

ASSEMBLY, No. 3723

STATE OF NEW JERSEY

218th LEGISLATURE

INTRODUCED MARCH 22, 2018

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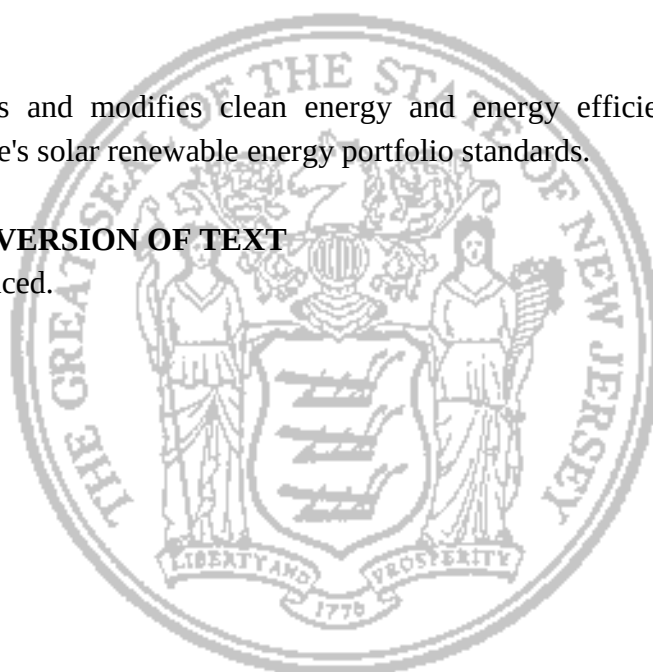
Assemblywomen Jasey, Reynolds-Jackson, Downey and Senator Singleton

SYNOPSIS

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

CURRENT VERSION OF TEXT

As introduced.



(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;

28 (4) consider the benefits and costs to ratepayers, local
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 thus is new matter.

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

6 c. The written report shall: (1) summarize the analysis
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
13 development and implementation of these technologies by public
14 and private entities in the State.

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

19
20 2. Section 38 of P.L.1999, c.23 (C.48:3-87) is amended to read
21 as follows:

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

27 (1) Its fuel mix, including categories for oil, gas, nuclear, coal,
28 solar, hydroelectric, wind and biomass, or a regional average
29 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 and
35 regulations adopted pursuant to P.L.1995, c.188.

36 b. Notwithstanding any provisions of the "Administrative
37 Procedure Act," P.L.1968, c.410 (C.52:14B-1 et seq.) to the
38 contrary, the board shall initiate a proceeding and shall adopt, in
39 consultation with the Department of Environmental Protection, after
40 notice and opportunity for public comment and public hearing,
41 interim standards to implement this disclosure requirement,
42 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.

6 Such standards shall be effective as regulations immediately
7 upon filing with the Office of Administrative Law and shall be
8 effective for a period not to exceed 18 months, and may, thereafter,
9 be amended, adopted or readopted by the board in accordance with
10 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:

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

19 (b) Actions at the regional or federal level cannot reasonably be
20 expected to achieve the compliance with the federal standards.

21 (2) By July 1, 2009, the board shall adopt, pursuant to the
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 leakage. If the transition period allowed pursuant to this
37 subparagraph occurs after the implementation of an emissions
38 portfolio standard or other regulatory mechanism to mitigate
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.

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

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

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

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

16 (2) beginning on January 1, **2001** 2020, that **one-half of**
17 **one** 21 percent of the kilowatt hours sold in this State by each
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** 2025, 35 percent 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
43 limited to, adjusting the Class I renewable energy requirement.

44 An electric power supplier or basic generation service provider
45 may satisfy the requirements of this subsection by participating in a
46 renewable energy trading program approved by the board in
47 consultation with the Department of Environmental Protection;

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]**
6 2033, that requires the following number or percentage, as the case
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	[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%

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
31 electric power generators connected to the distribution system in
32 this State, and to establish a framework within which, of the
33 electricity that the generators sell in this State, suppliers and
34 providers shall each obtain at least 3.470 percent in the energy year
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: **]**

38	<u>EY 2022</u>	<u>5.100%</u>
39	<u>EY 2023</u>	<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	<u>EY 2027</u>	<u>4.350%</u>
44	<u>EY 2028</u>	<u>3.740%</u>
45	<u>EY 2029</u>	<u>3.070%</u>
46	<u>EY 2030</u>	<u>2.210%</u>
47	<u>EY 2031</u>	<u>1.580%</u>

1 EY 2032 1.400%

2 EY 2033 1.100%

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 1, 2021.

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.

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
11 the applicant in full upon either denial of the application by the
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 report to the Legislature, detailing 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 new solar purchase obligations as a change required by operation of
3 law and implement the provisions of this subsection in a manner so
4 as to prevent any subsidies between suppliers and providers and to
5 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.

13 The renewable energy portfolio standards adopted by the board
14 pursuant to paragraphs (1) and (2) of this subsection shall be
15 effective as regulations immediately upon filing with the Office of
16 Administrative Law and shall be effective for a period not to exceed
17 18 months, and may, thereafter, be amended, adopted or readopted
18 by the board in accordance with the provisions of the
19 "Administrative Procedure Act."

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

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

34 The percentage established by the board pursuant to this
35 paragraph shall serve as an offset to the renewable energy portfolio
36 standard established pursuant to **【paragraphs (1) and】** paragraph (2)
37 of this subsection and shall reduce the corresponding Class I
38 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.

47 An electric power supplier or basic generation service provider
48 shall 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.).

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

21 (1) net metering standards for electric power suppliers and basic
22 generation service providers. The standards shall require electric
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
28 renewable energy source, for the net amount of electricity supplied
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 Electronics Engineers. The board shall allow electric public
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

1 shall be effective for a period not to exceed 18 months, and may,
2 thereafter, be amended, adopted or readopted by the board in
3 accordance with the provisions of the "Administrative Procedure
4 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**
14 **portfolio standard adopted pursuant to subsection g. of this section,**
15 **or the gas energy efficiency portfolio standard adopted pursuant to**
16 **subsection h. of this section】.**

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**
26 **the absence of such a standard】** pursuant to section 3 of P.L. ,
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】 shall** adopt, 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 needs of low-income communities that **【may】 shall** 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**
40 **is 20 percent below the usage projected by the board in the absence**
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】** subsection 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.

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

17	EY 2014	\$339
18	EY 2015	\$331
19	EY 2016	\$323
20	EY 2017	\$315
21	EY 2018	\$308
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] <u>\$228</u>
27	EY 2024	[\$266] <u>\$218</u>
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	<u>EY 2030</u>	<u>\$158</u>
34	<u>EY 2031</u>	<u>\$148</u>
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

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 l. The board shall implement its responsibilities under the
13 provisions of this section in such a manner as to:

14 (1) place greater reliance on competitive markets, with the
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
36 market diversity, competition, and appropriate coverage across all
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.

47 o. The board, in consultation with the Department of
48 Environmental Protection, electric public utilities, the Division of

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;

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

14 (4) reductions in State and national dependence on the use of
15 fossil fuels.

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

22 q. (1) During the energy years of 2014, 2015, and 2016, a solar
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
28 section may file an application with the board for approval of a
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.

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

13 r. (1) For all proposed solar electric power generation facility
14 projects except for those solar electric power generation facility
15 projects approved pursuant to subsection q. of this section, and for
16 all projects proposed in ~~each energy year following energy year~~
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
28 such by the board, after notice to the public and opportunity for
29 public comment or hearing. A proposed solar power electric
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 s. In addition to any other requirements of P.L.1999, c.23 or
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
36 been approved pursuant to subsection q. of this section.

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

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
22 and Control Act," P.L.1976, c.141 (C.58:10-23.11 et seq.) or any
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
28 board, in consultation with the Department of Environmental
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
32 sanitary landfill facility, which projects shall include, but not be
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 the
44 discharge of that hazardous substance at the real property;

45 (b) the person did not discharge the hazardous substance, is not
46 in any way responsible for the hazardous substance, and is not a
47 successor to the discharger or to any person in any way responsible
48 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
36 P.L.2012, c.24, the board shall complete a proceeding to establish a
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 v. The issuance of SRECs for all solar electric power
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.

45 Each electric public utility shall be required to achieve annual
46 reductions in the use of electricity of two percent of the average
47 annual usage in the prior three years within five years of
48 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. (C.) (pending before the Legislature as this bill), the board
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. (C.) (pending before the Legislature as this bill), the board
26 shall adopt quantitative performance indicators pursuant to the
27 "Administrative Procedure Act," P.L.1968, c.410 (C.52:14B-1 et
28 seq.) for each electric public utility and gas public utility, which
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
38 Legislature as this bill). In establishing quantitative performance
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 (C.) (pending before the Legislature as this bill), building codes,
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
14 programs to be approved by the board no later than 30 days prior to
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
22 1.0 at the portfolio level, considering both economic and
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
38 programs approved pursuant to this section. 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.

44 e. (1) Each electric public utility and gas public utility shall
45 file an annual petition with the board to demonstrate compliance
46 with the energy efficiency and peak demand reduction programs,
47 compliance with the targets established pursuant to the quantitative
48 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
14 indicators, the public utility shall receive an incentive as determined
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
30 required savings.

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
38 "Administrative Procedure Act."

39 f. (1) The board shall establish a stakeholder process to
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

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

4 (2) Each electric public utility and gas public utility shall
5 conduct a demographic analysis as part of the stakeholder process
6 to determine if all of its customers are able to participate fully in
7 implementing energy efficiency measures, to identify market
8 barriers that prevent such participation, and to 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.

12 g. For the purposes of this section, the board shall only
13 consider usage for which public utility energy efficiency programs
14 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.

24 b. No later than five years after the date of enactment of P.L. ,
25 c. (C.) (pending before the Legislature as this bill), the board
26 shall require the owner or operator of each commercial building
27 over 25,000 square feet in the State to benchmark energy and water
28 use for the prior calendar year using the United States
29 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
38 located from their properties but is within their electric public
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 shall
43 establish:

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

46 (2) an annual capacity limit for all solar energy projects under
47 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.
- 18 c. The board shall make available on its Internet website
- 19 information on solar energy projects whose owners are seeking
- 20 participants.
- 21 d. The board shall establish standards and an application
- 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.
- 32 The board may restrict qualified solar energy projects to those
- 33 located on brownfields, landfills, areas designated in need of
- 34 redevelopment, in underserved communities, or on commercial
- 35 rooftops.
- 36 e. Subject to review by the board, an electric public utility shall
- 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
- 47 entities. The rules and regulations shall also:

- 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;
- 8 (4) provide for a minimum number of participating customers
- 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,
- 14 including residential customers in multifamily housing;
- 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.
- 36 g. As used in this section:
- 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
- 42 Community Solar Energy Pilot Program. "Solar power includes flat
- 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.

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

17 c. The board shall require the owner of a solar energy project
18 to pay a certified public entity a pro-rated public sponsor fee of
19 \$10,000 per megawatt, up to a 10-megawatt allowance for each
20 public entity. The board shall require each participating customer
21 to pay at least 50 percent of the societal benefits charge established
22 pursuant to section 12 of P.L.1999, c.23 (C.48:3-60).

23

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
32 restrictions and requirements of this section. To be eligible for any
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).

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

1 time employees, to be eligible for a credit under this section. A
2 business that acquires a qualified wind energy facility after the
3 effective date of P.L.2010, c.57 (C.48:3-87.1 et al.) shall also be
4 deemed to have acquired the capital investment made or acquired
5 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.

26 (c) The calculation of the number of new, full-time employees
27 required pursuant to subparagraphs (a) and (b) of this paragraph
28 may include the number of new, full-time positions resulting from
29 an equipment supply coordination agreement with equipment
30 manufacturers, suppliers, installers and operators associated with
31 the supply chain required to support the qualified wind energy
32 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
36 Act," N.J.S.54A:1-1 et seq., unless that state has entered into a
37 reciprocity agreement with the State of New Jersey, provided that
38 any employee whose work is provided pursuant to a collective
39 bargaining agreement with **the port district** a business in the wind
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
43 employment incentive grant pursuant to the "Business Employment
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.

7 b. A business shall apply for the credit by **【August 1, 2016】**
8 July 1, 2024, and a business shall submit its documentation for
9 approval of its credit amount by **【August 1, 2019】** July 1, 2027.

10 c. The credit allowed pursuant to this section shall be
11 administered in accordance with the provisions of subsection c. of
12 section 3 of P.L.2007, c.346 (C.34:1B-209) and section 33 of
13 P.L.2009, c.90 (C.34:1B-209.1), except that all references therein to
14 "qualified business facility" shall be deemed to refer to "qualified
15 wind energy facility," as that term is defined in subsection f. of this
16 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

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

5 The rules and regulations 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.).

11 f. As used in this section: the terms "authority," "business,"
12 and "capital investment" shall have the same meanings as defined in
13 section 2 of the "Urban Transit Hub Tax Credit Act," P.L.2007,
14 c.346 (C.34:1B-208), except that all references therein to "qualified
15 business facility" shall be deemed to refer to "qualified wind energy
16 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.

25 "Qualified offshore wind project" **【means】** shall have the same
26 meaning as **【the term is defined】** provided in section 3 of P.L.1999,
27 c.23 (C.48:3-51).

28 "Qualified wind energy facility" means any building, complex of
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)

40
41 8. (New section) The Department of Labor and Workforce
42 Development shall establish job training programs for those who
43 work in manufacturing and servicing of offshore wind energy
44 equipment through Workforce Investment Boards, county colleges,
45 and other appropriate institutions. The department shall develop
46 training curricula in consultation with the equipment manufacturers.

47
48 9. This act shall take effect immediately.

STATEMENT

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

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

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

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

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

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

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

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

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

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

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

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
13 energy year 2021 and then gradually reducing the schedule
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,

1 and seven percent of the cost to customers of the total number of
2 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
7 commercial operation. The escrow would be forfeited to the State
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.

17 Further, the bill requires the board to establish an energy
18 efficiency program for electric public utilities and gas public
19 utilities to reduce electricity usage, natural gas usage, and peak
20 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 reduction programs. In establishing quantitative performance
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

1 performance and take into account the growth in the use of electric
2 vehicles, microgrids, and distributed energy resources. Each
3 quantitative performance indicator would be reviewed by the board
4 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
14 reduction measures required pursuant to the bill, including, but not
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,
28 measuring, and verifying energy usage reductions and peak demand
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
36 improvements to the programs. The utilities are required to conduct
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.

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

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

3 This bill also establishes the "Community Solar Energy Pilot
4 Program" to permit customers of an electric public utility to
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
14 the pilot program, the board would be required to convert the pilot
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.