencing			
25	on June 1, 2021, the minimum percentage of the electric			
26	energy sold by an electric distribution company or			
27	electric generation supplier to retail electric customers			
28	in this Commonwealth that must be sold from solar			
29	photovoltaic technologies that are owned and operated by			
30	customer-generators is:			

1	(A) 0.61% for June 1, 2021, through May 31,
2	<u>2022.</u>
3	(B) 0.75% for June 1, 2022, through May 31,
4	<u>2023.</u>
5	(C) 0.95% for June 1, 2023, through May 31,
6	<u>2024.</u>
7	(D) 1.25% for June 1, 2024, through May 31,
8	<u>2025.</u>
9	(E) 1.75% for June 1, 2025, through May 31,
10	2026, and thereafter.
11	(ii) For purposes of the requirements under
12	subparagraph (i), solar photovoltaic technologies that
13	are owned and operated by customer-generators shall
14	include any of the following:
15	(A) Solar photovoltaic technologies that were
16	certified before or on May 31, 2021, under subsection
17	(b)(2) and qualify to generate solar alternative
18	energy credits in accordance with section 3.1.
19	(B) Solar photovoltaic technologies that qualify
20	as customer-generators certified under subsection (b)
21	<u>(2).</u>
22	(iii) For purposes of the requirements under
23	subparagraphs (i) and (ii), for each year the total
24	aggregate customer-generator capacity of the systems that
25	qualify under this requirement must be interconnected on
26	the customer-generator's side of the utility meter with
27	the exception of systems that qualify under
28	subparagraph(ii)(A).
29	(4) Beginning in the 16th reporting year commencing on
30	June 1, 2021, and each reporting year thereafter, a solar

1	photovoltaic system that is certified before or on May 31,			
2	2021, provided the system meets the requirements under			
3	section 3.1, shall be included in the percentage of the			
4	required solar photovoltaic energy systems owned and operated			
5	by customer-generators under paragraph (2).			
6	(5) A solar photovoltaic energy system owned and			
7	operated by a customer-generator in accordance with paragraph			
8	(2) shall remain eligible to receive solar alternative energy			
9	credits for no more than 15 years beginning on June 1, 2021,			
10	or 15 years beginning on the date of the solar photovoltaic			
11	energy system's certification if the certification occurs			
12	after June 1, 2021. Upon expiration of the 15-year period			
13	specified under this paragraph, the solar photovoltaic energy			
14	system shall be eligible for alternative energy credits			
15	provided for Tier I alternative energy sources under			
16	paragraph (1).			
17	(6) Beginning in the 16th reporting year commencing on			
18	June 1, 2021, the minimum percentage of the electric energy			
19	sold by an electric distribution company or electric			
20	generation supplier to retail electric customers in this			
21	Commonwealth that must be sold from solar photovoltaic			
22	technologies from non-customer-generators is:			
23	(i) 0.65% for June 1, 2021, through May 31, 2022.			
24	(ii) 1.35% for June 1, 2022, through May 31, 2023.			
25	(iii) 2.10% for June 1, 2023, through May 31, 2024.			
26	(iv) 2.90% for June 1, 2024, through May 31, 2025.			
27	(v) 3.75% for June 1, 2025, through May 21, 2026,			
28	and thereafter.			
29	(7) This subsection shall not apply to the certification			
30	of a solar photovoltaic energy system with a contract for the			

- 1 <u>sale and purchase of alternative energy credits derived from</u>
- 2 <u>solar photovoltaic energy sources entered into before or on</u>
- 3 May 31, 2021, provided that the system meets the requirements
- 4 <u>under section 3.1.</u>
- 5 (8) This subsection shall apply to a contract for the
- 6 <u>sale and purchase of alternative energy credits derived from</u>
- 7 <u>solar photovoltaic energy sources entered into or renewed for</u>
- 8 reporting years commencing after May 31, 2021.
- 9 * * *
- 10 (f) Alternative compliance payment.--
- 11 (1) At the end of each program <u>reporting</u> year, the
- 12 program administrator shall provide a report to the
- commission and to each covered electric distribution company
- showing their status level of alternative energy acquisition.
- 15 (2) The commission shall conduct a review of each
- determination made under subsections (b), (b.1) and (c). If,
- 17 after notice and hearing, the commission determines that an
- 18 electric distribution company or electric generation supplier
- has failed to comply with subsections (b), (b.1) and (c), the
- 20 commission shall impose an alternative compliance payment on
- 21 that electric distribution company or electric generation
- 22 supplier.
- 23 (3) [The] Through May 31, 2021, the alternative
- compliance payment, with the exception of the solar
- 25 photovoltaic share compliance requirement set forth in
- 26 subsection (b)(2), shall be \$45 times the number of
- 27 additional alternative energy credits needed in order to
- comply with subsection (b) or (c).
- 29 (4) [The] Through May 31, 2021, the alternative
- 30 compliance payment for the solar photovoltaic share required

1 <u>under subsection (b)(2)</u> shall be 200% of the average market

2 value of solar renewable energy credits sold during the

3 reporting period within the service region of the regional

4 transmission organization, including, where applicable, the

levelized up-front rebates received by sellers of solar

6 [renewable] <u>alternative</u> energy credits in other jurisdictions

in the PJM Interconnection, L.L.C. transmission organization

(4.1) Beginning with the reporting year commencing on

(PJM) or its successor.

- June 1, 2021, and each reporting year thereafter, the

 alternative compliance payment, with the exception of the

 customer-generator solar photovoltaic share compliance
- requirement specified under subsection (b.1)(2), shall be \$45
- 14 <u>multiplied by the number of additional alternative energy</u>
- credits needed in order to comply with subsection (b.1) or
- 16 <u>(c)</u>.

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- 17 (4.2) Beginning with the reporting year commencing on
- June 1, 2026, and each reporting year thereafter, the
- 19 <u>alternative compliance payment with the exception of the</u>
- 20 <u>customer-generator solar photovoltaic share compliance</u>
- 21 requirement shall decrease by \$5 from the previous reporting
- 22 <u>year until the alternative compliance payment is \$25 and</u>
- continues thereafter at \$25.
- 24 (4.3) Beginning June 1, 2021, the alternative compliance
- 25 <u>payment for the customer-generator solar photovoltaic share</u>
- 26 compliance requirement specified under subsection (b.1)(2)
- 27 <u>shall be an amount equal to the product of \$125 multiplied by</u>
- 28 the number of additional alternative energy credits required
- 29 to comply with subsection (b.1)(2) from June 1, 2021, through
- 30 May 31, 2026.

1	(4.4) Beginning with the reporting year commencing on
2	June 1, 2026, and each reporting year thereafter, the
3	alternative compliance payment required for the customer-
4	generator solar photovoltaic share compliance requirement
5	specified under subsection (b.1)(2)(i) shall decrease by \$5
6	from the previous reporting year until the alternative
7	compliance payment is \$40, and continues thereafter at \$40.
Ω	(5) The commission shall establish a process to provide

- (5) The commission shall establish a process to provide for, at least annually, a review of the alternative energy market within this Commonwealth and the service territories of the regional transmission organizations that manage the transmission system in any part of this Commonwealth. The commission will use the results of this study to identify any needed changes to the cost associated with the alternative compliance payment program. If the commission finds that the costs associated with the alternative compliance payment program must be changed, the commission shall present these findings to the General Assembly for legislative enactment.
- 19 (g) Transfer [to sustainable development funds] of
 20 alternative compliance payments.--

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- (2) The alternative compliance payments shall be utilized solely for [projects] any of the following:
- 24 <u>(i) Projects</u> that will increase the amount of
 25 electric energy generated from alternative energy
 26 resources for purposes of compliance with subsections
 27 (b), (b.1) and (c).
- 28 <u>(ii) Workforce development programs to train workers</u>
 29 <u>in renewable energy industries.</u>

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1	Section 3. The act is amended by adding sections to read:		
2	Section 3.1. Solar photovoltaic technology requirements.		
3	(a) System requirements Notwithstanding section 4, in		
4	order to qualify as an alternative energy source eligible to		
5	meet the solar photovoltaic share of the compliance requirements		
6	under section 3, a solar photovoltaic system must do one of the		
7	<pre>following:</pre>		
8	(1) Directly deliver the electricity that the solar		
9	photovoltaic system generates to a retail customer of an		
10	electric distribution company or to the distribution system		
11	operated by an electric distribution company operating in		
12	this Commonwealth and currently obligated to meet the		
13	compliance requirements specified under section 3.		
14	(2) Directly connect to the electric system of an		
15	electric cooperative or municipal electric system operating		
16	in this Commonwealth.		
17	(3) Directly connect to the electric transmission system		
18	at a location within the service territory of an electric		
19	distribution company operating in this Commonwealth.		
20	(b) Construction		
21	(1) Nothing under this section or section 4 shall be		
22	construed to affect any of the following:		
23	(i) A certification originating in this Commonwealth		
24	and granted before the effective date of this section of		
25	a solar photovoltaic energy generator as a qualifying		
26	alternative energy source eligible to meet the solar		
27	photovoltaic share of this Commonwealth's alternative		
28	energy portfolio compliance requirements under section 3.		

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(ii) A certification of a solar photovoltaic system

with a binding written contract for the sale and purchase

1	of alternative energy credits derived from solar		
2	photovoltaic energy sources entered into before October		
3	<u>30, 2017.</u>		
4	(2) This section shall apply to contracts entered into		
5	or renewed on or after October 30, 2017.		
6	Section 3.2. Contract requirements for solar photovoltaic		
7	<pre>energy system sources.</pre>		
8	(a) Low-cost procurement for non-customer-generators		
9	(1) To assure the lowest-cost procurement, two-thirds of		
10	the annual total percentage requirement from solar		
11	photovoltaic sources as specified under section 3(b.1)(5)		
12	shall be procured through contracts of no less than 12 years		
13	and no more than 20 years for both energy and alternative		
14	energy credits required under this subsection. Energy		
15	procured to satisfy the requirements of this subsection may		
16	not be used to satisfy the procurement requirement under		
17	subsection (b).		
18	(2) An electric distribution company with more than		
19	1,000,000 annual megawatt hours of retail load shall:		
20	(i) procure energy and alternative energy credits		
21	based on the total electric energy sold to all customers		
22	in the electric distribution company's service territory,		
23	without regard to whether the supplier of the retail		
24	sales is the electric distribution company or an electric		
25	<pre>generation supplier;</pre>		
26	(ii) issue annual requests for proposals for		
27	competitive long-term procurement of solar energy and		
28	alternative energy credits and enter into contracts in		
29	compliance with this subsection in accordance with		
30	regulations established by the commission; and		

1	(iii) be entitled to a presumption of prudency and
2	full-cost recovery in distribution rates of payments for
3	competitive procurements made under this subsection at a
4	levelized price over the term of the contract of less
5	than one-half of the applicable alternative compliance
6	payment.
7	(3) For purposes of any true-up required under this
8	subsection, the following apply:
9	(i) If contracts executed to meet the requirements
0	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-
13	up period established under section 3(e)(5).
4	(ii) Electric generation suppliers in the territory
15	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.
20	(4) No later than December 1, 2021, the commission shall
21	establish regulations to implement the requirements under
22	this subsection and provide for the issuance and execution of
23	the first competitive procurement contracts for the supply of
24	alternative energy credits beginning with the reporting year
25	commencing on June 1, 2021. The regulations shall address,
26	but not be limited to, all of the following:
27	(i) Competitive contract procurement.
28	(ii) Alternative energy credit retirement.
29	(iii) Guidance on the prudency of proposed
30	purchases, including a presumption of prudence if the

Τ	annualized cost of alternative energy credits is less		
2	than one-half of the applicable alternative compliance		
3	payment.		
4	(iv) Competitiveness review using standard industry		
5	practices to ensure that each solicitation is competitive		
6	and providing for the prompt reissuance of a solicitation		
7	deemed to be uncompetitive.		
8	(v) Cost recovery for electric distribution		
9	companies for prudent and competitive contracts.		
10	(vi) Alternative energy credit true-up of		
11	procurement shortfalls in subsequent year contract		
12	procurements.		
13	(b) Low-cost procurement for Tier I resources		
14	(1) No later than December 1, 2021, the commission shall		
15	establish regulations providing for competitive procurement		
16	of at least one-sixth of the Tier I alternative energy		
17	required under section 3(b.1)(1), except for energy procured		
18	under subsection (a), under contracts with a term of no less		
19	than 10 years and no more than 15 years beginning with the		
20	reporting year commencing on June 1, 2022. The competitive		
21	procurements under this subsection shall result in contracts		
22	for both energy and alternative energy credits for Tier I		
23	alternative energy resources for the purpose of satisfying		
24	the requirements under section (3)(b.1)(1). The requirements		
25	under this paragraph shall not apply to the solar		
26	<pre>photovoltaic share requirements under section 3(b.1)(2) or</pre>		
27	<u>(5).</u>		
28	(2) In establishing regulations under paragraph (1), the		
29	commission shall collaborate with stakeholders, including,		
30	but not limited to, the department, energy generation		

- 1 <u>suppliers, renewable energy developers and electric</u>
- 2 distribution companies, and determine the benefit to electric
- 3 customers in this Commonwealth based on the following
- 4 <u>factors:</u>
- 5 <u>(i) The savings to electric customers resulting from</u>
- 6 <u>the procurement of alternative energy credits under this</u>
- 7 section.
- 8 <u>(ii) The preference for new generation resources</u>
- 9 <u>with reduced emissions as determined by the department.</u>
- 10 <u>(iii) The parties to the contracts.</u>
- 11 <u>(iv) The design of the competitive procurement</u>
- 12 <u>process.</u>
- 13 <u>(v) The terms to be included in the contracts based</u>
- on commercial reasonableness for the parties to the
- 15 <u>contracts.</u>
- 16 <u>Section 3.3. Energy storage report.</u>
- 17 (a) Report.--No later than one year after the effective date
- 18 of this section, the commission, in consultation with the PJM
- 19 Interconnection, L.L.C. regional transmission organization (PJM)
- 20 or its successor and stakeholders, including, but not limited
- 21 to, third-party electric generation suppliers and electric
- 22 utilities, shall conduct an energy storage analysis, including
- 23 pairing energy storage with Tier I resources, and submit a
- 24 report to the Governor and the General Assembly concerning
- 25 <u>needs</u>, <u>opportunities</u>, <u>costs</u> and <u>benefits</u> in this <u>Commonwealth</u>.
- 26 (b) Contract. -- The commission shall contract with an
- 27 independent consultant selected through a competitive request
- 28 for proposal process to produce the report under this section.
- 29 (c) Report.--At a minimum, the commission shall compile the
- 30 report in the following manner:

1	(1) Establish an energy storage capacity benchmark in		
2	megawatts, including target goals for pairing energy storage		
3	with Tier I resources.		
4	(2) Identify and measure the potential costs and		
5	benefits of deployment based on all of the following factors:		
6	(i) Deferred investments in generation, transmission		
7	and distribution facilities.		
8	(ii) Reduced ancillary services costs.		
9	(iii) Reduced transmission and distribution		
10	congestion.		
11	(iv) Reduced peak power costs and capacity costs.		
12	(v) Reduced costs for emergency power supplies		
13	during outages.		
14	(vi) Curtailment of nonrenewable energy generators		
15	to meet peak demand.		
16	(vii) Reduced greenhouse gas emissions.		
17	(3) Analyze and estimate all of the following:		
18	(i) The ability to integrate renewable energy		
19	resources with energy storage systems.		
20	(ii) The benefits of coupling the storage to meet		
21	peak demand.		
22	(iii) The impact of energy storage on grid		
23	reliability and power quality.		
24	(iv) The impact on retail electric rates over the		
25	useful life of an energy storage system compared to the		
26	same services using other facilities or resources.		
27	(4) Consider whether the implementation of energy		
28	storage systems would promote the use of electric vehicles in		
29	this Commonwealth and the potential impact on energy		
30	production in this Commonwealth.		

1	(5) Analyze the types of energy storage technologies
2	currently being implemented in this Commonwealth and other
3	states.
4	(6) Consider the benefits and costs to retail electric
5	customers in this Commonwealth, political subdivisions and
6	electric public utilities associated with the development and
7	implementation of additional energy storage technologies.
8	(7) Determine the optimal amount of energy storage
9	paired with Tier I resources that should be added in this
10	Commonwealth during the next five years to provide the
11	maximum benefit to retail electric customers in this
12	Commonwealth.
13	(8) Determine the optimum points of entry into the
14	electric distribution system for distributed energy
15	resources.
16	(9) Calculate the cost to retail electric customers in
17	this Commonwealth of adding the optimal amount of energy
18	storage.
19	Section 3.4. Energy storage deployment targets.
20	(a) Determination No later than 90 days after completion
21	of the report under section 3.3, the commission shall determine
22	appropriate energy storage deployment targets that each electric
23	distribution company needs to achieve by December 31, 2025,
24	including any interim targets. In making the determination, the
25	commission shall consider all of the following:
26	(1) The contents of the report under section 3.3.
27	(2) Adopting specific subcategories of deployment by
28	point of interconnection.
29	(3) Adopting requirements or processes for the
30	competitive deployment of energy storage services from third

1 :	<u>parties.</u>	

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

- (5) If advised by the report under section 3.3, creating a renewable peak standard that would set targets for meeting peak demand with renewable energy co-located with storage, including all of the following:
- (i) Demand response technology or energy storage

 that is paired solely with a Tier I alternative energy

 source that generates, dispatches or discharges energy to

 an electric distribution system during seasonal peak

 periods as determined by the commission or reduce load on

 the system.
- (ii) Renewable energy storage systems that can be

 co-located with the Tier I alternative energy sources or

 paired virtually, as long as the storage facility is

 within the boundaries of the same electric distribution

 company's service territory and specifically located to

 reduce peak demand.
- 22 (b) Definitions. -- As used in this section, the term
- 23 "procure" shall mean to acquire by ownership an energy storage
- 24 system or a contractual right to use the energy from, or the
- 25 capacity of, an energy storage system.
- 26 Section 3.5. Contracts for solar photovoltaic technologies by
- 27 <u>Commonwealth agencies.</u>
- 28 (a) Public works.--Except as provided under subsection (b),
- 29 <u>a Commonwealth agency shall require that a contract for the</u>
- 30 construction, reconstruction, alteration, repair, improvement or

- 1 <u>maintenance of public works contain a provision that, if any</u>
- 2 <u>solar photovoltaic technologies are to be used or supplied in</u>
- 3 the performance of the contract, only solar photovoltaic
- 4 technologies manufactured in the United States shall be used or
- 5 supplied in the performance of the contract or any subcontracts
- 6 under the contract.
- 7 (b) Exception. -- The requirement under subsection (a) shall
- 8 <u>not apply if the head of the Commonwealth agency, in writing,</u>
- 9 <u>determines that the solar photovoltaic technologies are not</u>
- 10 manufactured in the United States in sufficient quantities to
- 11 meet the requirements of the contract.
- 12 (c) Definitions.--As used in this section, the term "public"
- 13 work" shall have the same meaning given to it in section 2(5) of
- 14 the act of August 15, 1961 (P.L.987, No.442), known as the
- 15 <u>Pennsylvania Prevailing Wage Act.</u>
- 16 Section 4. Section 4 of the act is amended to read:
- 17 Section 4. Portfolio requirements in other states.
- 18 If an electric distribution [supplier] company or electric
- 19 generation [company] supplier provider sells electricity in any
- 20 other state and is subject to [renewable] <u>alternative</u> energy
- 21 portfolio requirements in that state, they shall list any such
- 22 requirement and shall indicate how it satisfied those
- 23 [renewable] <u>alternative</u> energy portfolio requirements. To
- 24 prevent double-counting, the electric distribution [supplier]
- 25 <u>company</u> or electric generation [company] <u>supplier</u> shall not
- 26 satisfy Pennsylvania's alternative energy portfolio requirements
- 27 using alternative energy used to satisfy another state's
- 28 portfolio requirements or alternative energy credits already
- 29 purchased by individuals, businesses or government bodies that
- 30 do not have a compliance obligation under this act unless the

- 1 individual, business or government body sells those credits to
- 2 the electric distribution company or electric generation
- 3 supplier. Energy derived from alternative energy sources inside
- 4 the geographical boundaries of this Commonwealth shall be
- 5 eligible to meet the compliance requirements under this act.
- 6 Energy derived from alternative energy sources located outside
- 7 the geographical boundaries of this Commonwealth but within the
- 8 service territory of a regional transmission organization that
- 9 manages the transmission system in any part of this Commonwealth
- 10 shall only be eligible to meet the compliance requirements of
- 11 electric distribution companies or electric generation suppliers
- 12 located within the service territory of the same regional
- 13 transmission organization. For purposes of compliance with this
- 14 act, alternative energy sources located in the PJM
- 15 Interconnection, L.L.C. regional transmission organization (PJM)
- 16 or its successor service territory shall be eligible to fulfill
- 17 compliance obligations of all Pennsylvania electric distribution
- 18 companies and electric generation suppliers. Energy derived from
- 19 alternative energy sources located outside the service territory
- 20 of a regional transmission organization that manages the
- 21 transmission system in any part of this Commonwealth shall not
- 22 be eligible to meet the compliance requirements of this act.
- 23 Electric distribution companies and electric generation
- 24 suppliers shall document that this energy was not used to
- 25 satisfy another state's [renewable] <u>alternative</u> energy portfolio
- 26 standards.
- 27 Section 5. Repeals are as follows:
- 28 (1) The General Assembly declares that the repeal under
- 29 paragraph (2) is necessary to effectuate the addition of
- 30 section 3.1 of the act.

- 1 (2) Section 2804 of the act of April 9, 1929 (P.L.177,
- No.175), known as The Administrative Code of 1929, is
- 3 repealed.
- 4 Section 6. This act shall take effect immediately.