# ASSEMBLY, No. 3723 STATE OF NEW JERSEY 218th LEGISLATURE

INTRODUCED MARCH 22, 2018

Sponsored by: Assemblyman JOHN F. MCKEON District 27 (Essex and Morris) Assemblywoman NANCY J. PINKIN District 18 (Middlesex) Assemblyman WAYNE P. DEANGELO District 14 (Mercer and Middlesex) Senator BOB SMITH District 17 (Middlesex and Somerset) Senator STEPHEN M. SWEENEY District 3 (Cumberland, Gloucester and Salem) Senator JEFF VAN DREW District 1 (Atlantic, Cape May and Cumberland)

Co-Sponsored by: Assemblywomen Jasey, Reynolds-Jackson, Downey and Senator Singleton

# SYNOPSIS

Establishes and modifies clean energy and energy efficiency programs; modifies State's solar renewable energy portfolio standards.

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(Sponsorship Updated As Of: 4/13/2018)

1 AN ACT concerning clean energy, amending and supplementing 2 P.L.1999, c.23, amending P.L.2010, c.57, and supplementing 3 P.L.2005, c.354 (C.34:1A-85 et seq.). 4 5 **BE IT ENACTED** by the Senate and General Assembly of the State 6 of New Jersey: 7 8 1. (New section) a. No later than one year after the date of 9 enactment of P.L., c. (C.) (pending before the Legislature as 10 this bill), the Board of Public Utilities, in consultation with PJM 11 Interconnection, L.L.C., the independent system operator, shall, 12 together with stakeholders including but not limited to third party 13 suppliers and electric public utilities, conduct an energy storage 14 analysis and submit a written report to the Governor and, pursuant 15 to section 2 of P.L.1991, c.164 (C.52:14-19.1), to the Legislature 16 concerning energy storage needs and opportunities in the State. In 17 conducting this analysis, the board shall: 18 (1) consider how implementation of renewable electric energy 19 storage systems may benefit ratepayers by providing emergency 20 back-up power for essential services, offsetting peak loads, and 21 stabilizing the electric distribution system; 22 (2) consider whether implementation of renewable electric 23 energy storage systems would promote the use of electric vehicles 24 in the State, and the potential impact on renewable energy 25 production in the State; 26 (3) study the types of energy storage technologies currently 27 being implemented in the State and elsewhere; (4) consider the benefits and costs to ratepayers, local 28 29 governments, and electric public utilities associated with the 30 development and implementation of additional energy storage 31 technologies; 32 (5) determine the optimal amount of energy storage to be added 33 in the State over the next five years in order to provide the 34 maximum benefit to ratepayers; 35 (6) determine the optimum points of entry into the electric 36 distribution system for distributed energy resources; and 37 (7) calculate the cost to the State's ratepayers of adding the 38 optimal amount of energy storage. 39 In conducting the analysis required by this subsection, the board 40 shall also consider the need for integration of distributed energy 41 resources into the electric distribution system and how distributed 42 energy resources may be incorporated into the electric distribution 43 system in the most efficient and cost-effective manner. 44 b. In conducting the energy storage analysis required by this 45 section, the board shall consult with the Laboratory for Energy

EXPLANATION – Matter enclosed in **bold-faced** brackets [thus] in the above bill is not enacted and is intended to be omitted in the law.

Matter underlined <u>thus</u> is new matter.

Smart Systems in the Center for Advanced Infrastructure and
 Transportation at Rutgers, The State University, and public and
 private entities in the State and in other states that have conducted
 studies concerning, or are implementing technologies for, energy
 storage and distributed energy resources.

6 The written report shall: (1) summarize the analysis c. 7 conducted pursuant to subsection a. of this section; (2) discuss and 8 quantify the potential benefits and costs associated with increasing 9 opportunities for energy storage and distributed energy resources in 10 the State; and (3) recommend ways to increase opportunities for 11 energy storage and distributed energy resources in the State, 12 including any recommendations for financial incentives to aid in the development and implementation of these technologies by public 13 14 and private entities in the State.

d. No later than six months after completion of the report, the
board shall initiate a proceeding to establish a process and
mechanism for achieving the goal of 600 megawatts of energy
storage by 2021 and 2,000 megawatts of energy storage by 2030.

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20 2. Section 38 of P.L.1999, c.23 (C.48:3-87) is amended to read 21 as follows:

38. a. The board shall require an electric power supplier or
basic generation service provider to disclose on a customer's bill or
on customer contracts or marketing materials, a uniform, common
set of information about the environmental characteristics of the
energy purchased by the customer, including, but not limited to:

(1) Its fuel mix, including categories for oil, gas, nuclear, coal,
solar, hydroelectric, wind and biomass, or a regional average
determined by the board;

30 (2) Its emissions, in pounds per megawatt hour, of sulfur 31 dioxide, carbon dioxide, oxides of nitrogen, and any other pollutant 32 that the board may determine to pose an environmental or health 33 hazard, or an emissions default to be determined by the board; and

34 (3) Any discrete emission reduction retired pursuant to rules and35 regulations adopted pursuant to P.L.1995, c.188.

b. Notwithstanding any provisions of the "Administrative
Procedure Act," P.L.1968, c.410 (C.52:14B-1 et seq.) to the
contrary, the board shall initiate a proceeding and shall adopt, in
consultation with the Department of Environmental Protection, after
notice and opportunity for public comment and public hearing,
interim standards to implement this disclosure requirement,
including, but not limited to:

43 (1) A methodology for disclosure of emissions based on output
44 pounds per megawatt hour;

45 (2) Benchmarks for all suppliers and basic generation service
46 providers to use in disclosing emissions that will enable consumers
47 to perform a meaningful comparison with a supplier's or basic
48 generation service provider's emission levels; and

1 (3) A uniform emissions disclosure format that is graphic in 2 nature and easily understandable by consumers. The board shall 3 periodically review the disclosure requirements to determine if 4 revisions to the environmental disclosure system as implemented 5 are necessary.

Such standards shall be effective as regulations immediately
upon filing with the Office of Administrative Law and shall be
effective for a period not to exceed 18 months, and may, thereafter,
be amended, adopted or readopted by the board in accordance with
the provisions of the "Administrative Procedure Act."

11 c. (1) The board may adopt, in consultation with the 12 Department of Environmental Protection, after notice and 13 opportunity for public comment, an emissions portfolio standard 14 applicable to all electric power suppliers and basic generation 15 service providers, upon a finding that:

(a) The standard is necessary as part of a plan to enable the
State to meet federal Clean Air Act or State ambient air quality
standards; and

(b) Actions at the regional or federal level cannot reasonably beexpected to achieve the compliance with the federal standards.

(2) By July 1, 2009, the board shall adopt, pursuant to the 21 22 "Administrative Procedure Act," P.L.1968, c.410 (C.52:14B-1 et 23 seq.), a greenhouse gas emissions portfolio standard to mitigate 24 leakage or another regulatory mechanism to mitigate leakage 25 applicable to all electric power suppliers and basic generation 26 service providers that provide electricity to customers within the 27 State. The greenhouse gas emissions portfolio standard or any other 28 regulatory mechanism to mitigate leakage shall:

29 (a) Allow a transition period, either before or after the effective 30 date of the regulation to mitigate leakage, for a basic generation 31 service provider or electric power supplier to either meet the 32 emissions portfolio standard or other regulatory mechanism to 33 mitigate leakage, or to transfer any customer to a basic generation 34 service provider or electric power supplier that meets the emissions 35 portfolio standard or other regulatory mechanism to mitigate 36 If the transition period allowed pursuant to this leakage. 37 subparagraph occurs after the implementation of an emissions portfolio standard or other regulatory mechanism to mitigate 38 39 leakage, the transition period shall be no longer than three years; 40 and

41 (b) Exempt the provision of basic generation service pursuant to
42 a basic generation service purchase and sale agreement effective
43 prior to the date of the regulation.

Unless the Attorney General or the Attorney General's designee
determines that a greenhouse gas emissions portfolio standard
would unconstitutionally burden interstate commerce or would be
preempted by federal law, the adoption by the board of an electric
energy efficiency portfolio standard pursuant to subsection g. of this

section, a gas energy efficiency portfolio standard pursuant to subsection h. of this section, or any other enhanced energy efficiency policies to mitigate leakage shall not be considered sufficient to fulfill the requirement of this subsection for the adoption of a greenhouse gas emissions portfolio standard or any other regulatory mechanism to mitigate leakage.

d. Notwithstanding any provisions of the "Administrative
Procedure Act," P.L.1968, c.410 (C.52:14B-1 et seq.) to the
contrary, the board shall initiate a proceeding and shall adopt, after
notice, provision of the opportunity for comment, and public
hearing, renewable energy portfolio standards that shall require:

(1) that two and one-half percent of the kilowatt hours sold in
this State by each electric power supplier and each basic generation
service provider be from [Class I or] Class II renewable energy
sources;

(2) beginning on January 1, [2001] 2020, that [one-half of 16 one] 21 percent of the kilowatt hours sold in this State by each 17 18 electric power supplier and each basic generation service provider 19 be from Class I renewable energy sources. The board shall increase 20 the required percentage for Class I renewable energy sources so that 21 by January 1, [2006, one percent] <u>2025, 35 percent</u> of the kilowatt 22 hours sold in this State by each electric power supplier and each 23 basic generation service provider shall be from Class I renewable 24 energy sources [and shall additionally increase the required 25 percentage for Class I renewable energy sources by one-half of one 26 percent each year until January 1, 2012, when four percent], and 27 by January 1, 2030, 50 percent of the kilowatt hours sold in this 28 State by each electric power supplier and each basic generation 29 service provider shall be from Class I renewable energy sources. 30 Notwithstanding the requirements of this subsection, the board shall 31 ensure that the cost to customers of the Class I renewable energy 32 requirement imposed pursuant to this subsection shall not exceed 33 nine percent of the total paid for electricity by all customers in the 34 State for energy year 2019, energy year 2020, and energy year 35 2021, respectively, and shall not exceed seven percent of the total 36 paid for electricity by all customers in the State in any energy year 37 thereafter. In calculating the cost to customers of the Class I 38 renewable energy requirement imposed pursuant to this subsection, 39 the board shall not include the costs of the offshore wind energy 40 certificate program established pursuant to paragraph (4) of this 41 subsection. The board shall take any steps necessary to prevent the 42 exceedance of the cap on the cost to customers including, but not limited to, adjusting the Class I renewable energy requirement. 43 44 An electric power supplier or basic generation service provider 45

may satisfy the requirements of this subsection by participating in a
renewable energy trading program approved by the board in
consultation with the Department of Environmental Protection;

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1 (3) that the board establish a multi-year schedule, applicable to 2 each electric power supplier or basic generation service provider in 3 this State, beginning with the one-year period commencing on June 4 1, 2010, and continuing for each subsequent one-year period up to 5 and including, the one-year period commencing on June 1, [2028] 2033, that requires the following number or percentage, as the case 6 7 may be, of kilowatt-hours sold in this State by each electric power 8 supplier and each basic generation service provider to be from solar 9 electric power generators connected to the distribution system in 10 this State:

11	EY 2011	306 Gigawatthours (Gwhrs)
12	EY 2012	442 Gwhrs
13	EY 2013	596 Gwhrs
14	EY 2014	2.050%
15	EY 2015	2.450%
16	EY 2016	2.750%
17	EY 2017	3.000%
18	EY 2018	3.200%
19	EY 2019	[3.290%] <u>4.300%</u>
20	EY 2020	[3.380%] <u>4.900%</u>
21	EY 2021	[3.470%] <u>5.100%</u>
22	<b>[</b> EY 2022	3.560%
23	EY 2023	3.650%
24	EY 2024	3.740%
25	EY 2025	3.830%
26	EY 2026	3.920%
27	EY 2027	4.010%
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28 EY 2028 4.100 percent, and for every energy year thereafter, at 29 least 4.100% per energy year to reflect an increasing number of 30 kilowatt-hours to be purchased by suppliers or providers from solar electric power generators connected to the distribution system in 31 32 this State, and to establish a framework within which, of the 33 electricity that the generators sell in this State, suppliers and providers shall each obtain at least 3.470 percent in the energy year 34 35 2021 and 4.100 percent in the energy year 2028 from solar electric 36 power generators connected to the distribution system in this State, 37 provided, however, that:]

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38	<u>EY 2022</u>	<u>5.100%</u>
39	EY 2023	<u>5.100%</u>
40	<u>EY 2024</u>	<u>4.900%</u>
41	<u>EY 2025</u>	<u>4.800%</u>
42	<u>EY 2026</u>	<u>4.500%</u>
43	EY 2027	<u>4.350%</u>
44	<u>EY 2028</u>	<u>3.740%</u>
45	EY 2029	<u>3.070%</u>
46	<u>EY 2030</u>	<u>2.210%</u>
47	<u>EY 2031</u>	<u>1.580%</u>

1	<u>EY 2032</u> <u>1.400%</u>
2	<u>EY 2033</u> <u>1.100%</u>
3	No later than 180 days after the date of enactment of P.L.
4	c. (C. ) (pending before the Legislature as this bill), the board shall
5	adopt rules and regulations to close the SREC program to new
6	applications upon the attainment of 5.1 percent of the kilowatt-hours
7	sold in the State by each electric power supplier and each basic
8	generation provider from solar electric power generators connected to
9	the distribution system. The board shall continue to consider any
10	application filed before the date of enactment of P.L., c. (C.)
11	(pending before the Legislature as this bill). The board shall provide
12	for an orderly and transparent mechanism that will result in the closing
13	of the existing SREC program on a date certain but no later than June
14	<u>1, 2021.</u>
15	No later than 24 months after the date of enactment of P.L., c.
16	(C. ) (pending before the Legislature as this bill), the board shall
17	complete a study that evaluates how to modify or replace the SREC
18	program to encourage the continued efficient and orderly development
19	of solar renewable energy generating sources throughout the State.
20	The board shall submit the written report thereon to the Governor
21	and, pursuant to section 2 of P.L.1991, c.164 (C.52:14-19.1), to the
22	Legislature. The board shall consult with public utilities, industry
23	experts, regional grid operators, solar power providers and financiers,
24	and other State agencies to determine whether the board can modify
25	the SREC program such that the program will:
26	- continually reduce, where feasible, the cost of achieving the solar
27	energy goals set forth in this subsection;
28	- provide an orderly transition from the SREC program to a new or
29	modified program;
30	- develop megawatt targets for grid connected and distribution
31	systems, including residential and small commercial rooftop systems,
32	community solar systems, and large scale behind the meter systems, as
33	a share of the overall solar energy requirement, which targets the board
34	may modify periodically based on the cost, feasibility, or social
35	impacts of different types of projects;
36	- establish and update market-based maximum incentive payment
37	caps periodically for each of the above categories of solar electric
38	power generation facilities;
39	- encourage and facilitate market-based cost recovery through
40	long-term contracts and energy market sales; and
41	- where cost recovery is needed for any portion of an efficient solar
42	electric power generation facility when costs are not recoverable
43	through wholesale market sales and direct payments from customers,
44	utilize competitive processes such as competitive procurement and
45	long-term contracts where possible to ensure such recovery, without
46	exceeding the maximum incentive payment cap for that category of
47	facility.

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1 The board shall approve, conditionally approve, or disapprove 2 any application for designation as connected to the distribution 3 system of a solar electric power generation facility filed with the 4 board after the date of enactment of P.L., c. (pending before the 5 Legislature as this bill), no more than 90 days after receipt by the 6 board of a completed application. For any such application for a 7 project greater than 25 kilowatts, the board shall require the 8 applicant to post a notice escrow with the board in an amount of 9 \$40 per kilowatt of DC nameplate capacity of the facility, not to 10 exceed \$40,000. The notice escrow amount shall be reimbursed to the applicant in full upon either denial of the application by the 11 12 board or upon commencement of commercial operation of the solar 13 electric power generation facility. The escrow amount shall be 14 forfeited to the State if the facility is designated as connected to the 15 distribution system pursuant to this subsection but does not 16 commence commercial operation within two years following the 17 date of the designation by the board. 18 For all applications for designation as connected to the 19 distribution system of a solar electric power generation facility filed 20 with the board after the date of enactment of P.L., c. (pending 21 before the Legislature as this bill), the SREC term shall be 10 years. 22 (a) The board shall determine an appropriate period of no less 23 than 120 days following the end of an energy year prior to which a 24 provider or supplier must demonstrate compliance for that energy 25 year with the annual renewable portfolio standard; 26 (b) No more than 24 months following the date of enactment of 27 P.L.2012, c.24, the board shall complete a proceeding to investigate 28 approaches to mitigate solar development volatility and prepare and 29 submit, pursuant to section 2 of P.L.1991, c.164 (C.52:14-19.1), a 30 Legislature, detailing report to the its findings and 31 recommendations. As part of the proceeding, the board shall 32 evaluate other techniques used nationally and internationally; 33 (c) The solar renewable portfolio standards requirements in this 34 paragraph shall exempt those existing supply contracts which are 35 effective prior to the date of enactment of [P.L.2012, c.24] P.L. 36 c. (C. ) (pending before the Legislature as this bill) from any 37 increase beyond the number of SRECs mandated by the solar 38 renewable energy portfolio standards requirements that were in 39 effect on the date that the providers executed their existing supply

40 contracts. This limited exemption for providers' existing supply 41 contracts shall not be construed to lower the Statewide solar 42 sourcing requirements set forth in this paragraph. Such incremental 43 requirements that would have otherwise been imposed on exempt 44 providers shall be distributed over the providers not subject to the 45 existing supply contract exemption until such time as existing 46 supply contracts expire and all providers are subject to the new 47 requirement in a manner that is competitively neutral among all 48 providers and suppliers. [The board shall] Notwithstanding any

1 rule or regulation to the contrary, the board shall recognize these

2 <u>new solar purchase obligations as a change required by operation of</u>

3 <u>law and</u> implement the provisions of this subsection in a manner so

4 as to prevent any subsidies between suppliers and providers and to5 promote competition in the electricity supply industry.

6 An electric power supplier or basic generation service provider 7 may satisfy the requirements of this subsection by participating in a 8 renewable energy trading program approved by the board in 9 consultation with the Department of Environmental Protection, or 10 compliance with the requirements of this subsection may be 11 demonstrated to the board by suppliers or providers through the 12 purchase of SRECs.

The renewable energy portfolio standards adopted by the board pursuant to paragraphs (1) and (2) of this subsection shall be effective as regulations immediately upon filing with the Office of Administrative Law and shall be effective for a period not to exceed 18 months, and may, thereafter, be amended, adopted or readopted by the board in accordance with the provisions of the "Administrative Procedure Act."

The renewable energy portfolio standards adopted by the board pursuant to this paragraph shall be effective as regulations immediately upon filing with the Office of Administrative Law and shall be effective for a period not to exceed 30 months after such filing, and shall, thereafter, be amended, adopted or readopted by the board in accordance with the "Administrative Procedure Act"; and

(4) within 180 days after the date of enactment of P.L.2010,
c.57 (C.48:3-87.1 et al.), that the board establish an offshore wind
renewable energy certificate program to require that a percentage of
the kilowatt hours sold in this State by each electric power supplier
and each basic generation service provider be from offshore wind
energy in order to support at least [1,100] <u>3,500</u> megawatts of
generation from qualified offshore wind projects.

The percentage established by the board pursuant to this paragraph shall serve as an offset to the renewable energy portfolio standard established pursuant to [paragraphs (1) and] <u>paragraph</u> (2) of this subsection and shall reduce the corresponding Class I renewable energy requirement.

39 The percentage established by the board pursuant to this 40 paragraph shall reflect the projected OREC production of each 41 qualified offshore wind project, approved by the board pursuant to 42 section 3 of P.L.2010, c.57 (C.48:3-87.1), for [twenty] 20 years 43 from the commercial operation start date of the qualified offshore 44 wind project which production projection and OREC purchase 45 requirement, once approved by the board, shall not be subject to 46 reduction.

An electric power supplier or basic generation service providershall comply with the OREC program established pursuant to this

1 paragraph through the purchase of offshore wind renewable energy 2 certificates at a price and for the time period required by the board. 3 In the event there are insufficient offshore wind renewable energy 4 certificates available, the electric power supplier or basic generation 5 service provider shall pay an offshore wind alternative compliance 6 payment established by the board. Any offshore wind alternative 7 compliance payments collected shall be refunded directly to the 8 ratepayers by the electric public utilities.

9 The rules established by the board pursuant to this paragraph 10 shall be effective as regulations immediately upon filing with the 11 Office of Administrative Law and shall be effective for a period not 12 to exceed 18 months, and may, thereafter, be amended, adopted or 13 readopted by the board in accordance with the provisions of the 14 "Administrative Procedure Act," P.L.1968, c.410 (C.52:14B-1 et 15 seq.).

e. Notwithstanding any provisions of the "Administrative Procedure Act," P.L.1968, c.410 (C.52:14B-1 et seq.) to the contrary, the board shall initiate a proceeding and shall adopt, after notice, provision of the opportunity for comment, and public hearing:

21 (1) net metering standards for electric power suppliers and basic generation service providers. The standards shall require electric 22 23 power suppliers and basic generation service providers to offer net 24 metering at non-discriminatory rates to industrial, large 25 commercial, residential and small commercial customers, as those 26 customers are classified or defined by the board, that generate 27 electricity, on the customer's side of the meter, using a Class I renewable energy source, for the net amount of electricity supplied 28 29 by the electric power supplier or basic generation service provider 30 over an annualized period. Systems of any sized capacity, as 31 measured in watts, are eligible for net metering. If the amount of 32 electricity generated by the customer-generator, plus any kilowatt 33 hour credits held over from the previous billing periods, exceeds the 34 electricity supplied by the electric power supplier or basic 35 generation service provider, then the electric power supplier or 36 basic generation service provider, as the case may be, shall credit 37 the customer-generator for the excess kilowatt hours until the end of 38 the annualized period at which point the customer-generator will be 39 compensated for any remaining credits or, if the customer-generator 40 chooses, credit the customer-generator on a real-time basis, at the 41 electric power supplier's or basic generation service provider's 42 avoided cost of wholesale power or the PJM electric power pool's 43 real-time locational marginal pricing rate, adjusted for losses, for 44 the respective zone in the PJM electric power pool. Alternatively, 45 the customer-generator may execute a bilateral agreement with an 46 electric power supplier or basic generation service provider for the 47 sale and purchase of the customer-generator's excess generation. 48 The customer-generator may be credited on a real-time basis, so

1 long as the customer-generator follows applicable rules prescribed 2 by the PJM electric power pool for its capacity requirements for the 3 net amount of electricity supplied by the electric power supplier or 4 basic generation service provider. The board may authorize an 5 electric power supplier or basic generation service provider to cease 6 offering net metering to customers that are not already net metered 7 whenever the total rated generating capacity owned and operated by 8 net metering customer-generators Statewide equals [2.9] 5.8 9 percent of the total annual kilowatt-hours sold in this State by each 10 electric power supplier and each basic generation service provider 11 during the prior one-year period;

12 (2) safety and power quality interconnection standards for Class 13 I renewable energy source systems used by a customer-generator 14 that shall be eligible for net metering.

15 Such standards or rules shall take into consideration the goals of 16 the New Jersey Energy Master Plan, applicable industry standards, 17 and the standards of other states and the Institute of Electrical and 18 The board shall allow electric public Electronics Engineers. 19 utilities to recover the costs of any new net meters, upgraded net 20 meters, system reinforcements or upgrades, and interconnection 21 costs through either their regulated rates or from the net metering 22 customer-generator;

23 (3) credit or other incentive rules for generators using Class I 24 renewable energy generation systems that connect to New Jersey's 25 electric public utilities' distribution system but who do not net 26 meter; and

27 (4) net metering aggregation standards to require electric public 28 utilities to provide net metering aggregation to single electric public 29 utility customers that operate a solar electric power generation 30 system installed at one of the customer's facilities or on property 31 owned by the customer, provided that any such customer is a State 32 entity, school district, county, county agency, county authority, 33 municipality, municipal agency, or municipal authority. The 34 standards shall provide that, in order to qualify for net metering 35 aggregation, the customer must operate a solar electric power 36 generation system using a net metering billing account, which 37 system is located on property owned by the customer, provided that: 38 (a) the property is not land that has been actively devoted to 39 agricultural or horticultural use and that is valued, assessed, and 40 taxed pursuant to the "Farmland Assessment Act of 1964," 41 P.L.1964, c.48 (C.54:4-23.1 et seq.) at any time within the 10-year 42 period prior to the effective date of P.L.2012, c.24, provided, 43 however, that the municipal planning board of a municipality in 44 which a solar electric power generation system is located may 45 waive the requirement of this subparagraph (a), (b) the system is not 46 an on-site generation facility, (c) all of the facilities of the single 47 customer combined for the purpose of net metering aggregation are 48 facilities owned or operated by the single customer and are located

1 within its territorial jurisdiction except that all of the facilities of a 2 State entity engaged in net metering aggregation shall be located 3 within five miles of one another, and (d) all of those facilities are 4 within the service territory of a single electric public utility and are 5 all served by the same basic generation service provider or by the 6 same electric power supplier. The standards shall provide that in 7 order to qualify for net metering aggregation, the customer's solar 8 electric power generation system shall be sized so that its annual 9 generation does not exceed the combined metered annual energy 10 usage of the qualified customer facilities, and the qualified 11 customer facilities shall all be in the same customer rate class under 12 the applicable electric public utility tariff. For the customer's 13 facility or property on which the solar electric generation system is 14 installed, the electricity generated from the customer's solar electric 15 generation system shall be accounted for pursuant to the provisions 16 of paragraph (1) of this subsection to provide that the electricity 17 generated in excess of the electricity supplied by the electric power 18 supplier or the basic generation service provider, as the case may 19 be, for the customer's facility on which the solar electric generation 20 system is installed, over the annualized period, is credited at the 21 electric power supplier's or the basic generation service provider's 22 avoided cost of wholesale power or the PJM electric power pool 23 real-time locational marginal pricing rate. All electricity used by 24 the customer's qualified facilities, with the exception of the facility 25 or property on which the solar electric power generation system is 26 installed, shall be billed at the full retail rate pursuant to the electric 27 public utility tariff applicable to the customer class of the customer 28 using the electricity. A customer may contract with a third party to 29 operate a solar electric power generation system, for the purpose of 30 net metering aggregation. Any contractual relationship entered into 31 for operation of a solar electric power generation system related to 32 net metering aggregation shall include contractual protections that 33 provide for adequate performance and provision for construction 34 and operation for the term of the contract, including any appropriate 35 bonding or escrow requirements. Any incremental cost to an 36 electric public utility for net metering aggregation shall be fully and 37 timely recovered in a manner to be determined by the board. The 38 board shall adopt net metering aggregation standards within 270 39 days after the effective date of P.L.2012, c.24.

40 Such rules shall require the board or its designee to issue a credit 41 or other incentive to those generators that do not use a net meter but 42 otherwise generate electricity derived from a Class I renewable 43 energy source and to issue an enhanced credit or other incentive, 44 including, but not limited to, a solar renewable energy credit, to 45 those generators that generate electricity derived from solar 46 technologies.

47 Such standards or rules shall be effective as regulations 48 immediately upon filing with the Office of Administrative Law and shall be effective for a period not to exceed 18 months, and may,
 thereafter, be amended, adopted or readopted by the board in
 accordance with the provisions of the "Administrative Procedure
 Act."

5 f. The board may assess, by written order and after notice and 6 opportunity for comment, a separate fee to cover the cost of 7 implementing and overseeing an emission disclosure system or 8 emission portfolio standard, which fee shall be assessed based on an 9 electric power supplier's or basic generation service provider's share 10 of the retail electricity supply market. The board shall not impose a 11 fee for the cost of implementing and overseeing a greenhouse gas 12 emissions portfolio standard adopted pursuant to paragraph (2) of 13 subsection c. of this section **[**, the electric energy efficiency portfolio standard adopted pursuant to subsection g. of this section, 14 15 or the gas energy efficiency portfolio standard adopted pursuant to subsection h. of this section]. 16

17 g. The board [may] shall adopt, pursuant to the 18 "Administrative Procedure Act," P.L.1968, c.410 (C.52:14B-1 et 19 seq.), an electric energy efficiency [portfolio standard] program in 20 order to ensure investment in cost-effective energy efficiency 21 measures, ensure universal access to energy efficiency measures, 22 and serve the needs of low-income communities that [may] shall 23 require each electric public utility to implement energy efficiency 24 measures that reduce electricity usage in the State [by 2020 to a 25 level that is 20 percent below the usage projected by the board in the absence of such a standard ] pursuant to section 3 of P.L., 26 27 c. (C. ) (pending before the Legislature as this bill). Nothing in 28 this [section] subsection shall be construed to prevent an electric 29 public utility from meeting the requirements of this [section] 30 subsection by contracting with another entity for the performance of 31 the requirements.

32 h. The board [may] adopt, shall pursuant to the 33 "Administrative Procedure Act," P.L.1968, c.410 (C.52:14B-1 et 34 seq.), a gas energy efficiency [portfolio standard] program in order 35 to ensure investment in cost-effective energy efficiency measures, 36 ensure universal access to energy efficiency measures, and serve the 37 <u>needs of low-income communities</u> that [may] <u>shall</u> require each gas 38 public utility to implement energy efficiency measures that reduce 39 natural gas usage [for heating] in the State [by 2020 to a level that is 20 percent below the usage projected by the board in the absence 40 41 of such a standard ] pursuant to section 3 of P.L., c. (C. ) 42 (pending before the Legislature as this bill). Nothing in this 43 [section] <u>subsection</u> shall be construed to prevent a gas public 44 utility from meeting the requirements of this [section] subsection 45 by contracting with another entity for the performance of the 46 requirements.

1 i. After the board establishes a schedule of solar kilowatt-hour 2 sale or purchase requirements pursuant to paragraph (3) of 3 subsection d. of this section, the board may initiate subsequent 4 proceedings and adopt, after appropriate notice and opportunity for 5 public comment and public hearing, increased minimum solar 6 kilowatt-hour sale or purchase requirements, provided that the 7 board shall not reduce previously established minimum solar 8 kilowatt-hour sale or purchase requirements, or otherwise impose 9 constraints that reduce the requirements by any means.

j. The board shall determine an appropriate level of solar alternative compliance payment, and permit each supplier or provider to submit an SACP to comply with the solar electric generation requirements of paragraph (3) of subsection d. of this section. The value of the SACP for each Energy Year, for Energy Years 2014 through [2028] 2033 per megawatt hour from solar electric generation required pursuant to this section, shall be:

- 17 EY 2014 \$339
- 18EY 2015\$33119EY 2016\$323
- 19
   E1 2010
   \$323

   20
   EY 2017
   \$315
- 20 ET 2017 \$313 21 EY 2018 \$308
- 22 EY 2019 [\$300] \$
- 22 EY 2019 [\$300] <u>\$268</u>
- 23 EY 2020 [\$293] <u>\$258</u>
- 24 EY 2021 [\$286] <u>\$248</u>
- 25
   EY 2022
   [\$279]
   <u>\$238</u>

   26
   EY 2023
   [\$272]
   \$228
- 26
   EY 2023
   [\$272]
   <u>\$228</u>

   27
   EY 2024
   [\$266]
   \$218
- 27
   EY 2024
   [\$266]
   \$218

   20
   EX 2025
   [\$266]
   \$200
- 28 EY 2025 [\$260] <u>\$208</u>
- 29 EY 2026 [\$253] <u>\$198</u>
- 30 EY 2027 [\$250] <u>\$188</u>
- 31 EY 2028 [\$239] <u>\$178</u>
- 32 <u>EY 2029</u> <u>\$168</u>
- 33
   EY 2030
   \$158

   24
   EV 2021
   \$140
- 34
   EY 2031
   \$148

   25
   EX 2022
   \$129
- 35 <u>EY 2032</u> <u>\$138</u>
- 36 <u>EY 2033</u> <u>\$128</u>.

37 The board may initiate subsequent proceedings and adopt, after 38 appropriate notice and opportunity for public comment and public 39 hearing, an increase in solar alternative compliance payments, 40 provided that the board shall not reduce previously established 41 levels of solar alternative compliance payments, nor shall the board 42 provide relief from the obligation of payment of the SACP by the 43 electric power suppliers or basic generation service providers in any 44 form. Any SACP payments collected shall be refunded directly to 45 the ratepayers by the electric public utilities.

46 k. The board may allow electric public utilities to offer long-47 term contracts through a competitive process, direct electric public

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1 utility investment and other means of financing, including but not 2 limited to loans, for the purchase of SRECs and the resale of SRECs 3 to suppliers or providers or others, provided that after such 4 contracts have been approved by the board, the board's approvals 5 shall not be modified by subsequent board orders. If the board 6 allows the offering of contracts pursuant to this subsection, the 7 board may establish a process, after hearing, and opportunity for 8 public comment, to provide that a designated segment of the 9 contracts approved pursuant to this subsection shall be contracts 10 involving solar electric power generation facility projects with a 11 capacity of up to 250 kilowatts. 12 1. The board shall implement its responsibilities under the provisions of this section in such a manner as to: 13 (1) place greater reliance on competitive markets, with the 14 15 explicit goal of encouraging and ensuring the emergence of new 16 entrants that can foster innovations and price competition; 17 (2) maintain adequate regulatory authority over non-competitive 18 public utility services; 19 (3) consider alternative forms of regulation in order to address 20 changes in the technology and structure of electric public utilities; 21 (4) promote energy efficiency and Class I renewable energy 22 market development, taking into consideration environmental 23 benefits and market barriers; 24 (5) make energy services more affordable for low and moderate 25 income customers; 26 (6) attempt to transform the renewable energy market into one 27 that can move forward without subsidies from the State or public 28 utilities: 29 (7) achieve the goals put forth under the renewable energy 30 portfolio standards; 31 (8) promote the lowest cost to ratepayers; and 32 (9) allow all market segments to participate. 33 m. The board shall ensure the availability of financial incentives 34 under its jurisdiction, including, but not limited to, long-term 35 contracts, loans, SRECs, or other financial support, to ensure market diversity, competition, and appropriate coverage across all 36 37 ratepayer segments, including, but not limited to, residential, 38 commercial, industrial, non-profit, farms, schools, and public entity 39 customers. 40 n. For projects which are owned, or directly invested in, by a 41 public utility pursuant to section 13 of P.L.2007, c.340 (C.48:3-42 98.1), the board shall determine the number of SRECs with which 43 such projects shall be credited; and in determining such number the 44 board shall ensure that the market for SRECs does not detrimentally 45 affect the development of non-utility solar projects and shall 46 consider how its determination may impact the ratepayers. 0. 47 The board, in consultation with the Department of 48 Environmental Protection, electric public utilities, the Division of

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10

1 Rate Counsel in, but not of, the Department of the Treasury, 2 affected members of the solar energy industry, and relevant 3 stakeholders, shall periodically consider increasing the renewable 4 energy portfolio standards beyond the minimum amounts set forth 5 in subsection d. of this section, taking into account the cost impacts 6 and public benefits of such increases including, but not limited to:

7 (1) reductions in air pollution, water pollution, land disturbance,8 and greenhouse gas emissions;

9 (2) reductions in peak demand for electricity and natural gas, 10 and the overall impact on the costs to customers of electricity and 11 natural gas;

(3) increases in renewable energy development, manufacturing,investment, and job creation opportunities in this State; and

(4) reductions in State and national dependence on the use offossil fuels.

p. Class I RECs and ORECs shall be eligible for use in renewable energy portfolio standards compliance in the energy year in which they are generated, and for the following two energy years. SRECs shall be eligible for use in renewable energy portfolio standards compliance in the energy year in which they are generated, and for the following four energy years.

22 (1) During the energy years of 2014, 2015, and 2016, a solar q. 23 electric power generation facility project that is not: (a) net 24 metered; (b) an on-site generation facility; (c) qualified for net 25 metering aggregation; or (d) certified as being located on a 26 brownfield, on an area of historic fill or on a properly closed 27 sanitary landfill facility, as provided pursuant to subsection t. of this section may file an application with the board for approval of a 28 29 designation pursuant to this subsection that the facility is connected 30 to the distribution system. An application filed pursuant to this 31 subsection shall include a notice escrow of \$40,000 per megawatt of 32 the proposed capacity of the facility. The board shall approve the 33 designation if: the facility has filed a notice in writing with the 34 board applying for designation pursuant to this subsection, together 35 with the notice escrow; and the capacity of the facility, when added 36 to the capacity of other facilities that have been previously 37 approved for designation prior to the facility's filing under this 38 subsection, does not exceed 80 megawatts in the aggregate for each 39 year. The capacity of any one solar electric power supply project 40 approved pursuant to this subsection shall not exceed 10 megawatts. 41 No more than 90 days after its receipt of a completed application 42 for designation pursuant to this subsection, the board shall approve, 43 conditionally approve, or disapprove the application. The notice 44 escrow shall be reimbursed to the facility in full upon either 45 rejection by the board or the facility entering commercial operation, 46 or shall be forfeited to the State if the facility is designated pursuant 47 to this subsection but does not enter commercial operation pursuant 48 to paragraph (2) of this subsection.

1 (2) If the proposed solar electric power generation facility does 2 not commence commercial operations within two years following 3 the date of the designation by the board pursuant to this subsection, 4 the designation of the facility shall be deemed to be null and void, 5 and the facility shall not be considered connected to the distribution 6 system thereafter.

(3) Notwithstanding the provisions of paragraph (2) of this
subsection, a solar electric power generation facility project that as
of May 31, 2017 was designated as "connected to the distribution
system," but failed to commence commercial operations as of that
date, shall maintain that designation if it commences commercial
operations by May 31, 2018.

13 (1) For all proposed solar electric power generation facility r. 14 projects except for those solar electric power generation facility 15 projects approved pursuant to subsection q. of this section, and for all projects proposed in [each energy year following energy year 16 17 2016, a] energy year 2019 and energy year 2020, the board may 18 approve projects for up to 50 megawatts annually in auctioned 19 capacity in two auctions per year as long as the board is accepting 20 applications. If the board approves projects for less than 50 21 megawatts in energy year 2019 or less than 50 megawatts in energy 22 year 2020, the difference in each year shall be carried over into the 23 successive energy year until 100 megawatts of auctioned capacity 24 has been approved by the board pursuant to this subsection. A 25 proposed solar electric power generation facility that is neither net 26 metered nor an on-site generation facility, may be considered 27 "connected to the distribution system" only upon designation as such by the board, after notice to the public and opportunity for 28 public comment or hearing. A proposed solar power electric 29 30 generation facility seeking board designation as "connected to the 31 distribution system" shall submit an application to the board that 32 includes for the proposed facility: the nameplate capacity; the 33 estimated energy and number of SRECs to be produced and sold per 34 year; the estimated annual rate impact on ratepayers; the estimated 35 capacity of the generator as defined by PJM for sale in the PJM 36 capacity market; the point of interconnection; the total project 37 acreage and location; the current land use designation of the 38 property; the type of solar technology to be used; and such other 39 information as the board shall require.

40 (2) The board shall approve the designation of the proposed
41 solar power electric generation facility as "connected to the
42 distribution system" if the board determines that:

43 (a) the SRECs forecasted to be produced by the facility do not
44 have a detrimental impact on the SREC market or on the
45 appropriate development of solar power in the State;

46 (b) the approval of the designation of the proposed facility
47 would not significantly impact the preservation of open space in
48 this State;

1 (c) the impact of the designation on electric rates and economic 2 development is beneficial; and

3 (d) there will be no impingement on the ability of an electric 4 public utility to maintain its property and equipment in such a 5 condition as to enable it to provide safe, adequate, and proper 6 service to each of its customers.

7 (3) The board shall act within 90 days of its receipt of a 8 completed application for designation of a solar power electric 9 generation facility as "connected to the distribution system," to 10 either approve, conditionally approve, or disapprove the 11 application. If the proposed solar electric power generation facility 12 does not commence commercial operations within two years 13 following the date of the designation by the board pursuant to this 14 subsection, the designation of the facility as "connected to the 15 distribution system" shall be deemed to be null and void, and the 16 facility shall thereafter be considered not "connected to the 17 distribution system."

18 In addition to any other requirements of P.L.1999, c.23 or s. 19 any other law, rule, regulation or order, a solar electric power 20 generation facility that is not net metered or an on-site generation 21 facility and which is located on land that has been actively devoted 22 to agricultural or horticultural use that is valued, assessed, and 23 taxed pursuant to the "Farmland Assessment Act of 1964," 24 P.L.1964, c.48 (C.54:4-23.1 et seq.) at any time within the 10-year 25 period prior to the effective date of P.L.2012, c.24, shall only be 26 considered "connected to the distribution system" if (1) the board 27 approves the facility's designation pursuant to subsection q. of this 28 section; or (2) (a) PJM issued a System Impact Study for the facility 29 on or before June 30, 2011, (b) the facility files a notice with the 30 board within 60 days of the effective date of P.L.2012, c.24, 31 indicating its intent to qualify under this subsection, and (c) the 32 facility has been approved as "connected to the distribution system" 33 by the board. Nothing in this subsection shall limit the board's 34 authority concerning the review and oversight of facilities, unless 35 such facilities are exempt from such review as a result of having been approved pursuant to subsection q. of this section. 36

37 t. (1) No more than 180 days after the date of enactment of 38 P.L.2012, c.24, the board shall, in consultation with the Department 39 of Environmental Protection and the New Jersey Economic 40 Development Authority, and, after notice and opportunity for public 41 comment and public hearing, complete a proceeding to establish a 42 program to provide SRECs to owners of solar electric power 43 generation facility projects certified by the board, in consultation 44 with the Department of Environmental Protection, as being located 45 on a brownfield, on an area of historic fill or on a properly closed 46 sanitary landfill facility, including those owned or operated by an 47 electric public utility and approved pursuant to section 13 of 48 P.L.2007, c.340 (C.48:3-98.1). Projects certified under this

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1 subsection shall be considered "connected to the distribution 2 system", shall not require such designation by the board, and shall 3 not be subject to board review required pursuant to subsections q. 4 and r. of this section. Notwithstanding the provisions of section 3 5 of P.L.1999, c.23 (C.48:3-51) or any other law, rule, regulation, or 6 order to the contrary, for projects certified under this subsection, the 7 board shall establish a financial incentive that is designed to 8 supplement the SRECs generated by the facility in order to cover 9 the additional cost of constructing and operating a solar electric 10 power generation facility on a brownfield, on an area of historic fill 11 or on a properly closed sanitary landfill facility. Any financial 12 benefit realized in relation to a project owned or operated by an 13 electric public utility and approved by the board pursuant to section 14 13 of P.L.2007, c.340 (C.48:3-98.1), as a result of the provision of a 15 financial incentive established by the board pursuant to this 16 subsection, shall be credited to ratepayers. The issuance of SRECs 17 for all solar electric power generation facility projects pursuant to 18 this subsection shall be deemed "Board of Public Utilities financial 19 assistance" as provided under section 1 of P.L.2009, c.89 (C.48:2-20 29.47).

21 (2) Notwithstanding the provisions of the "Spill Compensation and Control Act," P.L.1976, c.141 (C.58:10-23.11 et seq.) or any 22 23 other law, rule, regulation, or order to the contrary, the board, in 24 consultation with the Department of Environmental Protection, may 25 find that a person who operates a solar electric power generation 26 facility project that has commenced operation on or after the 27 effective date of P.L.2012, c.24, which project is certified by the board, in consultation with the Department of Environmental 28 29 Protection pursuant to paragraph (1) of this subsection, as being 30 located on a brownfield for which a final remediation document has 31 been issued, on an area of historic fill or on a properly closed sanitary landfill facility, which projects shall include, but not be 32 33 limited to projects located on a brownfield for which a final 34 remediation document has been issued, on an area of historic fill or 35 on a properly closed sanitary landfill facility owned or operated by 36 an electric public utility and approved pursuant to section 13 of 37 P.L.2007, c.340 (C.48:3-98.1), or a person who owns property 38 acquired on or after the effective date of P.L.2012, c.24 on which 39 such a solar electric power generation facility project is constructed 40 and operated, shall not be liable for cleanup and removal costs to 41 the Department of Environmental Protection or to any other person 42 for the discharge of a hazardous substance provided that:

43 (a) the person acquired or leased the real property after the44 discharge of that hazardous substance at the real property;

(b) the person did not discharge the hazardous substance, is not
in any way responsible for the hazardous substance, and is not a
successor to the discharger or to any person in any way responsible
for the hazardous substance or to anyone liable for cleanup and

1 removal costs pursuant to section 8 of P.L.1976, c.141 (C.58:10-2 23.11g); 3 (c) the person, within 30 days after acquisition of the property, 4 gave notice of the discharge to the Department of Environmental 5 Protection in a manner the Department of Environmental Protection 6 prescribes; 7 (d) the person does not disrupt or change, without prior written 8 permission from the Department of Environmental Protection, any 9 engineering or institutional control that is part of a remedial action 10 for the contaminated site or any landfill closure or post-closure 11 requirement; 12 (e) the person does not exacerbate the contamination at the 13 property; 14 (f) the person does not interfere with any necessary remediation 15 of the property; 16 (g) the person complies with any regulations and any permit the 17 Department of Environmental Protection issues pursuant to section 18 19 of P.L.2009, c.60 (C.58:10C-19) or paragraph (2) of subsection 19 a. of section 6 of P.L.1970, c.39 (C.13:1E-6); 20 (h) with respect to an area of historic fill, the person has 21 demonstrated pursuant to a preliminary assessment and site 22 investigation, that hazardous substances have not been discharged; 23 and 24 (i) with respect to a properly closed sanitary landfill facility, no 25 person who owns or controls the facility receives, has received, or 26 will receive, with respect to such facility, any funds from any post-27 closure escrow account established pursuant to section 10 of 28 P.L.1981, c.306 (C.13:1E-109) for the closure and monitoring of 29 the facility. 30 Only the person who is liable to clean up and remove the 31 contamination pursuant to section 8 of P.L.1976, c.141 (C.58:10-32 23.11g) and who does not have a defense to liability pursuant to 33 subsection d. of that section shall be liable for cleanup and removal 34 costs. 35 u. No more than 180 days after the date of enactment of P.L.2012, c.24, the board shall complete a proceeding to establish a 36 37 registration program. The registration program shall require the 38 owners of solar electric power generation facility projects 39 connected to the distribution system to make periodic milestone 40 filings with the board in a manner and at such times as determined 41 by the board to provide full disclosure and transparency regarding 42 the overall level of development and construction activity of those 43 projects Statewide. 44 The issuance of SRECs for all solar electric power v. 45 generation facility projects pursuant to this section, for projects 46 connected to the distribution system with a capacity of one 47 megawatt or greater, shall be deemed "Board of Public Utilities

1 financial assistance" as provided pursuant to section 1 of P.L.2009,

2 c.89 (C.48:2-29.47).

3 w. No more than 270 days after the date of enactment of 4 P.L.2012, c.24, the board shall, after notice and opportunity for 5 public comment and public hearing, complete a proceeding to 6 consider whether to establish a program to provide, to owners of 7 solar electric power generation facility projects certified by the 8 board as being three megawatts or greater in capacity and being net 9 metered, including facilities which are owned or operated by an 10 electric public utility and approved by the board pursuant to section 11 13 of P.L.2007, c.340 (C.48:3-98.1), a financial incentive that is 12 designed to supplement the SRECs generated by the facility to 13 further the goal of improving the economic competitiveness of 14 commercial and industrial customers taking power from such 15 projects. If the board determines to establish such a program 16 pursuant to this subsection, the board may establish a financial 17 incentive to provide that the board shall issue one SREC for no less 18 than every 750 kilowatt-hours of solar energy generated by the 19 certified projects. Any financial benefit realized in relation to a 20 project owned or operated by an electric public utility and approved 21 by the board pursuant to section 13 of P.L.2007, c.340 (C.48:3-22 98.1), as a result of the provisions of a financial incentive 23 established by the board pursuant to this subsection, shall be 24 credited to ratepayers.

25 x. Solar electric power generation facility projects that are 26 located on an existing or proposed commercial, retail, industrial, 27 municipal, professional, recreational, transit, commuter, 28 entertainment complex, multi-use, or mixed-use parking lot with a 29 capacity to park 350 or more vehicles where the area to be utilized 30 for the facility is paved, or an impervious surface may be owned or 31 operated by an electric public utility and may be approved by the 32 board pursuant to section 13 of P.L.2007, c.340 (C.48:3-98.1).

- 33 (cf: P.L.2017, c.139, s.1)
- 34

35 3. (New section) a. No later than one year after the date of 36 enactment of P.L., c. (C.) (pending before the Legislature as 37 this bill), the Board of Public Utilities shall require each electric 38 public utility and gas public utility to reduce the use of electricity, 39 or natural gas, as appropriate, within its territory, by its customers, 40 below what would have otherwise been used. For the purposes of 41 this section, a gas public utility shall reduce the use of natural gas 42 for residential, commercial, and industrial uses, but shall not be 43 required to include a reduction in natural gas used for distributed 44 energy resources such as combined heat and power.

Each electric public utility shall be required to achieve annual reductions in the use of electricity of two percent of the average annual usage in the prior three years within five years of implementation of its electric energy efficiency program. Each

1 natural gas public utility shall be required to achieve annual 2 reductions in the use of natural gas of 0.75 percent of the average 3 annual usage in the prior three years within five years of 4 implementation of its gas energy efficiency program. The amount 5 of reduction mandated by the board that exceeds two percent of the 6 average annual usage for electricity and 0.75 percent of the average 7 annual usage for natural gas for the prior three years shall be 8 determined pursuant to the study conducted pursuant to subsection 9 b. of this section until the reduction in energy usage reaches the full 10 economic, cost-effective potential in each service territory, as 11 determined by the board.

12 b. No later than one year after the date of enactment of P.L.,

13 (C.) (pending before the Legislature as this bill), the board c. 14 shall conduct and complete a study to determine the energy savings 15 targets for full economic, cost-effective potential for electricity 16 usage reduction and natural gas usage reduction as well as the 17 potential for peak demand reduction by the customers of each 18 electric public utility and gas public utility and the timeframe for 19 achieving the reductions. The energy savings targets for each 20 electric public utility and gas public utility shall be reviewed every 21 three years to determine if the targets should be adjusted. The 22 board, in conducting the study, shall accept comments and 23 suggestions from interested parties.

24 c. No later than one year after the date of enactment of P.L.,

25 (C. ) (pending before the Legislature as this bill), the board с. 26 shall adopt quantitative performance indicators pursuant to the 27 "Administrative Procedure Act," P.L.1968, c.410 (C.52:14B-1 et seq.) for each electric public utility and gas public utility, which 28 29 shall establish reasonably achievable targets for energy usage 30 reductions and peak demand reductions and take into account the 31 public utility's energy efficiency measures and other non-utility 32 energy efficiency measures including measures to support the 33 development and implementation of building code changes, 34 appliance efficiency standards, the Clean Energy program, any 35 other State-sponsored energy efficiency or peak reduction 36 programs, and public utility energy efficiency programs that exist 37 on the date of enactment of P.L., c. (C.) (pending before the Legislature as this bill). In establishing quantitative performance 38 39 indicators, the board shall use a methodology that incorporates 40 weather, economic factors, customer growth, outage-adjusted 41 efficiency factors, and any other appropriate factors to ensure that 42 the public utility's incentives or penalties determined pursuant to 43 subsection e. of this section and section 13 of P.L.2007, c.340 44 (C.48:3-98.1) are based upon performance, and take into account 45 the growth in the use of electric vehicles, microgrids, and 46 distributed energy resources. In establishing quantitative 47 performance indicators, the board shall also consider each public 48 utility's customer class mix and potential for adoption by each of

1 those customer classes of energy efficiency programs offered by the 2 public utility or that are otherwise available. The board shall 3 review each quantitative performance indicator every three years. 4 A public utility may apply all energy savings attributable to 5 programs available to its customers, including demand side 6 management programs, other measures implemented by the public 7 utility, non-utility programs, including those available under energy 8 efficiency programs in existence on the date of enactment of P.L. c. 9 ) (pending before the Legislature as this bill), building codes, (C. 10 and other efficiency standards in effect, to achieve the targets 11 established in this section.

12 d. (1) Each electric public utility and gas public utility shall 13 establish energy efficiency programs and peak demand reduction programs to be approved by the board no later than 30 days prior to 14 15 the start of the energy year in order to comply with the requirements 16 of this section. The energy efficiency programs and peak demand 17 reduction programs adopted by each public utility shall comply with 18 quantitative performance indicators adopted by the board pursuant 19 to subsection c. of this section.

20 (2) The energy efficiency programs and peak demand reduction 21 programs shall have a benefit-to-cost ratio greater than or equal to 1.0 at the portfolio level, considering both economic and 22 23 environmental factors, and shall be subject to review during the 24 stakeholder process established by the board pursuant to subsection 25 f. of this section. The methodology, assumptions, and data used to 26 perform the benefit-to-cost analysis shall be based upon publicly 27 available sources and shall be subject to stakeholder review and 28 comment. A program may have a benefit-to-cost ratio of less than 29 1.0 but may be appropriate to include within the portfolio if 30 implementation of the program is in the public interest, including, 31 but not limited to, benefitting low-income customers or promoting 32 emerging energy efficiency technologies.

33 (3) Each electric public utility and gas public utility shall file 34 with the board implementation and reporting plans as well as 35 evaluation, measurement, and verification strategies to determine 36 the energy usage reductions and peak demand reductions achieved 37 by the energy efficiency programs and peak demand reduction programs approved pursuant to this section. 38 The filings shall 39 include details of expenditures made by the public utility and the 40 resultant reduction in energy usage and peak demand. The board 41 shall determine the appropriate level of reasonable and prudent 42 costs for each energy efficiency program and peak demand 43 reduction program.

e. (1) Each electric public utility and gas public utility shall
file an annual petition with the board to demonstrate compliance
with the energy efficiency and peak demand reduction programs,
compliance with the targets established pursuant to the quantitative
performance indicators, and for cost recovery of the programs,

1 including any performance incentives or penalties, pursuant to 2 section 13 of P.L.2007, c.340 (C.48:3-98.1). Each electric public 3 utility and gas public utility shall file annually with the board a 4 petition to recover on a full and current basis through a surcharge 5 all reasonable and prudent costs incurred as a result of energy 6 efficiency programs and peak demand reduction programs required 7 pursuant to this section, including but not limited to recovery of and 8 on capital investment, and the revenue impact of sales losses 9 resulting from implementation of the energy efficiency and peak 10 demand reduction schedules, which shall be determined by the 11 board pursuant to section 13 of P.L. 2007, c. 340 (C.48:3-98.1).

12 (2) If an electric public utility or gas public utility achieves the 13 performance targets established in the quantitative performance indicators, the public utility shall receive an incentive as determined 14 15 by the board through an accounting mechanism established pursuant 16 to section 13 of P.L.2007, c.340 (C.48:3-98.1) for its energy 17 efficiency measures and peak demand reduction measures for the 18 following year. The incentive shall scale in a linear fashion to a 19 maximum established by the board that reflects the extra value of 20 achieving greater savings.

21 (3) If an electric public utility or gas public utility fails to 22 achieve the reductions in its performance target established in the 23 quantitative performance indicators, the public utility shall be 24 assessed a penalty as determined by the board through an 25 accounting mechanism established pursuant to section 13 of 26 P.L.2007, c.340 (C.48:3-98.1) for its energy efficiency measures 27 and peak demand reduction measures for the following year. The 28 penalty shall scale in a linear fashion to a maximum established by 29 the board that reflects the extent of the failure to achieve the required savings. 30

31 (4) The adjustments made pursuant to this subsection may be 32 made through adjustments of the electric public utility's or gas 33 public utility's return on equity related to the energy efficiency or 34 peak demand reduction programs only, or a specified dollar amount, 35 reflecting the incentive structure as established in this subsection. 36 The adjustments shall not be included in a revenue or cost in any 37 base rate filing and shall be adopted by the board pursuant to the "Administrative Procedure Act." 38

39 f. The board shall establish a stakeholder process to (1) 40 evaluate the economically achievable energy efficiency and peak 41 demand reduction requirements, rate adjustments, quantitative 42 performance indicators, and the process for evaluating, measuring, 43 and verifying energy usage reductions and peak demand reductions 44 by the public utilities. As part of the stakeholder process, the board 45 shall establish an independent advisory group to study the 46 evaluation, measurement, and verification process for energy 47 efficiency and peak demand reduction programs, which shall 48 include representatives from the public utilities, the Division of

Rate Counsel, and environmental and consumer organizations, to
 provide recommendations to the board for improvements to the
 programs.

4 (2) Each electric public utility and gas public utility shall 5 conduct a demographic analysis as part of the stakeholder process to determine if all of its customers are able to participate fully in 6 7 implementing energy efficiency measures, to identify market 8 that prevent such participation, and to barriers make 9 recommendations for measures to overcome such barriers. The 10 public utility shall be entitled to full and timely recovery of the 11 costs associated with this analysis.

g. For the purposes of this section, the board shall only
consider usage for which public utility energy efficiency programs
are applicable.

15

16 4. (New section) a. No later than one year after the date of 17 enactment of P.L., c. (C.) (pending before the Legislature as 18 this bill), the Board of Public Utilities shall direct each electric 19 public utility in the State to undertake a study to determine the 20 optimal voltage for use in their respective distribution systems, 21 including a consideration of voltage optimization. An electric 22 public utility shall be entitled to full and timely recovery of the 23 costs associated with this analysis.

b. No later than five years after the date of enactment of P.L.,

c. (C. ) (pending before the Legislature as this bill), the board
shall require the owner or operator of each commercial building
over 25,000 square feet in the State to benchmark energy and water
use for the prior calendar year using the United States
Environmental Protection Agency's Portfolio Manager tool.

30

31 5. (New section) a. No later than 210 days after the date of 32 enactment of P.L., c. (C.) (pending before the Legislature as 33 this bill), the Board of Public Utilities shall adopt, pursuant to the 34 "Administrative Procedure Act," P.L.1968, c.410 (C.52:14B-1 et 35 seq.), rules and regulations establishing a "Community Solar 36 Energy Pilot Program" to permit customers of an electric public 37 utility to participate in a solar energy project that is remotely located from their properties but is within their electric public 38 39 utility service territory to allow for a credit to the customer's utility 40 bill equal to the electricity generated that is attributed to the 41 customer's participation in the solar energy project.

42 b. The rules and regulations developed by the board shall43 establish:

44 (1) a capacity limit for individual solar energy projects to a45 maximum of five megawatts per project;

46 (2) an annual capacity limit for all solar energy projects under47 the pilot program;

1 (3) geographic limitations for solar energy projects and 2 participating customers; 3 (4) a minimum number of participating customers for each solar 4 energy project; 5 (5) the value of the credit on each participating customer's bill; 6 (6) standards to limit the land use impact of a solar energy 7 project as required in subsection r. of section 38 of P.L.1999, c.23 8 (C.48:3-87); 9 (7) the provision of access to solar energy projects for low and 10 moderate income customers; 11 (8) standards to ensure the ability of residential and commercial 12 customers to participate in solar energy projects, including 13 residential customers in multifamily housing; 14 (9) standards for connection to the distribution system of an 15 electric public utility; and 16 (10) provisions to minimize impacts to the distribution system 17 of an electric public utility. The board shall make available on its Internet website 18 c. 19 information on solar energy projects whose owners are seeking 20 participants. 21 The board shall establish standards and an application d. 22 process for owners of solar energy projects who wish to be included 23 in the Community Solar Energy Pilot Program. The standards for 24 the Community Solar Energy Pilot Program shall include, but need 25 not be limited to, a verification process to ensure that the solar 26 energy projects are producing an amount of energy that is greater 27 than or equal to the amount of energy that is being credited to its 28 participating customer's electric utility bills pursuant to subsection 29 b. of this section, and consumer protection measures. Projects 30 approved by the board shall have at least two participating 31 customers. The board may restrict qualified solar energy projects to those 32 33 located on brownfields, landfills, areas designated in need of 34 redevelopment, in underserved communities, or on commercial 35 rooftops. 36 Subject to review by the board, an electric public utility shall e. 37 be entitled to full and timely cost recovery for all costs incurred in 38 implementation and compliance with this section. 39 f. No later than 36 months after adoption of the rules and 40 regulations required pursuant to subsection b. of this section, the 41 board shall adopt rules and regulations, pursuant to the 42 "Administrative Procedure Act," P.L.1968, c.410 (C.52:14B-1 et 43 seq.), to convert the Community Solar Energy Pilot Program to a 44 permanent program. The board shall adopt rules and regulations for 45 the permanent program that set forth standards for projects owned 46 by electric public utilities, special purpose entities, and nonprofit entities. The rules and regulations shall also: 47

1 (1) limit the capacity of each solar energy project to a maximum 2 of five megawatts; 3 (2) establish a goal for the development of at least 50 megawatts 4 of solar energy projects per year, taking into account any changes to 5 the SREC program; 6 (3) set geographic limitations for solar energy projects and 7 participating customers; (4) provide for a minimum number of participating customers 8 9 for each solar energy project; 10 (5) require the provision of access to solar energy projects for 11 low and moderate income customers; 12 (6) establish standards to ensure the ability of residential and 13 commercial customers to participate in solar energy projects, including residential customers in multifamily housing; 14 15 (7) establish a method for determining the value of the credit on 16 each participating customer's bill; 17 (8) establish timeframes for the credit available to the customer; 18 (9) establish standards and methods to verify solar electric 19 energy generation on a monthly basis for a solar energy project; 20 (10) establish standards consistent with the land use provisions 21 for solar energy projects as provided in subsections r., s., and t. of 22 section 38 of P.L.1999, c.23 (C.48:3-87); 23 (11) establish standards, fees, and uniform procedures for solar 24 energy projects to be connected to the distribution system of an 25 electric public utility; 26 (12) minimize impacts to the distribution system of an electric 27 public utility; 28 (13) require monthly reporting requirements for the operators of 29 solar energy projects to the electric public utility, project customers, 30 and the board; 31 (14) require reporting by the electric public utility to the 32 operator of a solar energy project on the value of credits to the 33 participating customer's bills; and 34 (15) require transferability, portability, and buy-out provisions 35 for customers who participate in community solar energy projects. g. As used in this section: 36 37 "Solar energy project" means a system containing one or more 38 solar panels and associated equipment. 39 "Solar panel" means an elevated panel or plate, or a canopy or 40 array thereof, that captures and converts solar radiation to produce 41 electric power, and is approved by the board to be included in the Community Solar Energy Pilot Program. "Solar power includes flat 42 43 plate, focusing solar collectors, or photovoltaic solar cells and 44 excludes the base or foundation of the panel, plate, canopy, or 45 array. 46 47 6. (New section) a. No later than 120 days after the date of 48 enactment of P.L., c. (C.) (pending before the Legislature as

1 this bill), the board shall establish an application and approval 2 process to certify public entities to act as a host customer for remote 3 net metering generating capacity. A public entity certified to act as 4 a host customer may allocate credits to other public entities within 5 the same electric public utility service territory. A copy of the 6 agreement between the public entity certified to act as a host 7 customer and other public entities designated to receive credits shall 8 be provided to the electric public utility before remote net metering 9 credits may be applied to a customer bill. A public entity certified 10 to act as a host customer may host a solar energy project with a 11 capacity up to the total average usage of the electric public utility 12 accounts for the host public entity customer.

b. The board shall establish a remote net metering application
process to approve as the primary account holder a certified public
entity that is the host customer and the other public entities
designated to receive credits.

c. The board shall require the owner of a solar energy project
to pay a certified public entity a pro-rated public sponsor fee of
\$10,000 per megawatt, up to a 10-megawatt allowance for each
public entity. The board shall require each participating customer
to pay at least 50 percent of the societal benefits charge established
pursuant to section 12 of P.L.1999, c.23 (C.48:3-60).

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24 7. Section 6 of P.L.2010, c.57 (C.34:1B-209.4) is amended to 25 read as follows:

26 6. a. (1) A business, upon application to and approval from the 27 authority, shall be allowed a credit of 100 percent of its capital 28 investment, made after the effective date of P.L.2010, c.57 (C.48:3-29 87.1 et al.) but prior to its submission of documentation pursuant to 30 subsection c. of this section, in a qualified wind energy facility 31 located within an eligible wind energy zone, pursuant to the restrictions and requirements of this section. To be eligible for any 32 33 tax credits authorized under this section, a business shall 34 demonstrate to the authority, at the time of application, that the 35 State's financial support of the proposed capital investment in a 36 qualified wind energy facility will yield a net positive benefit to the 37 State. The value of all credits approved by the authority pursuant to 38 this section may be up to \$100,000,000, except as may be increased 39 by the authority if the chief executive officer of the authority judges 40 certain qualified offshore wind projects to be meritorious. Credits 41 provided pursuant to this section shall not be applicable to the cap 42 on the credits provided in section 3 of P.L.2007, c.346 (C.34:1B-43 209).

(2) (a) A business, other than a tenant eligible pursuant to
subparagraph (b) of this paragraph, shall make or acquire capital
investments totaling not less than \$50,000,000 in a qualified wind
energy facility, at which the business, including tenants at the
qualified wind energy facility, shall employ at least 300 new, full-

time employees, to be eligible for a credit under this section. A business that acquires a qualified wind energy facility after the effective date of P.L.2010, c.57 (C.48:3-87.1 et al.) shall also be deemed to have acquired the capital investment made or acquired by the seller.

6 (b) A business that is a tenant in the qualified wind energy 7 facility, the owner of which has made or acquired capital 8 investments in the facility totaling more than \$50,000,000, shall 9 occupy a leased area of the qualified wind energy facility that 10 represents at least \$17,500,000 of the capital investment in the 11 qualified wind energy facility at which at least 300 new, full-time 12 employees in the aggregate are employed, to be eligible for a credit 13 under this section. The amount of capital investment in a facility 14 that a leased area represents shall be equal to that percentage of the 15 owner's total capital investment in the facility that the percentage of 16 net leasable area leased by the tenant is of the total net leasable area 17 of the qualified business facility. Capital investments made by a 18 tenant shall be deemed to be included in the calculation of the 19 capital investment made or acquired by the owner, but only to the 20 extent necessary to meet the owner's minimum capital investment of 21 \$50,000,000. Capital investments made by a tenant and not 22 allocated to meet the owner's minimum capital investment threshold 23 of \$50,000,000 shall be added to the amount of capital investment 24 represented by the tenant's leased area in the qualified wind energy 25 facility.

(c) The calculation of the number of new, full-time employees
required pursuant to subparagraphs (a) and (b) of this paragraph
may include the number of new, full-time positions resulting from
an equipment supply coordination agreement with equipment
manufacturers, suppliers, installers and operators associated with
the supply chain required to support the qualified wind energy
facility.

33 For the purposes of this paragraph, "full time employee" shall 34 not include an employee who is a resident of another state and 35 whose income is not subject to the "New Jersey Gross Income Tax Act," N.J.S.54A:1-1 et seq., unless that state has entered into a 36 37 reciprocity agreement with the State of New Jersey, provided that 38 any employee whose work is provided pursuant to a collective bargaining agreement with [the port district] <u>a business</u> in the wind 39 40 energy zone may be included.

41 (3) A business shall not be allowed a tax credit pursuant to this 42 section if the business [participates in] receives a business employment incentive grant pursuant to the "Business Employment 43 44 Incentive Program Act," P.L.1996, c.26 (C.34:1B-124 et al.), 45 relating to the same capital and employees that qualify the business 46 for this credit, or if the business receives assistance pursuant to the 47 "Business Retention and Relocation Assistance Act," P.L.1996, c.25 48 (C.34:1B-112 et seq.). A business that is allowed a tax credit under

1 this section shall not be eligible for incentives authorized pursuant

2 to the "Municipal Rehabilitation and Economic Recovery Act,"

3 P.L.2002, c.43 (C.52:27BBB-1 et al.).

4 (4) Full-time employment for an accounting or privilege period
5 shall be determined as the average of the monthly full-time
6 employment for the period.

b. A business shall apply for the credit by [August 1, 2016]
July 1, 2024, and a business shall submit its documentation for
approval of its credit amount by [August 1, 2019] July 1, 2027.

c. The credit allowed pursuant to this section shall be administered in accordance with the provisions of subsection c. of section 3 of P.L.2007, c.346 (C.34:1B-209) and section 33 of P.L.2009, c.90 (C.34:1B-209.1), except that all references therein to "qualified business facility" shall be deemed to refer to "qualified wind energy facility," as that term is defined in subsection f. of this section.

17 d. The amount of the credit allowed pursuant to this section 18 shall, except as otherwise provided, be equal to the capital 19 investment made by the business, or the capital investment 20 represented by the [business'] business's leased area, and shall be 21 taken over a 10-year period, at the rate of one-tenth of the total 22 amount of the [business'] business's credit for each tax accounting 23 or privilege period of the business, beginning with the tax period in 24 which the business is first approved by the authority as having met 25 the investment capital and employment qualifications, subject to 26 any disqualification as determined by annual review by the 27 authority. In conducting its annual review, the authority may 28 require a business to submit any information determined by the 29 authority to be necessary and relevant to its review. The credit 30 amount for any tax period ending after the date [eight] 18 years 31 after the effective date of P.L.2007, c.346 (C.34:1B-207 et seq.) 32 during which the documentation of a [business'] business's credit 33 amount remains unapproved shall be forfeited, although credit 34 amounts for the remainder of the years of the 10-year credit period 35 shall remain available. The amount of the credit allowed for a tax 36 period to a business that is a tenant in a qualified wind energy 37 facility shall not exceed the [business'] business's total lease 38 payments for occupancy of the qualified wind energy facility for the 39 tax period.

40 e. The authority shall adopt rules [in accordance with] and 41 regulations pursuant to the "Administrative Procedure Act," 42 P.L.1968, c.410 (C.52:14B-1 et seq.) as are necessary to implement 43 this section, including, but not limited to: examples of and the 44 determination of capital investment; the nature of businesses and 45 employment positions constituting and participating in an 46 equipment supply coordination agreement; a determination of the 47 types of businesses that may be eligible and expenses that may

constitute capital improvements; <u>the</u> promulgation of procedures
 and forms necessary to apply for a credit; and provisions for
 applicants to be charged an initial application fee, and ongoing
 service fees, to cover the administrative costs related to the credit.

5 The rules <u>and regulations</u> established by the authority pursuant to 6 this subsection shall be effective immediately upon filing with the 7 Office of Administrative Law and shall be effective for a period not 8 to exceed 12 months and may, thereafter, be amended, adopted or 9 readopted in accordance with the provisions of the "Administrative 10 Procedure Act," P.L.1968, c.410 (C.52:14B-1 et seq.).

f. As used in this section: the terms "authority," "business,"
and "capital investment" shall have the same meanings as defined in
section 2 of the "Urban Transit Hub Tax Credit Act," P.L.2007,
c.346 (C.34:1B-208), except that all references therein to "qualified
business facility" shall be deemed to refer to "qualified wind energy
facility" as defined in this subsection.

17 In addition, as used in this section:

18 "Equipment supply coordination agreement" means an agreement 19 between a business and equipment manufacturer, supplier, installer, 20 and operator that supports a qualified offshore wind project, or 21 other wind energy project as determined by the authority, and that 22 indicates the number of new, full-time jobs to be created by the 23 agreement participants towards the employment requirement as set 24 forth in paragraph (2) of subsection a. of this section.

"Qualified offshore wind project" [means] <u>shall have</u> the same
<u>meaning</u> as [the term is defined] <u>provided</u> in section 3 of P.L.1999,
c.23 (C.48:3-51).

"Qualified wind energy facility" means any building, complex of 28 29 buildings, or structural components of buildings, including water 30 access infrastructure, and all machinery and equipment used in the 31 manufacturing, assembly, development or administration of 32 component parts that support the development and operation of a 33 qualified offshore wind project, or other wind energy project as 34 determined by the authority, and that are located in a wind energy 35 zone.

36 "Wind energy zone" means property located in the South Jersey
37 Port District established pursuant to "The South Jersey Port
38 Corporation Act," P.L.1968, c.60 (C.12:11A-1 et seq.).

39 (cf: P.L.2013, c.161, s.25)

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8. (New section) The Department of Labor and Workforce
Development shall establish job training programs for those who
work in manufacturing and servicing of offshore wind energy
equipment through Workforce Investment Boards, county colleges,
and other appropriate institutions. The department shall develop
training curricula in consultation with the equipment manufacturers.

48 9. This act shall take effect immediately.

#### A3723 MCKEON, PINKIN 32

### **STATEMENT**

3 This bill would require the Board of Public Utilities (board) to 4 conduct an energy storage analysis, make changes to the solar 5 renewable energy certificate program, adopt energy efficiency and peak demand reduction programs, adopt a "Community Solar 6 7 Energy Pilot Program," and provide tax credits for certain offshore 8 wind energy projects. The bill would also require the Department 9 of Labor and Workforce Development to establish job training 10 programs for those who work in manufacturing and servicing of 11 offshore wind energy equipment.

12 This bill would require the board, in consultation with PJM, the 13 independent system operator, to conduct an energy storage analysis.

In conducting the analysis required by the bill, the board would: 14

15 (1) consider how implementation of renewable electric energy 16 storage systems may benefit ratepayers by providing emergency 17 back-up power for essential services, offsetting peak loads, and 18 stabilizing the electric distribution system;

19 (2) consider whether implementation of renewable electric 20 energy storage systems would promote the use of electric vehicles 21 in the State and the potential impact on renewable energy 22 production in the State;

23 (3) study the types of energy storage technologies currently being implemented in the State; 24

25 (4) consider the benefits and costs to ratepayers, local 26 governments, and electric public utilities associated with the 27 development and implementation of additional energy storage 28 technologies;

29 (5) determine the optimal amount of energy storage to be added 30 in the State over the next five years in order to provide the 31 maximum benefit to ratepayers;

(6) determine optimum points of entry into the electric 32 33 distribution system for distributed energy resources; and

34 (7) calculate the cost to the State's ratepayers of adding the 35 optimal amount of energy storage.

36 The bill requires the board to prepare and submit, within one 37 year after enactment of the bill into law, a written report to the Governor and to the Legislature concerning energy storage needs 38 39 and opportunities in the State. The report would: (1) summarize 40 the energy storage analysis; (2) discuss and quantify the potential 41 benefits and costs associated with increasing opportunities for 42 energy storage and distributed energy resources in the State; and (3) 43 recommend ways to increase opportunities for energy storage and 44 distributed energy resources opportunities in the State, including 45 any recommendations for financial incentives to aid in the 46 development and implementation of these technologies by public 47 and private entities in the State. Six months after completion of the 48 report, the board would be required to initiate a proceeding to

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1 establish a process and mechanism for achieving the goal of 600 2 megawatts of energy storage by 2021 and 2,000 megawatts of 3 energy storage by 2030.

4 The bill would also make modifications to the State's solar 5 renewable energy portfolio standards. It requires the board to 6 complete a study that evaluates how to modify or replace the 7 current program. Under current law, electric power suppliers and 8 basic generation service providers must provide a certain 9 percentage of their electricity from solar electric power generators. 10 The bill accelerates the schedule to require electric power suppliers 11 and basic generation service providers to provide a greater 12 percentage of solar energy each year, culminating in 5.1 percent by energy year 2021 and then gradually reducing the schedule 13 14 thereafter until energy year 2033. The bill also reduces the solar 15 alternative compliance payments (SACP) beginning in energy year 16 2019 until energy year 2033. For energy year 2019, the SACP is 17 reduced to \$268 and is gradually reduced by \$10 per year until 18 2033.

19 The board would be required to adopt rules and regulations no 20 later than 180 days after the effective date of the bill to close the 21 SREC program to new applications upon the attainment of 5.1 22 percent of the kilowatt-hours sold in the State by each electric 23 power supplier and each basic generation service provider from 24 solar electric power generators connected to the distribution system. 25 The bill provides for the closing of the SREC program no later than 26 June 1, 2021. The bill also requires the board complete a study to 27 evaluate how to modify or replace the SREC program in order to 28 encourage the continued efficient and orderly development of solar 29 renewable generating sources. The study would evaluate how to 30 develop a program that would reduce the costs of achieving the 31 State's solar energy goals, provide an orderly transition from the 32 current SREC program to a new program, develop targets for grid-33 connected and distribution systems, establish and update market-34 based maximum incentive payment caps, and encourage and 35 facilitate market-based cost recovery through long-term contracts 36 and energy market sales.

37 The bill would also require that by January 1, 2020, 21 percent 38 of the kilowatt hours sold in the State by each electric power 39 supplier and each basic generation service provider be from Class I 40 renewable energy sources. It would also require the board to 41 initiate a proceeding to establish renewable energy portfolio 42 standards of 35 percent by energy year 2025 and 50 percent by 43 energy year 2030. The bill would impose a cap, excluding the costs 44 of the offshore wind renewable energy certificate program, on the 45 cost to customers for those requirements for three energy years 46 beginning in energy year 2019, of nine percent of the cost to 47 customers of the total number of kilowatt hours sold in the State,

and seven percent of the cost to customers of the total number of
 kilowatt hours sold in the State in any year thereafter.

3 The bill requires that the board, for any new applications 4 submitted after the bill's date of enactment into law, require for any 5 project over 25 kilowatts a notice escrow be paid that would be 6 returned upon denial of the application, or upon commencement of commercial operation. The escrow would be forfeited to the State 7 8 if the facility does not commence commercial operation within two 9 years following the date of designation by the board. The bill 10 would also change the SREC term to 10 years from 15 years for any 11 project where the application is filed after the date of enactment of 12 the bill. The bill would add solar alternative compliance payment 13 amounts for energy years 2029 to 2033. The bill would provide that 14 the board, for energy years 2019 and 2020, may approve up to a 15 total of 100 megawatts of auctioned capacity of solar electric power 16 generation facility projects.

Further, the bill requires the board to establish an energy efficiency program for electric public utilities and gas public utilities to reduce electricity usage, natural gas usage, and peak demand.

21 Under the bill, the board is to adopt an energy efficiency 22 program that requires each utility to implement energy efficiency 23 measures and peak demand reduction measures to reduce electricity 24 usage or natural gas usage in its service territory, as appropriate, by 25 two percent of the average energy usage in the prior three years 26 within five years of implementation of the program. Each utility is 27 to establish energy efficiency programs and peak demand reduction 28 programs to be approved by the board and made available to the 29 public to implement the energy efficiency programs. Each utility 30 would also be required to file with the board implementation and 31 reporting plans as well as evaluation, measurement, and verification 32 strategies to determine the energy usage reductions and peak 33 demand reductions achieved by the energy efficiency measures and 34 peak demand reduction measures approved by the board.

35 Under the bill, the board is required to adopt quantitative 36 performance indicators pursuant to the "Administrative Procedure 37 Act" for each utility which would establish reasonably achievable 38 targets for energy usage reductions and peak demand reductions and 39 that take into account the utility's energy efficiency measures and 40 other non-utility energy efficiency measures including measures to 41 support the development and implementation of building code 42 changes, appliance efficiency standards, the Clean Energy program, 43 and any other State-sponsored energy efficiency or peak demand 44 In establishing quantitative performance reduction programs. 45 indicators the board is directed to use a methodology that 46 incorporates weather, economic factors, customer growth, and 47 outage-adjusted efficiency factors to ensure that the public utility's 48 incentives or penalties, as determined under the bill, are based upon

performance and take into account the growth in the use of electric
 vehicles, microgrids, and distributed energy resources. Each
 quantitative performance indicator would be reviewed by the board
 every three years.

5 The bill also requires each electric public utility and gas public 6 utility to file an annual petition with the board to demonstrate 7 compliance with the energy efficiency and peak demand reduction 8 programs, compliance with the targets established pursuant to the 9 quantitative performance indicators, and for cost recovery of the 10 programs. In addition to a base rate case filing, each utility may 11 file annually with the board a petition to recover on a full and 12 current basis through a surcharge all reasonable and prudent costs 13 incurred as a result of energy efficiency measures and peak demand reduction measures required pursuant to the bill, including, but not 14 15 limited to, recovery of and on capital investment and the revenue 16 impact of sales losses resulting from the implementation of energy 17 efficiency and peak demand reduction schedules. If a utility 18 achieves the performance targets established in the quantitative 19 performance indicators, the utility would receive an incentive as 20 determined by the board, but failure to achieve the performance 21 targets would result in a penalty as determined by the board. The 22 penalty would scale in a linear fashion to a maximum that reflects 23 the extent of the failure to achieve the required savings.

24 The bill also requires the board to establish a stakeholder process 25 to evaluate the economically achievable energy usage reductions 26 and peak demand reduction requirements, rate adjustments, 27 quantitative performance indicators, and the process for evaluating, measuring, and verifying energy usage reductions and peak demand 28 29 reductions by the utilities. As part of the stakeholder process, the 30 board is required to establish an independent advisory group to 31 study the evaluation, measurement, and verification process for 32 energy efficiency programs and peak demand reduction programs, 33 which would include representatives from the public utilities, the 34 Division of Rate Counsel, and environmental and consumer 35 organizations, to provide recommendations to the board for improvements to the programs. The utilities are required to conduct 36 37 a demographic analysis as part of the stakeholder process to 38 determine if all customers are able to participate fully in 39 implementing energy efficiency measures and peak demand 40 reduction programs, to identify market barriers that prevent such 41 participation, and to make recommendations for measures to 42 overcome such barriers. Each utility would be entitled to recover 43 the costs associated with the analysis.

The bill requires the board to direct the electric public utilities to undertake a study to determine the optimal voltage for use in their distribution systems. Further, the bill requires the board to require the owner or operator of each commercial building over 25,000 square feet in the State to benchmark energy and water use for the

prior calendar year using the United States Environmental
 Protection Agency's Portfolio Manager tool.

This bill also establishes the "Community Solar Energy Pilot 3 Program" to permit customers of an electric public utility to 4 5 participate in a solar energy project that is remotely located from 6 their properties, but is within their utility service territory, to allow 7 for a credit to the customer's utility bill equal to the electricity 8 generated that is attributed to the customer's participation in the 9 solar energy project. The program would permit a customer of an 10 electric public utility to participate in a solar energy project with a 11 capacity of five megawatts or less. The board would be required to 12 adopt regulations that establish the parameters for the program. No 13 later than 36 months after the adoption of regulations establishing the pilot program, the board would be required to convert the pilot 14 15 program to a permanent program.

16 The bill would also require the board to establish an application 17 and approval process to certify public entities to act as a host 18 customer for remote net metering generating capacity. A public 19 entity certified to act as a host customer may allocate credits to 20 other public entities within the same utility service territory. A 21 public entity certified to act as a host customer may host a solar 22 energy project with a capacity up to the total average usage of the 23 utility accounts for the host public entity customer.

24 The bill also provides a tax credit for qualified wind energy 25 projects in an eligible wind energy zone. It also requires the 26 Department of Labor and Workforce Development to establish job 27 training programs for those who work in manufacturing and 28 servicing of offshore wind energy equipment through Workforce 29 Investment Boards, county colleges, and other appropriate 30 institutions and to develop training curricula in consultation with 31 the equipment manufacturers.