SENATE COMMITTEE SUBSTITUTE FOR

SENATE, No. 877

STATE OF NEW JERSEY

218th LEGISLATURE

ADOPTED FEBRUARY 22, 2018

Sponsored by:
Senator STEPHEN M. SWEENEY
District 3 (Cumberland, Gloucester and Salem)
Senator BOB SMITH
District 17 (Middlesex and Somerset)
Senator JEFF VAN DREW
District 1 (Atlantic, Cape May and Cumberland)

SYNOPSIS

Establishes and modifies clean energy and energy efficiency programs; establishes zero emission certificate program; modifies State's solar renewable energy portfolio standards.

CURRENT VERSION OF TEXT

Substitute as adopted by the Senate Budget and Appropriations Committee.

AN ACT concerning energy, and amending and supplementing various parts of the statutory law.

BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey:*

1. (New section) a. The Legislature finds and declares that:

(1) Climate change is one of the greatest threats facing the State today and in the future. Reducing emissions of carbon dioxide, other greenhouse gases, and other pollutants by preserving and expanding zero-emission electricity generation within and outside the State is critical to mitigating the impacts of climate change.

(2) Reducing emissions of carbon dioxide, other greenhouse gases, and other pollutants by preserving and expanding zero-emission electricity generation within and outside the State is critical to mitigating the impacts of climate change.

(3) Nuclear power is a reliable, zero-emission source of energy that has supplied New Jersey's energy demands for decades.

(4) New Jersey has historically relied on a diverse mix of energy supply sources, including nuclear power, to meet the needs of its residents and businesses.

(5) Reducing emissions of carbon dioxide, other greenhouse gases, and other pollutants, and preserving and developing zero-emission electricity generation sources within and outside the State that currently provide electricity to customers in New Jersey, are critical to improving air quality for New Jersey residents.

(6) The Energy Master Plan of New Jersey, last updated in 2015, requires significant revisions to ensure that 100 percent of the State's electric energy needs are generated by clean energy sources by 2050, and any update to the Energy Master Plan by the State must include a focus on the expansion of renewable and zero-emission sources of energy.

(7) The existing renewable energy portfolio standard has been successful in promoting the growth of renewable energy generation to reduce air pollution in New Jersey; however, to achieve its near term environmental goals, New Jersey must expand its commitment to zero-emission energy generation and value the environmental attributes of zero-emission generation sources that currently fall outside the scope of the existing renewable energy portfolio standard, including but not limited to nuclear power.

(8) Nuclear power generation is a critical component of the State's clean energy portfolio because nuclear power plants do not emit carbon dioxide, other greenhouse gases, and other pollutants; in addition, nuclear power is an important element of a diverse

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

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

energy generation portfolio that currently meets approximately 40 percent of New Jersey's electric power needs.

(9) Several of the existing, licensed, and operating nuclear power plants within and outside the State that currently provide electricity to customers in New Jersey are at risk of abrupt retirement due to a variety of factors.

(10) The retirement of nuclear power generation will inevitably result in an immediate increase in air emissions within New Jersey due to increased reliance on natural gas-fired generation and coal-fired generation.

(11) Poor air quality has a disproportionate impact on the most vulnerable citizens of New Jersey including children, the elderly, and people living in poverty. Fossil-fuel power plants drive increases in pollutants like ground-level ozone, which aggravates respiratory illnesses for individuals with decreased lung function. Public health and environmental justice necessitate a reduction in these pollutants to protect the most vulnerable of our citizenry.

(12) As a coastal state, New Jersey is particularly exposed to many of the effects of global climate change, such as rising sea levels and more extreme storms. Many of New Jersey's most important commercial and tourism assets are located in coastal areas, and events like Superstorm Sandy have demonstrated the imminent and tangible threats that intense storms pose to New Jersey's economy and environment.

(13) Given the overwhelming scientific consensus that fossil fuel use is causing potentially irreversible global climate change and the attendant environmental catastrophes, it is a moral imperative that the State invest in energy infrastructure within and outside the State that does not produce greenhouse gases.

b. The Legislature therefore determines that:

(1) The abrupt retirement of existing, licensed, and operating nuclear power plants within and outside the State that provide electricity to customers in New Jersey, and any concomitant increase in the proportion of New Jersey's electricity demand met by natural gas and coal, will result in a substantial increase in emissions of several serious pollutants, and associated adverse public health and environmental impacts. The pollutants resulting from increased fossil-fuel generation and drilling include emissions of carbon dioxide, methane, carbon monoxide, sulfur dioxide, particulate matter, volatile organic compounds, mercury, and nitrous oxides, and the creation of ozone.

(2) New Jersey is currently not projected to meet certain federal and State air quality standards and emissions level requirements, counties of the State are currently designated as nonattainment for the federal 8-hour Ozone National Ambient Air Quality Standard, and the abrupt retirement of nuclear power plants that serve New Jersey combined with increased reliance on natural gas-fired and coal-fired generation will substantially impede the State's ability to

meet those federal and State air quality and emissions standards and requirements.

(3) In light of the primacy of natural gas use for heating in New Jersey, increased reliance on natural gas-fired generation will render the electric generation and delivery systems less resilient and more vulnerable to the impacts of extreme winter weather events, natural gas pipeline accidents, and other factors affecting the deliverability of natural gas to electric generating stations in and around the State.

(4) The model of providing credits to zero- or low-emission energy generation sources as compensation for their environmental attributes has proven successful for Class I and Class II renewable energy sources, which receive renewable energy certificates, and solar electric power generators, which receive solar renewable energy certificates.

(5) A program that recognizes and compensates nuclear energy generators in a manner similar to other non-emitting energy generation resources to the extent required to prevent the loss of nuclear energy, subject to independent review as provided in section 3 of P.L. , c. (C.) (pending before the Legislature as this bill), which the State's residents and businesses rely on for approximately 40 percent of their electricity needs, could, in the absence of equally or more cost-effective clean energy alternatives, further the State's interest in environmental protection and maintaining a diverse mix of energy sources.

(6) While recognizing the importance of nuclear energy generation, the State must also commit to the deployment of renewable and zero-emission energy to address climate change, drive economic development, and create new employment opportunities.

(7) In order to meet the goals under the "Global Warming Response Act," P.L.2007, c.112 (C.26:2C-37 et seq.), to reduce greenhouse gas emissions 80 percent by 2050, it will be necessary to significantly reduce emissions from the electric power generation sector. This will require reducing the State's heavy reliance on natural gas for electric power generation, the primary source of emissions from the electric power generation sector.

(8) The zero emission certificate program set forth in sections 1 through 4 of P.L. , c. (C.) (pending before the Legislature as this bill) is structured such that its costs are guaranteed to be significantly less than the social cost of carbon emissions avoided by the continued operation of selected nuclear power plants, ensuring that the program does not place an undue financial burden on retail customers. The social cost of carbon, as calculated by the U.S. Interagency Working Group on the Social Cost of Carbon in its August 2016 Technical Update, is an accepted measure of the cost of carbon emissions. Carbon emissions avoided by selected

nuclear power plants are but one component of their emissions avoidance benefits.

2. (New section) As used in sections 1 through 4 of P.L. , c. (C.) (pending before the Legislature as this bill):

"Board" shall have the same meaning as provided in section 3 of P.L.1999, c.23 (C.48:3-51).

"Electric public utility" shall have the same meaning as provided in section 3 of P.L.1999, c.23 (C.48:3-51).

"Eligibility period" means the period of time, measured in energy years, during which a selected nuclear power plant may receive zero emission certificates pursuant to section 3 of P.L. , c. (C.) (pending before the Legislature as this bill).

"Eligible nuclear power plant" means a nuclear power plant certified by the board to allow it to be selected to participate in the program established pursuant to section 3 of P.L. , c. (C.) (pending before the Legislature as this bill).

"Emissions avoidance benefits" means the benefits associated with the preservation of better air quality and other environmental attributes caused by the production of electric energy from a selected nuclear power plant, as well as the reduction in damage that would otherwise be caused by carbon dioxide or other greenhouse gases or other pollutants emitted but for the production of electric energy from a selected nuclear power plant. Such damage threatens massive economic and lifestyle disruption, and includes but is not limited to a contribution to sea level rise, heat waves, more frequent and severe occurrence of extreme weather events, and damage to agriculture, water resources, public health, energy and communication systems, and the natural ecosystems that define and support communities.

"Energy year" or "EY" shall have the same meaning as provided in section 3 of P.L.1999, c.23 (C.48:3-51).

"Nuclear power plant" means an individual electric generating unit utilizing nuclear fuel to produce electric power.

"Selected nuclear power plant" means an eligible nuclear power plant selected by the board to participate in the program established pursuant to section 3 of P.L. , c. (C.) (pending before the Legislature as this bill).

"Zero emission certificate" or "ZEC" means a certificate, issued by the board or its designee, representing the fuel diversity, air quality, and environmental attributes of one megawatt-hour of electricity generated by an eligible nuclear power plant selected by the board to participate in the program established pursuant to section 3 of P.L. , c. (C.) (pending before the Legislature as this bill).

3. (New section) a. As part of an application submitted to the board pursuant to subsection c. of this section, a nuclear power

plant seeking to participate in the program established by sections 1 through 4 of P.L. , c. (C.) (pending before the Legislature as this bill) shall provide to the board any financial information requested by the board pertaining to the nuclear power plant, including, but not limited to, certified cost projections over the next three energy years, including operation and maintenance expenses, fuel expenses, including spent fuel expenses, non-fuel capital expenses, fully allocated overhead costs, the cost of operational risks and market risks that would be avoided by ceasing operations, and any other information, financial or otherwise, to demonstrate that the nuclear power plant's fuel diversity, air quality, and environmental attributes are at risk of loss because the nuclear power plant is projected to not fully cover its costs and risks, or alternatively is projected to not fully cover its costs and risks including its risk-adjusted cost of capital. For purposes of this subsection, operational risks shall include, but need not be limited to, the risk that operating costs will be higher than anticipated because of new regulatory mandates or equipment failures and the risk that per megawatt hour costs will be higher than anticipated because of a lower than expected capacity factor, and market risks shall include, but need not be limited to, the risk of a forced outage and the associated costs arising from contractual obligations, and the risk that output from the nuclear power plant may not be able to be sold at projected levels. An application submitted to the board pursuant to subsection c. of this section, shall also include a certification that the nuclear power plant will cease operations within three years unless the nuclear power plant experiences a material financial change, and the certification shall specify the necessary steps required to be completed to cease the nuclear power plant's operations.

The financial and other information required pursuant to this subsection may be submitted on a confidential basis and shall be treated and maintained as confidential by the board and shall not be subject to public disclosure, notwithstanding any law to the contrary, including the common law. The board and the Attorney General shall jointly approve the disclosure of such confidential information to a party that they deem essential to aid the board in making the determinations required under this subsection, provided that the party is not in a position such that disclosure could harm competition and the party agrees in writing to maintain the confidentiality of the confidential information.

b. Notwithstanding any law, regulation, rule, or order to the contrary, the board shall complete a proceeding no later than 180 days after the date of enactment of P.L. , c. (C.) (pending before the Legislature as this bill), to allow for the commencement of a program allowing for the issuance by the board of a zero emission certificate. In this proceeding, the board shall adopt, after notice, the opportunity for comment, and public hearing, an order

establishing a ZEC program for selected nuclear power plants which shall include, but need not be limited to:

(1) a method and application process for determination of the eligibility and selection of nuclear power plants; and

(2) establishment of a mechanism for each electric public utility to purchase ZECs from selected nuclear power plants and a mechanism for the board to effectuate the provisions of subsection i. of this section.

c. No later than 210 days after the date of enactment of P.L. , c. (C.) (pending before the Legislature as this bill), a nuclear power plant seeking to participate in the program established by sections 1 through 4 of P.L. , c. (C.) (pending before the Legislature as this bill) shall submit its application to the board.

d. Notwithstanding any law, rule, regulation, or order to the contrary, the board shall complete a proceeding no later than 330 days after the date of enactment of P.L. , c. (C.) (pending before the Legislature as this bill) and shall adopt, after notice, the opportunity for comment, and public hearing, an order establishing a rank-ordered list of the nuclear power plants eligible to be selected to receive ZECs, and establishing which eligible nuclear power plants have been selected to receive ZECs pursuant to this section. If the board determines, in its discretion, that no nuclear plant that applies pursuant to subsection c. of this section satisfies the objectives of sections 1 through 4 of P.L. , c. (C.) (pending before the Legislature as this bill), then the board shall be under no obligation to certify any nuclear power plant as an eligible nuclear power plant.

e. To be certified by the board as an eligible nuclear power plant, a nuclear power plant shall:

(1) be licensed to operate by the United States Nuclear Regulatory Commission by the date of enactment of P.L. , c. (C.) (pending before the Legislature as this bill) and through 2030 or later;

(2) demonstrate to the satisfaction of the board that it makes a significant and material contribution to the air quality in the State by minimizing emissions that result from electricity consumed in New Jersey, it minimizes harmful emissions that adversely affect the citizens of the State, and if the nuclear power plant were to retire, that that retirement would significantly and negatively impact New Jersey’s ability to comply with State air emissions reduction requirements;

(3) demonstrate to the satisfaction of the board, through the financial and other confidential information submitted to the board pursuant to subsection a. of this section, and any other information required by the board, which information may be submitted on a confidential basis and shall be treated and maintained as confidential by the board and shall not be subject to public disclosure, notwithstanding any law to the contrary, including the

common law, that the nuclear power plant's fuel diversity, air quality, and environmental attributes are at risk of loss because the nuclear power plant is projected not to fully cover its costs and risks, or alternatively is projected not to cover its costs including its risk-adjusted cost of capital, and that the nuclear power plant will cease operations within three years unless the nuclear power plant experiences a material financial change;

(4) certify annually that the nuclear power plant does not receive any direct or indirect payment or credit under a law, rule, regulation, order, tariff, or other action of this State or any other state, or a federal law, regulation, order, tariff, or other action, or a regional compact, despite its reasonable best efforts to obtain any such payment or credit, for its fuel diversity, resilience, air quality or other environmental attributes that will eliminate the need for the nuclear power plant to retire, except for any payment or credit received under the provisions of sections 1 through 4 of P.L. , c. (C.) (pending before the Legislature as this bill); and

(5) submit an application fee to the board in an amount to be determined by the board, but which shall not exceed $250,000, to be used to defray the costs incurred by the board to administer the ZEC program.

f. In ranking eligible nuclear power plants from first to last, the board shall consider how well the nuclear power plants satisfy the criteria set forth under the provisions of sections 1 through 4 of P.L., c. (C.) (pending before the Legislature as this bill), and shall also consider other relevant factors such as sustainability or long-term commitment to nuclear energy production in a manner that supports New Jersey' cost-effective transition to a zero carbon energy supply. Two or more eligible nuclear power plants shall not have the same ranking.

g. (1) The board shall select eligible nuclear power plants to receive ZECs according to their ranking. Beginning with the top-ranked eligible nuclear power plant and continuing in rank order, the board shall continue to select nuclear power plants but not beyond the point at which the combined number of megawatt-hours of electricity produced in the energy year immediately prior to the date of enactment of P.L. , c. (C.) (pending before the Legislature as this bill) by all selected nuclear power plants equals 40 percent of the total number of megawatt-hours of electricity distributed by electric public utilities in the State in the energy year immediately prior to the date of enactment of P.L. , c. (C.) (pending before the Legislature as this bill). The board shall not select an eligible nuclear power plant to receive ZECs if the addition of the electricity produced by that nuclear power plant in the energy year immediately prior to the date of enactment of P.L. , c. (C.) (pending before the Legislature as this bill) to the electricity produced in the energy year immediately prior to the date of enactment of P.L. , c. (C.) (pending before the Legislature as

this bill) by the selected plants ranked ahead of that plant on the rank-ordered list exceeds 40 percent of the total number of megawatt-hours of electricity distributed by electric public utilities in the State in the energy year immediately prior to the date of enactment of P.L. , c. (C.) (pending before the Legislature as this bill).

(2) A selected nuclear power plant shall be eligible to receive ZECs 330 days after the date of enactment of P.L. , c. (C.) (pending before the Legislature as this bill). In the first energy year in which an eligible nuclear power plant is selected, the selected nuclear power plant shall receive a number of ZECs equal to the number of megawatt-hours of electricity it produced in that energy year starting on the date of the eligible nuclear power plant's selection. In each energy year thereafter, each selected nuclear power plant shall receive a number of ZECs equal to the number of megawatt-hours of electricity that it produced in that energy year.

h. (1) Selected nuclear power plants shall initially receive ZECs for an eligibility period that shall run through the end of the first energy year in which the nuclear power plant is selected, plus an additional three energy years.

(2) No later than 13 months prior to the conclusion of the initial eligibility period established pursuant to paragraph (1) of this subsection, and no later than 13 months prior to the conclusion of each three energy year eligibility period thereafter, a nuclear power plant may demonstrate its eligibility to the board and the board may certify the nuclear power plant's eligibility to receive ZECs for additional eligibility periods of three energy years, consistent with the provisions of sections 1 through 4 of P.L. , c. (C.) (pending before the Legislature as this bill).

(3) A selected nuclear power plant shall annually certify to the board that it will continue operations at full or near full capacity for the duration of the period of its eligibility to receive ZECs, except with respect to nuclear power plant shutdowns for necessary maintenance and refueling.

i. (1) The board shall determine the price of a ZEC each energy year by dividing the total number of dollars held by electric public utilities in the accounts established pursuant to paragraph (1) of subsection j. of this section at the end of the prior energy year by the greater of: 40 percent of the total number of megawatt-hours of electricity distributed by the electric public utilities in the State in the prior energy year, or the number of megawatt-hours of electricity generated in the prior energy year by the selected nuclear power plants.

(2) Each electric public utility in the State shall be required to begin to purchase ZECs on a monthly basis from each selected nuclear power plant with payment to follow within 90 days after the conclusion of the first energy year in which selected nuclear power plants receive ZECs and within 90 days after the conclusion of each

subsequent energy year. The number of ZECs an electric public utility shall be required to purchase shall equal the total number of ZECs received by the selected nuclear power plants for the prior energy year pursuant to paragraph (2) of subsection g. of this section multiplied by the percentage of electricity distributed in the State by the electric public utility as compared to other electric public utilities in the State.

(3) To ensure that a selected nuclear power plant shall not receive double-payment for its fuel diversity, resilience, air quality or other environmental attributes, the board shall annually determine the dollar amount received by the selected nuclear power plant in an energy year pursuant to a law, rule, regulation, order, tariff, or other action of the State or any other state, or a federal law, regulation, order, tariff, or other action, or regional compact referenced in paragraph (4) of subsection e. of this section. Notwithstanding paragraph (2) of this subsection, the number of ZECs purchased by each electric public utility from a selected nuclear power plant for an energy year shall be reduced by the number of ZECs equal in value to the dollar amount determined by the board in this paragraph, multiplied by the percentage of electricity distributed in the State by the electric public utility as compared to other electric public utilities in the State. To the extent that the board determines that a selected nuclear plant receives revenues for its fuel diversity, resilience, air quality, or other environmental attributes, the board shall immediately reduce the number of ZECs on a prospective basis consistent with the level of such revenues.

j. (1) The board shall order the full recovery of all costs associated with the electric public utility's required procurement of ZECs, and with the board's implementation of the ZEC program under sections 1 through 4 of P.L. , c. (C.) (pending before the Legislature as this bill), through a non-bypassable, irrevocable charge imposed on the electric public utility's retail distribution customers. Within 150 days after the date of enactment of P.L. , c. (C.) (pending before the Legislature as this bill), each electric public utility shall file with the board a tariff to recover from its retail distribution customers a charge in the amount of $0.004 per kilowatt-hour which reflects the emissions avoidance benefits associated with the continued operation of selected nuclear power plants. Within 60 days after the tariff filing required pursuant to this paragraph, after notice, the opportunity for comment, and public hearing, the board shall approve the tariff, provided that it is consistent with the provisions of this subsection. No later than the date of the board's order establishing the initial selected nuclear power plants to receive ZECs, each electric public utility shall implement the tariff and begin collecting from its customers the approved charge. Revenues collected by the electric public utility from the non-bypassable, irrevocable charge shall be placed in a

separate, interest-bearing account and shall be used solely to purchase ZECs, and to reimburse the board for reasonable, verifiable costs the board incurs to implement the ZEC program pursuant to sections 1 through 4 of P.L. , c. (C.) (pending before the Legislature as this bill) to the extent the board's costs exceed the application fees collected by the board pursuant to paragraph (5) of subsection e. of this section.

(2) Notwithstanding any provision of sections 1 through 4 of P.L. , c. (C.) (pending before the Legislature as this bill) to the contrary, an electric public utility shall not be required to purchase any additional number of ZECs if the cost of the additional number of ZECs exceeds the revenues deposited in the electric public utility's separate, interest-bearing account, created pursuant to paragraph (1) of this subsection, for that energy year, after subtracting the reasonable, verifiable costs incurred by the board during that energy year to implement the ZEC program pursuant to this section, which costs shall be remitted to the board from the ZEC fund each energy year in a manner to be determined by the board. Excess monies in an electric public utility's separate, interest-bearing account shall be refunded to its retail distribution customers at the end of each energy year.

(3) (a) Notwithstanding the provisions of paragraph (1) of this subsection, and to ensure that the ZEC program remains affordable to New Jersey customers, the board may, in its discretion, reduce the per kilowatt-hour charge imposed by paragraph (1) of this subsection starting in the second three year eligibility period and for each subsequent three year eligibility period thereafter, provided that the board determines that a reduced charge will nonetheless be sufficient to achieve the State's air quality and other environmental objectives by preventing the retirement of the nuclear power plants that meet the eligibility criteria established pursuant to subsections d. and e. of this section.

(b) If the board reduces the per kilowatt-hour charge imposed by paragraph (1) of this subsection pursuant to subparagraph (a) of this paragraph, the reduction shall be applicable to the next eligibility period only and the board shall make its determination no later than 13 months prior to the start of that eligibility period. Within 30 days thereafter, each electric public utility shall file, in lieu of the tariff described in paragraph (1) of this subsection, a tariff consistent with the board's determination. Within 60 days after filing of the tariff, after notice, the opportunity for comment, and public hearing, the board shall approve the revised tariff, provided that it is consistent with the board's determination. The revised tariff will take effect starting in the next eligibility period.

(c) If the board does not certify any nuclear power plants for a subsequent eligibility period pursuant to sections 1 through 4 of P.L. , c. (C.) (pending before the Legislature as this bill), the board may, in its discretion, reduce the per kilowatt-hour charge imposed pursuant to paragraph (1) of this subsection to ensure that

the ZEC program remains affordable to New Jersey customers in the final year of the first eligibility period, provided that the board determines that a reduced charge will nonetheless be sufficient to achieve the State's air quality and environmental objectives by preventing the retirement of the nuclear power plants that meet the eligibility criteria established pursuant to subsections d. and e. of this section.

(d) For the second three energy year eligibility period, and every subsequent eligibility period thereafter, a selected nuclear power plant shall pay a renewal fee to the board in an amount to be determined by the board, but which shall not exceed $250,000, to be used to defray the costs incurred by the board to administer the ZEC program.

k. (1) A selected nuclear power plant shall be excused from performance, including but not limited to the sale of ZECs, and a payment from an electric public utility shall not be due to the selected nuclear power plant, if:

(a) a selected nuclear power suspends or ceases operations, despite the selected nuclear power plant's reasonable efforts to continue operations, due to an event beyond its control, including but not limited to acts of God, flood, drought, earthquake, storm, fire, lightning, epidemic, war, riot, labor dispute, labor or material shortage, sabotage, or explosion. The selected nuclear power plant shall no longer be excused from performance, and a payment from a public utility shall be due, after conclusion of the event;

(b) a State law is enacted imposing a significant new tax, special assessment, or fee on the generation of electricity, the ownership or leasehold of a generating unit, or the privilege or occupation of the generation, ownership, or leasehold of generation units by a selected nuclear power plant;

(c) a State or federal law is enacted that materially reduces the value of a ZEC, or the board exercises its discretion to reduce the amount of the per kilowatt-hour charge pursuant to paragraph (3) of subsection j. of this section;

(d) the selected nuclear power plant requires capital expenditures in excess of $40,000,000 that were neither known nor reasonably foreseeable at the time it was selected to receive ZECs, and the capital expenditures are expenditures that a prudent owner or operator of a selected nuclear power plant would not undertake; or

(e) The United States Nuclear Regulatory Commission terminates the selected nuclear power plant's license.

(2) If a selected nuclear power plant ceases operations during an eligibility period for any reason other than those specified in this subsection, the selected nuclear power plant shall pay a charge to the electric public utilities that purchased ZECs from the selected nuclear power plant in an amount equal to the compensation received for the sale of ZECs since the board's last determination of

the selected nuclear power plant's eligibility to receive ZECs. An electric public utility shall provide a refund to its retail distribution customers in an amount equal to the charge paid by a selected nuclear power plant to the electric public utility pursuant to the provisions of this paragraph.

(3) The owner of a selected nuclear power plant shall, within two years after receiving ZECs, submit a plan to the board to retain, retrain, or compensate personnel whose employment would be eliminated as a direct result of the cessation of the selected nuclear power plant's operations, including an alternative economic development plan for communities that rely on the selected nuclear power plant for a substantial portion of their tax revenues.

l. A selected nuclear power plant shall not lay off any personnel unless the lay-off is due to employee misconduct or underperformance issues, or due to the suspension or cessation of the selected nuclear power plant's operations as provided in subsection k. of this section.

m. The owner of a selected nuclear power plant shall, within two years after receiving ZECs, conduct a study and prepare a written report in cooperation with selected experts, to determine the optimal use of dry cask storage of spent nuclear fuel at its site, considering environmental impacts, worker safety, and cost impacts.

4. (New section) a. No later than 10 years after the date of enactment of P.L. , c. (C.) (pending before the Legislature as this bill), the Board of Public Utilities shall conduct a study to evaluate the efficacy of the zero emission certificate program and submit a written report thereon to the Governor and, pursuant to section 2 of P.L.1991, c.164 (C.52:14-19.1), to the Legislature. In conducting the study, the board shall evaluate the program's effect on the premature retirement of nuclear power plants, its effect on the environment and air quality in the State, and its contribution to a more reliable energy supply by assuring fuel diversity. The study shall also evaluate the program's benefits and costs to ratepayers.

b. The written report shall: (1) summarize the analysis conducted pursuant to subsection a. of this section; (2) discuss and quantify the potential benefits and costs associated with the program; (3) recommend any changes to the program or whether it should continue; and (4) recommend whether the program should be expanded to include other technologies.

5. (New section) a. No later than one year after the date of enactment of P.L. , c. (C.) (pending before the Legislature as this bill), the Board of Public Utilities, in consultation with PJM Interconnection, L.L.C., the independent system operator, shall, together with stakeholders including but not limited to third party suppliers and electric public utilities, conduct an energy storage

analysis and submit a written report to the Governor and, pursuant to section 2 of P.L.1991, c.164 (C.52:14-19.1), to the Legislature concerning energy storage needs and opportunities in the State. In conducting this analysis, the board shall:

(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 and elsewhere;

(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 the 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.

In conducting the analysis required by this subsection, the board shall also consider the need for integration of distributed energy resources into the electric distribution system and how distributed energy resources may be incorporated into the electric distribution system in the most efficient and cost-effective manner.

b. In conducting the energy storage analysis required by this section, the board shall consult with the Laboratory for Energy Smart Systems in the Center for Advanced Infrastructure and Transportation at Rutgers, The State University, and public and private entities in the State and in other states that have conducted studies concerning, or are implementing technologies for, energy storage and distributed energy resources.

c. The written report shall: (1) summarize the analysis conducted pursuant to subsection a. of this section; (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 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.

d. No later than six months after completion of the report, the board shall initiate a proceeding to establish a process and

mechanism for achieving the goal of 600 megawatts of energy storage by 2021 and 2,000 megawatts of energy storage by 2030.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Unless the Attorney General or the Attorney General's designee determines that a greenhouse gas emissions portfolio standard would unconstitutionally burden interstate commerce or would be preempted by federal law, the adoption by the board of an electric energy efficiency portfolio standard pursuant to subsection g. of this section, a gas energy efficiency portfolio standard pursuant to subsection h. of this section, or any other enhanced energy efficiency policies to mitigate leakage shall not be considered sufficient to fulfill the requirement of this subsection for the adoption of a greenhouse gas emissions portfolio standard or any other regulatory mechanism to mitigate leakage.

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

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

(2) beginning on January 1, ⟦2001⟧ 2020, that ⟦one-half of one⟧ 21 percent of the kilowatt hours sold in this State by each electric power supplier and each basic generation service provider be from Class I renewable energy sources. The board shall increase the required percentage for Class I renewable energy sources so that by January 1, ⟦2006, one percent⟧ 2025, 35 percent of the kilowatt hours sold in this State by each electric power supplier and each basic generation service provider shall be from Class I renewable energy sources ⟦and shall additionally increase the required percentage for Class I renewable energy sources by one-half of one percent each year until January 1, 2012, when four percent⟧ , and by January 1, 2030, 50 percent of the kilowatt hours sold in this State by each electric power supplier and each basic generation service provider shall be from Class I renewable energy sources. Notwithstanding the requirements of this paragraph, the board shall ensure that the cost to ratepayers of the Class I renewable energy requirement imposed pursuant to this subsection, shall be capped so that the cost to customers of satisfying the requirement shall not exceed seven percent of the Statewide average residential customer bill for energy year 2019, energy year 2020, and energy year 2021, respectively, and shall not exceed five percent of the Statewide average residential customer bill in any year thereafter. The board shall take any steps necessary to meet the cap on the cost to customers including, but not limited to, adjusting the Class I renewable portfolio standard requirement pursuant to this subsection.

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

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

EY 2011	306 Gigawatthours (Gwhrs)
EY 2012	442 Gwhrs
EY 2013	596 Gwhrs
EY 2014	2.050%
EY 2015	2.450%
EY 2016	2.750%
EY 2017	3.000%

EY 2018	3.200%
EY 2019	⟦3.290%⟧ 4.300%
EY 2020	⟦3.380%⟧ 4.900%
EY 2021	⟦3.470%⟧ 5.100%
⟦EY 2022	3.560%
EY 2023	3.650%
EY 2024	3.740%
EY 2025	3.830%
EY 2026	3.920%
EY 2027	4.010%

EY 2028 4.100 percent, and for every energy year thereafter, at least 4.100% per energy year to reflect an increasing number of kilowatt-hours to be purchased by suppliers or providers from solar electric power generators connected to the distribution system in this State, and to establish a framework within which, of the electricity that the generators sell in this State, suppliers and providers shall each obtain at least 3.470 percent in the energy year 2021 and 4.100 percent in the energy year 2028 from solar electric power generators connected to the distribution system in this State, provided, however, that:⟧

EY 2022	5.100%
EY 2023	5.100%
EY 2024	4.900%
EY 2025	4.800%
EY 2026	4.500%
EY 2027	4.350%
EY 2028	3.740%
EY 2029	3.070%
EY 2030	2.210%
EY 2031	1.580%
EY 2032	1.400%
EY 2033	1.100%

No later than 24 months after the date of enactment of P.L. , c. (C.) (pending before the Legislature as this bill), the board shall complete a study that evaluates how to modify or replace the SREC program to encourage the continued efficient and orderly development of solar renewable energy generating sources throughout the State. The board shall submit the written report thereon to the Governor and, pursuant to section 2 of P.L.1991, c.164 (C.52:14-19.1), to the Legislature. The board shall consult with public utilities, industry experts, regional grid operators, solar power providers and financiers, and other State agencies to determine whether the board can modify the SREC program such that the program will:

(1) continually reduce, where feasible, the cost of achieving the solar energy goals set forth above;

(2) provide an orderly transition from the SREC program to a new or modified program;

(3) develop megawatt targets for grid connected and distribution systems, including residential and small commercial rooftop systems, community solar systems, and large scale behind the meter systems, as a share of the overall solar requirement, which targets the board may modify periodically based on the cost, feasibility, or social impacts of different types of projects;

(4) establish and update market-based maximum incentive payment caps periodically for each of the above categories of solar electric power generation facilities;

(5) encourage and facilitate market-based cost recovery through long-term contracts and energy market sales; and

(6) where cost recovery is needed for any portion of an efficient solar electric power generation facility when costs are not recoverable through wholesale market sales and direct payments from customers, utilize competitive processes such as competitive procurement and long-term contracts where possible to assure such recovery, without exceeding the maximum incentive payment cap for that category of facility.

The board shall approve, conditionally approve, or disapprove any application for designation as connected to the distribution system of a solar electric power generation facility filed with the board after the date of enactment of P.L. , c. (pending before the Legislature as this bill), no more than 90 days after receipt by the board of a completed application. For any such application for a project greater than 25 kilowatts, the board shall require the applicant to post a notice escrow with the board in an amount of $40 per kilowatt of DC nameplate capacity of the facility, not to exceed $40,000. The notice escrow amount shall be reimbursed to the applicant in full upon either denial of the application by the board or upon commencement of commercial operation of the solar electric power generation facility. The escrow amount shall be forfeited to the State if the facility is designated as connected to the distribution system pursuant to this subsection but does not commence commercial operation within two years following the date of the designation by the board.

For all applications for designation as connected to the distribution system of a solar electric power generation facility filed with the board after the date of enactment of P.L. , c. (pending before the Legislature as this bill), the SREC term shall be 10 years.

(a) The board shall determine an appropriate period of no less than 120 days following the end of an energy year prior to which a provider or supplier must demonstrate compliance for that energy year with the annual renewable portfolio standard;

(b) No more than 24 months following the date of enactment of P.L.2012, c.24, the board shall complete a proceeding to investigate approaches to mitigate solar development volatility and prepare and submit, pursuant to section 2 of P.L.1991, c.164 (C.52:14-19.1), a report to the Legislature, detailing its findings and

recommendations. As part of the proceeding, the board shall evaluate other techniques used nationally and internationally;

(c) The solar renewable portfolio standards requirements in this paragraph shall exempt those existing supply contracts which are effective prior to the date of enactment of **[**P.L.2012, c.24**]** P.L. , c. (C.) (pending before the Legislature as this bill) from any increase beyond the number of SRECs mandated by the solar renewable portfolio standards requirements that were in effect on the date that the providers executed their existing supply contracts. This limited exemption for providers' existing supply contracts shall not be construed to lower the Statewide solar sourcing requirements set forth in this paragraph. Such incremental requirements that would have otherwise been imposed on exempt providers shall be distributed over the providers not subject to the existing supply contract exemption until such time as existing supply contracts expire and all providers are subject to the new requirement in a manner that is competitively neutral among all providers and suppliers. **[**The board shall**]** Notwithstanding any rule or regulation to the contrary, the board shall recognize these new solar purchase obligations as a change required by operation of law and implement the provisions of this subsection in a manner so as to prevent any subsidies between suppliers and providers and to promote competition in the electricity supply industry.

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

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

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

(4) within 180 days after the date of enactment of P.L.2010, c.57 (C.48:3-87.1 et al.), that the board establish an offshore wind renewable energy certificate program to require that a percentage of the kilowatt hours sold in this State by each electric power supplier

and each basic generation service provider be from offshore wind energy in order to support at least ⟦1,100⟧ 3,500 megawatts of generation from qualified offshore wind projects.

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

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

An electric power supplier or basic generation service provider shall comply with the OREC program established pursuant to this paragraph through the purchase of offshore wind renewable energy certificates at a price and for the time period required by the board. In the event there are insufficient offshore wind renewable energy certificates available, the electric power supplier or basic generation service provider shall pay an offshore wind alternative compliance payment established by the board. Any offshore wind alternative compliance payments collected shall be refunded directly to the ratepayers by the electric public utilities.

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

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

(1) net metering standards for electric power suppliers and basic generation service providers. The standards shall require electric power suppliers and basic generation service providers to offer net metering at non-discriminatory rates to industrial, large commercial, residential and small commercial customers, as those customers are classified or defined by the board, that generate electricity, on the customer's side of the meter, using a Class I renewable energy source, for the net amount of electricity supplied by the electric power supplier or basic generation service provider over an annualized period. Systems of any sized capacity, as

measured in watts, are eligible for net metering. If the amount of electricity generated by the customer-generator, plus any kilowatt hour credits held over from the previous billing periods, exceeds the electricity supplied by the electric power supplier or basic generation service provider, then the electric power supplier or basic generation service provider, as the case may be, shall credit the customer-generator for the excess kilowatt hours until the end of the annualized period at which point the customer-generator will be compensated for any remaining credits or, if the customer-generator chooses, credit the customer-generator on a real-time basis, at the electric power supplier's or basic generation service provider's avoided cost of wholesale power or the PJM electric power pool's real-time locational marginal pricing rate, adjusted for losses, for the respective zone in the PJM electric power pool. Alternatively, the customer-generator may execute a bilateral agreement with an electric power supplier or basic generation service provider for the sale and purchase of the customer-generator's excess generation. The customer-generator may be credited on a real-time basis, so long as the customer-generator follows applicable rules prescribed by the PJM electric power pool for its capacity requirements for the net amount of electricity supplied by the electric power supplier or basic generation service provider. The board may authorize an electric power supplier or basic generation service provider to cease offering net metering to customers that are not already net metered whenever the total rated generating capacity owned and operated by net metering customer-generators Statewide equals **[**2.9**]** 5.8 percent of the total annual kilowatt-hours sold in this State by each electric power supplier and each basic generation service provider during the prior one-year period;

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

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

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

(4) net metering aggregation standards to require electric public utilities to provide net metering aggregation to single electric public utility customers that operate a solar electric power generation system installed at one of the customer's facilities or on property

owned by the customer, provided that any such customer is a State entity, school district, county, county agency, county authority, municipality, municipal agency, or municipal authority. The standards shall provide that, in order to qualify for net metering aggregation, the customer must operate a solar electric power generation system using a net metering billing account, which system is located on property owned by the customer, provided that: (a) the property is not land that has been actively devoted to agricultural or horticultural use and that is valued, assessed, and taxed pursuant to the "Farmland Assessment Act of 1964," P.L.1964, c.48 (C.54:4-23.1 et seq.) at any time within the 10-year period prior to the effective date of P.L.2012, c.24, provided, however, that the municipal planning board of a municipality in which a solar electric power generation system is located may waive the requirement of this subparagraph (a), (b) the system is not an on-site generation facility, (c) all of the facilities of the single customer combined for the purpose of net metering aggregation are facilities owned or operated by the single customer and are located within its territorial jurisdiction except that all of the facilities of a State entity engaged in net metering aggregation shall be located within five miles of one another, and (d) all of those facilities are within the service territory of a single electric public utility and are all served by the same basic generation service provider or by the same electric power supplier. The standards shall provide that in order to qualify for net metering aggregation, the customer's solar electric power generation system shall be sized so that its annual generation does not exceed the combined metered annual energy usage of the qualified customer facilities, and the qualified customer facilities shall all be in the same customer rate class under the applicable electric public utility tariff. For the customer's facility or property on which the solar electric generation system is installed, the electricity generated from the customer's solar electric generation system shall be accounted for pursuant to the provisions of paragraph (1) of this subsection to provide that the electricity generated in excess of the electricity supplied by the electric power supplier or the basic generation service provider, as the case may be, for the customer's facility on which the solar electric generation system is installed, over the annualized period, is credited at the electric power supplier's or the basic generation service provider's avoided cost of wholesale power or the PJM electric power pool real-time locational marginal pricing rate. All electricity used by the customer's qualified facilities, with the exception of the facility or property on which the solar electric power generation system is installed, shall be billed at the full retail rate pursuant to the electric public utility tariff applicable to the customer class of the customer using the electricity. A customer may contract with a third party to operate a solar electric power generation system, for the purpose of net metering aggregation. Any contractual relationship entered into

for operation of a solar electric power generation system related to net metering aggregation shall include contractual protections that provide for adequate performance and provision for construction and operation for the term of the contract, including any appropriate bonding or escrow requirements. Any incremental cost to an electric public utility for net metering aggregation shall be fully and timely recovered in a manner to be determined by the board. The board shall adopt net metering aggregation standards within 270 days after the effective date of P.L.2012, c.24.

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

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

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

g. The board **[**may**]** shall adopt, pursuant to the "Administrative Procedure Act," P.L.1968, c.410 (C.52:14B-1 et seq.), an electric energy efficiency **[**portfolio standard**]** program in order to ensure investment in cost-effective energy efficiency measures, ensure universal access to energy efficiency measures, and serve the needs of low-income communities that **[**may**]** shall require each electric public utility to implement energy efficiency measures that reduce electricity usage in the State **[**by 2020 to a level that is 20 percent below the usage projected by the board in the absence of such a standard**]** pursuant to section 7 of P.L. , c. (C.) (pending before the Legislature as this bill). Nothing in this section shall be construed to prevent an electric public utility from

meeting the requirements of this section by contracting with another entity for the performance of the requirements.

h. The board **[**may**]** shall adopt, pursuant to the "Administrative Procedure Act," P.L.1968, c.410 (C.52:14B-1 et seq.), a gas energy efficiency **[**portfolio standard**]** program in order to ensure investment in cost-effective energy efficiency measures, ensure universal access to energy efficiency measures, and serve the needs of low-income communities that **[**may**]** shall require each gas public utility to implement energy efficiency measures that reduce natural gas usage **[**for heating**]** in the State **[**by 2020 to a level that is 20 percent below the usage projected by the board in the absence of such a standard**]** pursuant to section 7 of P.L. , c. (C.) (pending before the Legislature as this bill). Nothing in this section shall be construed to prevent a gas public utility from meeting the requirements of this section by contracting with another entity for the performance of the requirements.

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

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

EY 2014 $339
EY 2015 $331
EY 2016 $323
EY 2017 $315
EY 2018 $308
EY 2019 **[**$300**]** $268
EY 2020 **[**$293**]** $258
EY 2021 **[**$286**]** $248
EY 2022 **[**$279**]** $238
EY 2023 **[**$272**]** $228
EY 2024 **[**$266**]** $218
EY 2025 **[**$260**]** $208
EY 2026 **[**$253**]** $198
EY 2027 **[**$250**]** $188

EY 2028 [$239] $178
EY 2029 $168
EY 2030 $158
EY 2031 $148
EY 2032 $138
EY 2033 $128.

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

k. The board may allow electric public utilities to offer long-term contracts through a competitive process, direct electric public utility investment and other means of financing, including but not limited to loans, for the purchase of SRECs and the resale of SRECs to suppliers or providers or others, provided that after such contracts have been approved by the board, the board's approvals shall not be modified by subsequent board orders. If the board allows the offering of contracts pursuant to this subsection, the board may establish a process, after hearing, and opportunity for public comment, to provide that a designated segment of the contracts approved pursuant to this subsection shall be contracts involving solar electric power generation facility projects with a capacity of up to 250 kilowatts.

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

(1) place greater reliance on competitive markets, with the explicit goal of encouraging and ensuring the emergence of new entrants that can foster innovations and price competition;

(2) maintain adequate regulatory authority over non-competitive public utility services;

(3) consider alternative forms of regulation in order to address changes in the technology and structure of electric public utilities;

(4) promote energy efficiency and Class I renewable energy market development, taking into consideration environmental benefits and market barriers;

(5) make energy services more affordable for low and moderate income customers;

(6) attempt to transform the renewable energy market into one that can move forward without subsidies from the State or public utilities;

(7) achieve the goals put forth under the renewable energy portfolio standards;

(8) promote the lowest cost to ratepayers; and

(9) allow all market segments to participate.

m. The board shall ensure the availability of financial incentives under its jurisdiction, including, but not limited to, long-term contracts, loans, SRECs, or other financial support, to ensure market diversity, competition, and appropriate coverage across all ratepayer segments, including, but not limited to, residential, commercial, industrial, non-profit, farms, schools, and public entity customers.

n. For projects which are owned, or directly invested in, by a public utility pursuant to section 13 of P.L.2007, c.340 (C.48:3-98.1), the board shall determine the number of SRECs with which such projects shall be credited; and in determining such number the board shall ensure that the market for SRECs does not detrimentally affect the development of non-utility solar projects and shall consider how its determination may impact the ratepayers.

o. The board, in consultation with the Department of Environmental Protection, electric public utilities, the Division of Rate Counsel in, but not of, the Department of the Treasury, affected members of the solar energy industry, and relevant stakeholders, shall periodically consider increasing the renewable energy portfolio standards beyond the minimum amounts set forth in subsection d. of this section, taking into account the cost impacts and public benefits of such increases including, but not limited to:

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

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

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

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

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

q. (1) During the energy years of 2014, 2015, and 2016, a solar electric power generation facility project that is not: (a) net metered; (b) an on-site generation facility; (c) qualified for net metering aggregation; or (d) certified as being located on a brownfield, on an area of historic fill or on a properly closed sanitary landfill facility, as provided pursuant to subsection t. of this section may file an application with the board for approval of a designation pursuant to this subsection that the facility is connected to the distribution system. An application filed pursuant to this subsection shall include a notice escrow of $40,000 per megawatt of

the proposed capacity of the facility. The board shall approve the designation if: the facility has filed a notice in writing with the board applying for designation pursuant to this subsection, together with the notice escrow; and the capacity of the facility, when added to the capacity of other facilities that have been previously approved for designation prior to the facility's filing under this subsection, does not exceed 80 megawatts in the aggregate for each year. The capacity of any one solar electric power supply project approved pursuant to this subsection shall not exceed 10 megawatts. No more than 90 days after its receipt of a completed application for designation pursuant to this subsection, the board shall approve, conditionally approve, or disapprove the application. The notice escrow shall be reimbursed to the facility in full upon either rejection by the board or the facility entering commercial operation, or shall be forfeited to the State if the facility is designated pursuant to this subsection but does not enter commercial operation pursuant to paragraph (2) of this subsection.

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

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

r. (1) For all proposed solar electric power generation facility projects except for those solar electric power generation facility projects approved pursuant to subsection q. of this section, and for all projects proposed in **[**each energy year following energy year 2016, a**]** <u>energy year 2019 and energy year 2020, the board may approve projects for up to 50 megawatts annually in auctioned capacity in two auctions per year as long as the board is accepting applications. If the board approves projects for less than 50 megawatts in energy year 2019 or less than 50 megawatts in energy year 2020, the difference in each year shall be carried over into the successive energy year until 100 megawatts of auctioned capacity has been approved by the board pursuant to this subsection.</u> A proposed solar electric power generation facility that is neither net metered nor an on-site generation facility, may be considered "connected to the distribution system" only upon designation as such by the board, after notice to the public and opportunity for public comment or hearing. A proposed solar power electric generation facility seeking board designation as "connected to the distribution system" shall submit an application to the board that

includes for the proposed facility: the nameplate capacity; the estimated energy and number of SRECs to be produced and sold per year; the estimated annual rate impact on ratepayers; the estimated capacity of the generator as defined by PJM for sale in the PJM capacity market; the point of interconnection; the total project acreage and location; the current land use designation of the property; the type of solar technology to be used; and such other information as the board shall require.

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

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

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

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

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

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

s. In addition to any other requirements of P.L.1999, c.23 or any other law, rule, regulation or order, a solar electric power generation facility that is not net metered or an on-site generation facility and which is located on land that has been actively devoted to agricultural or horticultural use that is valued, assessed, and taxed pursuant to the "Farmland Assessment Act of 1964," P.L.1964, c.48 (C.54:4-23.1 et seq.) at any time within the 10-year period prior to the effective date of P.L.2012, c.24, shall only be considered "connected to the distribution system" if (1) the board approves the facility's designation pursuant to subsection q. of this section; or (2) (a) PJM issued a System Impact Study for the facility on or before June 30, 2011, (b) the facility files a notice with the board within 60 days of the effective date of P.L.2012, c.24, indicating its intent to qualify under this subsection, and (c) the

facility has been approved as "connected to the distribution system" by the board. Nothing in this subsection shall limit the board's authority concerning the review and oversight of facilities, unless such facilities are exempt from such review as a result of having been approved pursuant to subsection q. of this section.

t. (1) No more than 180 days after the date of enactment of P.L.2012, c.24, the board shall, in consultation with the Department of Environmental Protection and the New Jersey Economic Development Authority, and, after notice and opportunity for public comment and public hearing, complete a proceeding to establish a program to provide SRECs to owners of solar electric power generation facility projects certified by the board, in consultation with the Department of Environmental Protection, as being located on a brownfield, on an area of historic fill or on a properly closed sanitary landfill facility, including those owned or operated by an electric public utility and approved pursuant to section 13 of P.L.2007, c.340 (C.48:3-98.1). Projects certified under this subsection shall be considered "connected to the distribution system", shall not require such designation by the board, and shall not be subject to board review required pursuant to subsections q. and r. of this section. Notwithstanding the provisions of section 3 of P.L.1999, c.23 (C.48:3-51) or any other law, rule, regulation, or order to the contrary, for projects certified under this subsection, the board shall establish a financial incentive that is designed to supplement the SRECs generated by the facility in order to cover the additional cost of constructing and operating a solar electric power generation facility on a brownfield, on an area of historic fill or on a properly closed sanitary landfill facility. Any financial benefit realized in relation to a project owned or operated by an electric public utility and approved by the board pursuant to section 13 of P.L.2007, c.340 (C.48:3-98.1), as a result of the provision of a financial incentive established by the board pursuant to this subsection, shall be credited to ratepayers. The issuance of SRECs for all solar electric power generation facility projects pursuant to this subsection shall be deemed "Board of Public Utilities financial assistance" as provided under section 1 of P.L.2009, c.89 (C.48:2-29.47).

(2) Notwithstanding the provisions of the "Spill Compensation and Control Act," P.L.1976, c.141 (C.58:10-23.11 et seq.) or any other law, rule, regulation, or order to the contrary, the board, in consultation with the Department of Environmental Protection, may find that a person who operates a solar electric power generation facility project that has commenced operation on or after the effective date of P.L.2012, c.24, which project is certified by the board, in consultation with the Department of Environmental Protection pursuant to paragraph (1) of this subsection, as being located on a brownfield for which a final remediation document has been issued, on an area of historic fill or on a properly closed

sanitary landfill facility, which projects shall include, but not be limited to projects located on a brownfield for which a final remediation document has been issued, on an area of historic fill or on a properly closed sanitary landfill facility owned or operated by an electric public utility and approved pursuant to section 13 of P.L.2007, c.340 (C.48:3-98.1), or a person who owns property acquired on or after the effective date of P.L.2012, c.24 on which such a solar electric power generation facility project is constructed and operated, shall not be liable for cleanup and removal costs to the Department of Environmental Protection or to any other person for the discharge of a hazardous substance provided that:

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

(b) the person did not discharge the hazardous substance, is not in any way responsible for the hazardous substance, and is not a successor to the discharger or to any person in any way responsible for the hazardous substance or to anyone liable for cleanup and removal costs pursuant to section 8 of P.L.1976, c.141 (C.58:10-23.11g);

(c) the person, within 30 days after acquisition of the property, gave notice of the discharge to the Department of Environmental Protection in a manner the Department of Environmental Protection prescribes;

(d) the person does not disrupt or change, without prior written permission from the Department of Environmental Protection, any engineering or institutional control that is part of a remedial action for the contaminated site or any landfill closure or post-closure requirement;

(e) the person does not exacerbate the contamination at the property;

(f) the person does not interfere with any necessary remediation of the property;

(g) the person complies with any regulations and any permit the Department of Environmental Protection issues pursuant to section 19 of P.L.2009, c.60 (C.58:10C-19) or paragraph (2) of subsection a. of section 6 of P.L.1970, c.39 (C.13:1E-6);

(h) with respect to an area of historic fill, the person has demonstrated pursuant to a preliminary assessment and site investigation, that hazardous substances have not been discharged; and

(i) with respect to a properly closed sanitary landfill facility, no person who owns or controls the facility receives, has received, or will receive, with respect to such facility, any funds from any post-closure escrow account established pursuant to section 10 of P.L.1981, c.306 (C.13:1E-109) for the closure and monitoring of the facility.

Only the person who is liable to clean up and remove the contamination pursuant to section 8 of P.L.1976, c.141 (C.58:10-

23.11g) and who does not have a defense to liability pursuant to subsection d. of that section shall be liable for cleanup and removal costs.

u. No more than 180 days after the date of enactment of P.L.2012, c.24, the board shall complete a proceeding to establish a registration program. The registration program shall require the owners of solar electric power generation facility projects connected to the distribution system to make periodic milestone filings with the board in a manner and at such times as determined by the board to provide full disclosure and transparency regarding the overall level of development and construction activity of those projects Statewide.

v. The issuance of SRECs for all solar electric power generation facility projects pursuant to this section, for projects connected to the distribution system with a capacity of one megawatt or greater, shall be deemed "Board of Public Utilities financial assistance" as provided pursuant to section 1 of P.L.2009, c.89 (C.48:2-29.47).

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

x. Solar electric power generation facility projects that are located on an existing or proposed commercial, retail, industrial, municipal, professional, recreational, transit, commuter, entertainment complex, multi-use, or mixed-use parking lot with a capacity to park 350 or more vehicles where the area to be utilized for the facility is paved, or an impervious surface may be owned or operated by an electric public utility and may be approved by the

board pursuant to section 13 of P.L.2007, c.340 (C.48:3-98.1).
(cf: P.L.2017, c.139, s.1)

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

Each electric public utility shall be required to achieve annual reductions in the use of electricity of two percent of the average annual usage in the prior three years within five years of implementation of the electric energy efficiency programs. Each natural gas public utility shall be required to achieve annual reductions in the use of natural gas of 0.75 percent of the average annual usage in the prior three years within five years of implementation of the gas energy efficiency programs. The amount of reduction mandated by the board that exceeds two percent of the average annual usage for electricity and 0.75 percent of the average annual usage for natural gas for the prior three years shall be determined pursuant to the study conducted pursuant to subsection b. of this section until the reduction in energy usage reaches the full economic, cost-effective potential in each service territory, as determined by the board.

b. No later than one year after the date of enactment of P.L. , c. (C.) (pending before the Legislature as this bill), the board shall conduct and complete a study to determine the energy savings targets for full economic, cost-effective potential for electricity usage reduction or natural gas usage reduction as well as the potential for peak demand reduction by the customers of each electric public utility and gas public utility and the timeframe for achieving the reductions. The energy savings targets for each electric public utility and gas public utility shall be reviewed every three years to determine if the targets should be adjusted. The board, in conducting the study, shall accept comments and suggestions from interested parties.

c. No later than one year after the date of enactment of P.L. , c. (C.) (pending before the Legislature as this bill), the board shall adopt quantitative performance indicators pursuant to the "Administrative Procedure Act," P.L.1968, c.410 (C.52:14B-1 et seq.) for each electric public utility and gas public utility, which shall establish reasonably achievable targets for energy reductions and peak demand reductions and take into account the public utility's energy efficiency measures and other non-utility energy

efficiency measures including measures to support the development and implementation of building code changes, appliance efficiency standards, the Clean Energy program, and any other State-sponsored energy efficiency or peak reduction programs, and public utility energy efficiency programs that exist on the date of enactment of P.L. , c. (C.) (pending before the Legislature as this bill). In establishing quantitative performance indicators, the board shall use a methodology that incorporates weather, economic factors, customer growth, outage-adjusted efficiency factors, and any other factors to ensure that the public utility's incentives or penalties determined pursuant to subsection e. of this section and section 13 of P.L.2007, c.340 (C.48:3-98.1) are based upon performance, and take into account the growth in the use of electric vehicles, microgrids, and distributed energy resources. In establishing quantitative performance indicators, the board shall also consider each public utility's customer class mix and potential for adoption by each of those customer classes of energy efficiency programs offered by the public utility or that are otherwise available. The board shall review each quantitative performance indicator every three years. A public utility may apply all energy savings attributable to programs available to its customers, including demand side management programs, other measures implemented by the public utility, non-utility programs, including those available under energy efficiency programs in existence on the date of enactment of P.L. c. (C.) (pending before the Legislature as this bill), building codes, and other efficiency standards in effect, to achieve the targets established in this section.

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

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

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

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

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

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

(4) The adjustments made pursuant to this subsection may be made through adjustments of the electric public utility's or gas public utility's return on equity related to the energy efficiency or peak demand reduction programs only, or a specified dollar amount,

reflecting the incentive structure as established in this subsection. The adjustments shall not be included in a revenue or cost in any base rate filing and shall be adopted by the board pursuant to the "Administrative Procedure Act."

f. (1) The board shall establish a stakeholder process to evaluate the economically achievable energy efficiency and peak demand reduction requirements, rate adjustments, quantitative performance indicators, and the process for evaluating, measuring, and verifying energy reductions and peak demand reduction by the public utilities. As part of the stakeholder process, the board shall establish an independent advisory group to study the evaluation, measurement, and verification process for energy efficiency and peak demand reduction programs, which shall include representatives from the public utilities, the Division of Rate Counsel, and environmental and consumer organizations, to provide recommendations to the board for improvements to the programs.

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

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

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

b. No later than five years after the date of enactment of P.L. , c. (C.) (pending before the Legislature as this bill), the board shall require the owner or operator of each commercial building over 25,000 square feet in the State to benchmark energy and water use for the prior calendar year using the United States Environmental Protection Agency’s Portfolio Manager tool.

9. (New section) a. No later than 210 days after the date of enactment of P.L. , c. (C.) (pending before the Legislature as this bill), the Board of Public Utilities shall adopt, pursuant to the "Administrative Procedure Act," P.L.1968, c.410 (C.52:14B-1 et seq.), rules and regulations establishing a "Community Solar

Energy Pilot Program" to permit customers of an electric public utility to participate in a solar energy project that is remotely located from their properties but is within their electric public utility service territory to allow for a credit to the customer's utility bill equal to the electricity generated that is attributed to the customer's participation in the solar energy project.

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

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

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

(3) geographic limitations for solar energy projects and participating customers;

(4) a minimum number of participating customers for each solar energy project;

(5) the value of the credit on each participating customer's bill;

(6) standards to limit the land use impact of a solar energy project as required in subsection r. of section 38 of P.L.1999, c.23 (C.48:3-87);

(7) the provision of access to solar energy projects for low and moderate income customers;

(8) standards to ensure the ability of residential and commercial customers to participate in solar energy projects, including residential customers in multifamily housing;

(9) standards for connection to the distribution system of an electric public utility; and

(10) provisions to minimize impacts to the distribution system of an electric public utility.

c. The board shall make available on its Internet website information on solar energy projects whose owners are seeking participants.

d. The board shall establish standards and an application process for owners of solar energy projects who wish to be included in the Community Solar Energy Pilot Program. The standards for the Community Solar Energy Pilot Program shall include, but need not be limited to, a verification process to ensure that solar energy projects are producing an amount of energy that is greater than or equal to the amount of energy that is being credited to its participating customer's electric utility bills pursuant to subsection b. of this section, and consumer protection measures. Projects approved by the board shall have at least two participating customers.

The board may restrict qualified solar energy projects to those located on brownfields, landfills, areas designated in need of redevelopment, in underserved communities, or on commercial rooftops.

e. Subject to review by the board, an electric public utility shall be entitled to full and timely cost recovery for all costs incurred in implementation and compliance with this section.

f. No later than 36 months after the adoption of rules and regulations pursuant to subsection b. of this section, the board shall adopt rules and regulations, pursuant to the "Administrative Procedure Act," P.L.1968, c.410 (C.52:14B-1 et seq.), to convert the Community Solar Energy Pilot Program to a permanent program. The board shall adopt rules and regulations for the permanent program that set forth standards for projects owned by electric public utilities, special purpose entities, and nonprofit entities. The rules and regulations shall also:

(1) limit the capacity of each solar energy project to a maximum of five megawatts;

(2) establish a goal for the development of at least 50 megawatts of solar energy projects per year, taking into account any changes to the SREC program;

(3) set geographic limitations for solar energy projects and participating customers;

(4) provide for a minimum number of participating customers for each solar energy project;

(5) require the provision of access to solar energy projects for low and moderate income customers;

(6) establish standards to ensure the ability of residential and commercial customers to participate in solar energy projects, including residential customers in multifamily housing;

(7) establish a method for determining the value of the credit on each participating customer's bill;

(8) establish timeframes for the credit available to the customer;

(9) establish standards and methods to verify solar electric energy generation on a monthly basis for a solar energy project;

(10) standards consistent with the land use provisions for solar energy projects as provided in subsections r., s., and t. of section 38 of P.L.1999, c.23 (C.48:3-87);

(11) establish standards, fees, and uniform procedures for solar energy projects to be connected to the distribution system of an electric public utility;

(12) minimize impacts to the distribution system of an electric public utility;

(13) require monthly reporting requirements for the operators of solar energy projects to the electric public utility, project customers, and the board;

(14) require reporting by the electric public utility to the operator of a solar energy project on the value of credits to the participating customer's bills; and

(15) require transferability, portability, and buy-out provisions for customers who participate in community solar energy projects.

g. As used in this section:

"Solar energy project" means a system containing one or more solar panels and associated equipment.

"Solar panel" means an elevated panel or plate, or a canopy or array thereof, that captures and converts solar radiation to produce electric power, and is approved by the board to be included in the Community Solar Energy Pilot Program. "Solar power includes flat plate, focusing solar collectors, or photovoltaic solar cells and excludes the base or foundation of the panel, plate, canopy, or array.

10. (New section) a. No later than 120 days after the date of enactment of P.L. , c. (C.) (pending before the Legislature as this bill), the board shall establish an application and approval process to certify public entities to act as a host customer for remote net metering generating capacity. A public entity certified to act as a host customer may allocate credits to other public entities within the same electric public utility service territory. A copy of the agreement between the public entity certified to act as a host customer and other public entities designated to receive credits shall be provided to the electric public utility before remote net metering credits may be applied to a customer bill. A public entity certified to act as a host customer may host a solar energy project with a capacity up to the total average usage of the electric public utility accounts for the host public entity customer.

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

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

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

6. a. (1) A business, upon application to and approval from the authority, shall be allowed a credit of 100 percent of its capital investment, made after the effective date of P.L.2010, c.57 (C.48:3-87.1 et al.) but prior to its submission of documentation pursuant to subsection c. of this section, in a qualified wind energy facility located within an eligible wind energy zone, pursuant to the restrictions and requirements of this section. To be eligible for any tax credits authorized under this section, a business shall demonstrate to the authority, at the time of application, that the State's financial support of the proposed capital investment in a qualified wind energy facility will yield a net positive benefit to the

State. The value of all credits approved by the authority pursuant to this section may be up to $100,000,000, except as may be increased by the authority if the chief executive officer of the authority judges certain qualified offshore wind projects to be meritorious. Credits provided pursuant to this section shall not be applicable to the cap on the credits provided in section 3 of P.L.2007, c.346 (C.34:1B-209).

(2) (a) A business, other than a tenant eligible pursuant to subparagraph (b) of this paragraph, shall make or acquire capital investments totaling not less than $50,000,000 in a qualified wind energy facility, at which the business, including tenants at the qualified wind energy facility, shall employ at least 300 new, full-time employees, to be eligible for a credit under this section. A business that acquires a qualified wind energy facility after the effective date of P.L.2010, c.57 (C.48:3-87.1 et al.) shall also be deemed to have acquired the capital investment made or acquired by the seller.

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

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

For the purposes of this paragraph, "full time employee" shall not include an employee who is a resident of another state and whose income is not subject to the "New Jersey Gross Income Tax Act," N.J.S.54A:1-1 et seq., unless that state has entered into a

reciprocity agreement with the State of New Jersey, provided that any employee whose work is provided pursuant to a collective bargaining agreement with ⟦the port district⟧ a business in the wind energy zone may be included.

(3) A business shall not be allowed a tax credit pursuant to this section if the business ⟦participates in⟧ receives a business employment incentive grant pursuant to the "Business Employment Incentive Program Act," P.L.1996, c.26 (C.34:1B-124 et al.), relating to the same capital and employees that qualify the business for this credit, or if the business receives assistance pursuant to the "Business Retention and Relocation Assistance Act," P.L.1996, c.25 (C.34:1B-112 et seq.). A business that is allowed a tax credit under this section shall not be eligible for incentives authorized pursuant to the "Municipal Rehabilitation and Economic Recovery Act," P.L.2002, c.43 (C.52:27BBB-1 et al.).

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

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

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

d. The amount of the credit allowed pursuant to this section shall, except as otherwise provided, be equal to the capital investment made by the business, or the capital investment represented by the ⟦business'⟧ business's leased area, and shall be taken over a 10-year period, at the rate of one-tenth of the total amount of the ⟦business'⟧ business's credit for each tax accounting or privilege period of the business, beginning with the tax period in which the business is first approved by the authority as having met the investment capital and employment qualifications, subject to any disqualification as determined by annual review by the authority. In conducting its annual review, the authority may require a business to submit any information determined by the authority to be necessary and relevant to its review. The credit amount for any tax period ending after the date ⟦eight⟧ 18 years after the effective date of P.L.2007, c.346 (C.34:1B-207 et seq.) during which the documentation of a ⟦business'⟧ business's credit amount remains unapproved shall be forfeited, although credit amounts for the remainder of the years of the 10-year credit period shall remain available. The amount of the credit allowed for a tax

period to a business that is a tenant in a qualified wind energy facility shall not exceed the [business'] business's total lease payments for occupancy of the qualified wind energy facility for the tax period.

e. The authority shall adopt rules [in accordance with] and regulations pursuant to the "Administrative Procedure Act," P.L.1968, c.410 (C.52:14B-1 et seq.) as are necessary to implement this section, including, but not limited to: examples of and the determination of capital investment; the nature of businesses and employment positions constituting and participating in an equipment supply coordination agreement; a determination of the types of businesses that may be eligible and expenses that may constitute capital improvements; the promulgation of procedures and forms necessary to apply for a credit; and provisions for applicants to be charged an initial application fee, and ongoing service fees, to cover the administrative costs related to the credit.

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

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

In addition, as used in this section:

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

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

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

"Wind energy zone" means property located in the South Jersey Port District established pursuant to "The South Jersey Port Corporation Act," P.L.1968, c.60 (C.12:11A-1 et seq.).
(cf: P.L.2013, c.161, s.25)

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

13. (New section) If any provision of P.L. , c. (C.) (pending before the Legislature as this bill) or its application to any person or circumstance is held invalid or unconstitutional, that judgment or decision shall not affect other provisions or applications of P.L. , c. (C.) (pending before the Legislature as this bill) which can be given effect without the invalid or unconstitutional provision or application, and to this end the provisions of this act are severable.

14. This act shall take effect immediately.