SENATE, No. 4876

STATE OF NEW JERSEY

221st LEGISLATURE

INTRODUCED NOVEMBER 17, 2025

Sponsored by:
Senator BOB SMITH
District 17 (Middlesex and Somerset)
Senator JOHN J. BURZICHELLI
District 3 (Cumberland, Gloucester and Salem)

SYNOPSIS

"New Jersey Energy Security and Affordability Act"; establishes advanced nuclear reactor, distributed energy storage, and demand optimization programs in BPU.

CURRENT VERSION OF TEXT

As introduced.

AN ACT concerning electric energy supply and distribution, supplementing Title 48 of the Revised Statutes, and amending P.L.1973, c.185 and P.L.1999, c.23.

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

1. (New section) Sections 1 through 9 of P.L. , c. (C.) (pending before the Legislature as this bill) shall be known and may be cited as the "New Jersey Energy Security and Affordability Act."

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

(1) The regional electric grid is facing unprecedented load growth driven by data centers and constraints on new supply entry that risks grid reliability for New Jersey ratepayers;

(2) Even absent such projected growth in demand, current low capacity has resulted in record high capacity market prices, which are being passed on to ratepayers;

(3) A reliable and affordable energy system is critical to the future of the State's economy and the health and prosperity of all its citizens;

(4) Nuclear energy is a carbon-free and reliable source of energy, and nuclear power plants have the highest capacity factor of any electric generation resource, at over 92 percent, with certain advanced nuclear reactors reaching a capacity factor of 98 percent, which means that they can produce their maximum power output 98 percent of the time;

(5) Likewise, nuclear power plants have the highest effective load carrying capacity of any electric generating resource at 98 percent in the summer and 96 percent in the winter, meaning that they are almost always capable of delivering power to the grid, regardless of weather and other external factors;

(6) Nuclear energy resources display inherent operational reliability, fuel security, and adaptability to extreme weather events;

(7) In New Jersey, nuclear energy contributions have declined in recent years following the permanent shutdown of the Oyster Creek single-reactor nuclear power plant in 2018, which was the nation's oldest operating nuclear power reactor at the time;

(8) Newer advanced nuclear reactors, however, are even safer, more cost efficient, and more environmentally friendly than previous generations of nuclear reactors;

(9) Advanced nuclear reactors provide firm power that complements renewable energy resources while strengthening energy security, reliability, and affordability and offering high-paying jobs and significant regional economic benefits;

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

Matter underlined thus is new matter.

(10) In addition, technologies such as battery storage and distributed energy resource aggregations, also known as virtual power plants, can play an important role in reducing the need for additional generation capacity and costly distribution system infrastructure upgrades by optimizing energy demand, reducing peak loads, and increasing grid stability;

(11) These technologies are also capable of being deployed incrementally and rapidly, allowing the State to begin taking steps to address peak capacity demands in the immediate term; and

(12) The State's electric public utilities are particularly well-placed to manage and deploy distributed energy resources in a way that optimizes the benefits that they provide to the electric distribution system and reduces costs to ratepayers.

b. The Legislature therefore determines that it is in the public interest of the residents of New Jersey to promote and incentivize the construction of advanced nuclear reactors in the State as a source of carbon-free, reliable, and affordable energy, and to establish programs for the strategic deployment of distributed resource aggregation and distribution-level battery storage to address energy demands.

3. (New section) As used in sections 1 through 9 of P.L. , c. (C.) (pending before the Legislature as this bill):

"Advanced nuclear development charge" or "ANDC" means the same as the term is defined in section 12 of P.L.1999, c.23 (C.48:3-60).

"Advanced nuclear energy certificate" or "ANEC" means a certificate, issued by the board or its designee, representing the environmental and reliability attributes of one megawatt hour of electric generation from a qualified project.

"Advanced nuclear reactor" or "advanced reactor" means a nuclear reactor with significant improvements compared to reactors operating on December 27, 2020, including improvements such as: (1) additional inherent safety features; (2) lower waste yields; (3) improved fuel and material performance; (4) increased tolerance to loss of fuel cooling; (5) enhanced reliability and improved resilience; (6) increased proliferation resistance; (7) increased thermal efficiency; (8) reduced consumption of cooling water and other environmental impacts; (9) the ability to integrate into electric applications and nonelectric applications; (10) modular sizes that allow for deployment that corresponds with the demand for electricity or process heat; and (11) operational flexibility to respond to changes in demand for electricity or process heat and to complement integration with intermittent renewable energy or energy storage.

"Allowable cost increase" means a construction cost for a qualified project that the board finds: (1) is higher than the verified total construction cost estimate approved as part of the final project

approval, (2) is adequately documented, (3) was reasonably and prudently incurred, and (4) could not have been reasonably foreseen by the project.

"Basic generation service provider" means the same as the term is defined in section 3 of P.L.1999, c.23 (C.48:3-51).

"Board" means the Board of Public Utilities.

"Construction costs" means the costs, as specified in a final order issued pursuant to section 6 of P.L. , c. (C.) (pending before the Legislature as this bill), inclusive of capital costs, incurred by a qualified project prior to nuclear reactor operation. "Construction costs" may include, but need not be limited to, costs related to the analysis, design, manufacture, fabrication, quality assurance, placement, erection, installation, modification, supervision, inspection, or testing of a facility necessary for building a qualified project, and the purchase of land for, and the building of, a qualified project. "Construction costs" shall not include financing costs.

"Distributed energy resource" or "DER" means an electricity-producing resource, energy storage system, bidirectional electric vehicle charger, or controllable load, including a controllable unidirectional electric vehicle charger, that is connected to an electric public utility's distribution infrastructure.

"Distributed energy resource aggregator" or "DER aggregator" means a third-party business entity that is authorized to enroll, operate, and compensate a virtually integrated and coordinated set of interconnected DERs which deliver services under the PJM tariff as filed in compliance with FERC Order 2222.

"Electric power supplier" means the same as the term is defined in section 3 of P.L.1999, c.23 (C.48:3-51).

"Electric public utility" means the same as the term is defined in section 3 of P.L.1999, c.23 (C.48:3-51).

"Federal Energy Regulatory Commission" or "FERC" means the same as the term is defined in section 3 of P.L.1999, c.23 (C.48:3-51).

"Nuclear energy" means electric energy generated by a qualified project.

"Nuclear reactor" means an apparatus required to be licensed by the United States Nuclear Regulatory Commission, other than an atomic weapon, that is designed or used to sustain nuclear fission in a self-supporting chain reaction.

"Overburdened community" means the same as the term is defined in section 2 of P.L.2020, c.92 (C.13:1D-158).

"PJM" means "PJM Interconnection, L.L.C." or "PJM," as those terms are defined in section 3 of P.L.1999, c.23 (C.48:3-51).

"Qualified project" means a nuclear electricity generation facility of at least one advanced nuclear reactor located in the State, connected to the electric transmission system in the State, and

approved by the board pursuant to section 6 of P.L. , c. (C.) (pending before the Legislature as this bill).

"Small modular reactor" means an advanced reactor that: (1) has a rated electric generating capacity of no more than 1,000 megawatts thermal; (2) may be of modular design; and (3) is capable of being constructed and operated either alone or in combination with one or more similar reactors if additional reactors are or become necessary at a single site.

4. (New section) a. To facilitate the evaluation of any expression of interest and information received pursuant to section 5 of P.L. , c. (C.) (pending before the Legislature as this bill), and to ensure a qualified project is part of a congruent and comprehensive nuclear energy industry and the energy infrastructure in the State, the board, in consultation with the Department of Environmental Protection, shall, as soon as practicable:

(1) conduct a comprehensive study on the feasibility of deploying advanced reactors, including small modular reactors, as a source of carbon-free and reliable energy in the State;

(2) identify barriers to the development and deployment of advanced nuclear reactors and associated technologies in the State;

(3) leverage the expertise of institutes of higher education, the nuclear energy industry, the industrial manufacturing sector, regulatory stakeholders, and State and federal agencies to develop a comprehensive strategic plan to ensure the development and deployment of advanced nuclear reactors and associated technologies in the State;

(4) facilitate coordination and communication among State programs affecting the development and deployment of advanced nuclear reactors and associated technologies in the State; and

(5) pursue public outreach and education about nuclear energy.

b. The board, in consultation with the Department of Environmental Protection, shall make recommendations to the Governor and Legislature based on the activities carried out pursuant to subsection a. of this section. The recommendations shall be designed to ensure that the State's energy programs promote the development and use of nuclear energy for peaceful purposes, while protecting the interest, health, and safety of the public and the environment.

5. (New section) a. No later than 270 days after the effective date of P.L. , c. (C.) (pending before the Legislature as this bill), the board shall issue a request for expressions of interest and information for the construction of at least one advanced nuclear reactor to generate at least 1,100 megawatts of electric power in the State.

b. Any entity seeking to construct an advanced nuclear reactor and qualify as a qualified project shall submit to the board, no later than 90 days after the release of the request pursuant to subsection a. of this section, an expression of interest and information, which shall include, but need not be limited to, the following information:

(1) a letter of intent filed with the United States Nuclear Regulatory Commission;

(2) a proposed licensing pathway under the United States Nuclear Regulatory Commission;

(3) proposed State and municipal permitting pathways;

(4) a Regulatory Engagement Plan prepared in accordance with United States Nuclear Regulatory Commission guidance, which shall include:

(a) the company's structure;

(b) the project's structure, including anticipated construction timeframe and completion date; and

(c) pre-application engagement documents and information;

(5) site characteristics or an Early Site Permit pursuant to 10 C.F.R. s.52.12 et seq., if issued;

(6) the proposed system design and technology structure;

(7) the estimated costs of construction and operations, including a detailed analysis of all project components;

(8) the proposed financing structure, including proposed investors and any proposed energy offtake agreements or proposed co-located energy users;

(9) any proposed or anticipated sources of construction funding, including whether the entity proposing the project is seeking and anticipates a loan from the United States Department of Energy's Loan Programs Office and the percentage of total construction costs that would be covered by the loan;

(10) the proposed ANEC price structure pursuant to section 7 of P.L. , c. (C.) (pending before the Legislature as this bill), which reflects the total revenue requirements of the project over the proposed period on a dollars per megawatt hour basis and the anticipated impact to ratepayers, including the anticipated impact per month on ratepayer bills;

(11) the proposed amount of ANDC funding pursuant to subsection c. of section 12 of P.L.1999, c.23 (C.48:3-60) and the anticipated impact to ratepayers, including the anticipated impact per month on ratepayer bills;

(12) proposed laddered structures for adjustments to the ANDC or ANEC to provide for sharing of allowable cost increases of less than or equal to 20 percent of the proposed construction cost estimate between the entity proposing the project and ratepayers;

(13) an analysis of the impact of the proposed project on jobs, wages, income, tax revenue, local and regional economy, infrastructure development, and economic development for the State;

(14) a proposal for returning to New Jersey ratepayers some or all of the revenues generated by the qualified project from the sale of energy, capacity, or any ancillary service in PJM during the term for which the project is eligible to receive ANECs; and

(15) any other information deemed necessary by the board.

c. An expression of interest and information shall not result in a binding agreement, but shall be used by the board to grant provisional qualification status to at least one proposed advanced nuclear reactor project. The board shall undertake an extensive and complete evaluation of all proposed projects and provisionally qualify or deny provisional qualification of any proposed project no more than 270 days after receipt by the board of a complete expression of interest and information. The board shall grant provisional qualification status upon a determination that a proposed advanced nuclear reactor project is reasonably likely to satisfy the State's energy reliability, resilience, and capacity needs at reasonable cost to ratepayers based on a review of the information submitted pursuant to subsection b. of this section.

d. Upon granting provisional qualification status, the board shall enter into negotiations with the provisionally qualified project with respect to the ANEC price and schedule, any ANDC funding, risk sharing for construction cost decreases and allowable cost increases, and any other terms and conditions that the board deems necessary based on the information provided in the expression of interest. In conducting its evaluation and negotiations, the board may request and consider any additional information the board deems necessary for these purposes.

e. The board may designate one or more provisionally qualified projects as a qualified project if, after reaching an agreement with the project on all relevant terms, the board finds that the project will significantly contribute to meeting the State's energy reliability, resilience, and capacity needs at a reasonable cost to ratepayers pursuant to subsection f. of this section.

f. A provisionally qualified project shall be deemed by the board to satisfy the State's energy reliability, resilience, and capacity needs at a reasonable cost to ratepayers, only if the proposed project satisfies the following conditions:

(1) all proposed costs of the project are necessary and justifiable, and cost estimates are found to be as accurate and realistic as possible and therefore comprise the verified total construction cost estimate;

(2) the proposed financing mechanisms fairly balance the risks and rewards of the project between ratepayers and shareholders, and ensure that any costs of non-performance shall be borne by shareholders;

(3) the entity proposing the project demonstrates financial integrity and sufficient access to capital to allow for a reasonable expectation of completion of construction of the project;

(4) the ANDC and ANEC funding, including funding for any allowable cost increases up to 20 percent above the verified total construction cost estimate, will not impose costs on New Jersey electric customers that are unreasonable or excessive, either in isolation or in relation to customers' bills as a whole; and

(5) any other requirements specified by the board in the request for expressions of interest and information issued pursuant to subsection a. of this section.

g. In negotiating the total amount of funding provided through the ANDC, based on the verified total construction cost estimate, and any risk-sharing structure for allowable cost increases of up to 20 percent above the verified total construction cost estimate, the board shall evaluate the reasonableness of the funding based on the verified total construction cost estimate, other sources of project funding and financing, anticipated project revenues, the anticipated construction phase duration, and the cost to New Jersey electric customers. The total amount of funding provided through the ANDC to a qualified project for construction costs not exceeding the verified total construction cost estimate shall be no more than 5 percent of the verified total construction cost estimate approved by the board in the final agreement made pursuant to section 6 of P.L. , c. (C.) (pending before the Legislature as this bill).

(1) If a qualified project, or any other existing nuclear reactor in New Jersey owned in whole, or in part, by the same entities as the project or their parent companies, has an agreement to sell electricity to a co-located energy user or other end user via a direct power purchase agreement, the verified total construction cost estimate shall be reduced in proportion to the percentage of the project's electricity output contracted to be sold to the co-located energy user or other end user.

(2) If a qualified project, or any other existing nuclear reactor in New Jersey owned in whole, or in part, by the same entities as the project or their parent companies, enters into an agreement to sell electricity to a co-located energy user or other end user via a direct power purchase agreement during construction or after construction is complete, the qualified project shall reimburse New Jersey ratepayers for any funding provided in excess of the amount that would have been allowed pursuant to paragraph (1) of this subsection.

h. (1) In negotiating the ANEC price schedule for the project, the board shall consider the return of revenues to New Jersey ratepayers from the qualified project's sale of energy, capacity, or any ancillary service in PJM during the term of the ANEC, as well as any risk-sharing structure for construction cost decreases and allowable cost increases of up to 20 percent above the verified total construction cost estimate, and shall evaluate its reasonableness based on:

(a) the projected electrical output and anticipated market prices over the anticipated life of the project, including a forecast of electricity revenues from the sale of energy to the grid derived from the project and capacity, as well as revenues anticipated by the sale of ANECs, air emission credits or offsets, or any tradable environmental attributes created by the project;

(b) the verified total construction cost estimate of the project;

(c) other sources of project funding and financing; and

(d) the cost to New Jersey electric customers.

(2) The board may consult with, and, if the board deems appropriate, rely on the findings of, other State entities with relevant expertise when carrying out an evaluation pursuant to this subsection.

6. (New section) a. If the board and a provisionally qualified project entity reach an agreement, all key terms and conditions shall be memorialized in a final board order designating the project as a qualified project. The final board order shall not be subject to change except with the consent of the board and the qualified project entity. Key terms to be specified in the final board order shall include, but need not be limited to:

(1) the commercial operation date of the qualified project;

(2) the verified project construction cost estimate;

(3) the value and payment schedule for ANECs, including the portion of revenues generated by the qualified project from the sale of energy, capacity, or any ancillary service in PJM during the term of the ANEC to be returned to New Jersey ratepayers;

(4) critical project development milestones and the consequences for failing to meet the milestones;

(5) any ANDC funding to be provided to the project and the schedule for disbursements of the funding;

(6) provisions for the treatment of construction cost decreases or allowable cost increases; and

(7) project reporting requirements.

b. Any final agreement issued by the board pursuant to this section shall, at a minimum, include conditions to ensure the following:

(1) no ANEC shall be paid until electricity is produced by the qualified project and transmitted to the electric grid;

(2) the qualified project shall result in a net increase of nuclear energy transmitted to the grid in the State equivalent to greater than 80 percent of the output of the advanced reactors associated with the project when accounting for, if applicable, any agreement to sell electricity to a co-located energy user or to an end user via a direct power purchase agreement under any condition described in subsection g. of section 5 of P.L. , c. (C.) (pending before the Legislature as this bill);

(3) the qualified project entity will reimburse the board and the State for all reasonable costs incurred for review of the project by the board, including, but not limited to, consulting services, oversight, inspections, and audits;

(4) the qualified project entity will undertake all reasonable wildlife protection efforts necessary to sustain the natural population of wildlife present in the areas surrounding the nuclear energy generation facility; and

(5) the qualified project entity will undertake community engagement and public education about nuclear energy for the duration of operations and will support the board in its efforts pursuant to paragraph (5) subsection a. of section 4 of P.L. , c. (C.) (pending before the Legislature as this bill).

c. In addition to the cost-sharing structure determined pursuant to subsection g. of section 5 of P.L. , c. (C.) (pending before the Legislature as this bill), for allowable cost increases of greater than 20 percent of the verified total construction cost estimate, the qualified project entity may petition the board for a further adjustment to the ANDC or ANEC, which the board may grant, in its discretion, upon a determination that the increase is necessary for the project's continued financial viability and will not impose an unreasonable burden on ratepayers.

d. A qualified project entity shall not be required to pass along to ratepayers tax credits or other governmental benefits that are greater than projected due to higher than anticipated costs of construction. A qualified project entity shall pass along to ratepayers 50 percent, or other percentage agreed to by the board and the qualified project entity, of any new tax credits or governmental benefits that were not anticipated in the final board order.

e. If the board and a provisionally qualified project entity do not reach an agreement within 12 months from the date of provisional qualification, the provisional qualification shall expire and the project shall no longer be considered a provisionally qualified project, except if the board and the provisionally qualified project entity both agree to extend the time to reach agreement.

f. Notwithstanding the limits and thresholds established in R.S.52:25-23 and the circulars issued pursuant thereto by the Division of Purchase and Property in the Department of Treasury and any agency-specific threshold applicable to the board, the board may use the procedures allowed by R.S.52:25-23 and established by the Director of the Division of Purchase and Property in Circular No. 26-02-DPP to procure without advertising the services of a consultant to assist the board with its duties under this section, except that the board shall not use a sole source for this procurement. A procurement pursuant to this subsection shall not be counted against the board's delegated procurement authority threshold.

7. (New section) a. No later than 18 months after the designation of any qualified project pursuant to section 6 of P.L. , c. (C.) (pending before the Legislature as this bill), the board shall establish, by board order, an Advanced Nuclear 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 nuclear energy. The ANEC program shall be designed to support at least 1,100 megawatts of electric generation from qualified projects. The percentage of kilowatt hours of energy that is required to be from nuclear energy shall reflect the projected ANEC production of each qualified project designated by the board pursuant to section 6 of P.L. , c. (C.) (pending before the Legislature as this bill) for a period to be agreed upon by the board and qualified project beginning from the commercial operation start date of the qualified project.

b. (1) A qualified project shall be eligible to receive ANECs for each kilowatt hour of electricity generated and sold through competitive wholesale markets in the PJM region. A qualified project shall not be eligible to receive ANECs for electricity sold to a co-located energy user or via a direct power purchase agreement with an end user.

(2) If an existing nuclear reactor in New Jersey that is owned in whole, or in part, by the same entities as the project or their parent companies, enters into an agreement to sell electricity to a co-located energy user or to an end user via a direct power purchase agreement after the designation of the qualified project, the electricity generated by the qualified advanced nuclear reactor that is eligible to receive ANECs shall be reduced by the number of kilowatt hours of electricity generated by the other reactor that is sold to the end user.

c. An electric power supplier or basic generation service provider shall comply with the ANEC program established pursuant to this section through the purchase of ANECs at a price and for the time period required by the board.

d. Revenues generated by a qualified project from the sale of energy, capacity, or any ancillary service in PJM during the term for which the project is eligible to receive ANECs shall be returned to New Jersey ratepayers as specified in the final board order entered pursuant to subsection a. of section 6 of P.L. , c. (C.) (pending before the Legislature as this bill). This subsection shall not apply to revenues generated from the direct sale of energy to an end user that contributed to the funding or financing of construction of the project and whose purchase of power from the project was contemplated in the board order designating the project as a qualified project.

8. (New section) a. The board shall establish, by board order, a distributed capacity program to support the development by electric public utilities of 500 megawatts of battery storage capacity in the State by 2030, with the goal of increasing grid stability, reducing interconnection timeframes, and reducing system cost.

b. No later than 12 months after the effective date of P.L. , c. (C.) (pending before the Legislature as this bill), the board shall establish minimum requirements for the distributed capacity program, including, but not limited to:

(1) the number of megawatt hours of storage capacity each electric public utility shall develop;

(2) minimum and maximum size and other requirements for storage resources participating in the program;

(3) provisions concerning the compatibility and alignment of storage asset deployment with the demand optimization program established pursuant to section 9 of P.L. , c. (C.) (pending before the Legislature as this bill), as well as any other programs that compensate participants for grid services;

(4) standards for electric public utility selection of developers and vendors, including use of competitive procurement processes where practicable;

(5) options for leasing storage assets to customers;

(6) requirements to ensure that low- and moderate-income customers and customers in overburdened communities benefit from the program;

(7) provisions to leverage all available funding sources, including any available financing from the United States Department of Energy and any applicable federal tax credits to reduce costs to New Jersey ratepayers; and

(8) any categories of costs associated with the electric public utilities' implementation of the program that may be recovered from ratepayers.

c. After the board issues minimum filing requirements, each electric public utility shall file an implementation and reporting plan with the board for its proposed implementation of the program and its proposed use of battery storage and other distributed assets in the program. The board shall review each plan and may request changes to the submitted plan prior to board action. The board may approve, approve in part, or deny each submitted plan, and shall determine the appropriate level of spending for each electric public utility's program and establish an appropriate rate of return on equity, which may be less than the rate of return established in the electric public utility's last base rate case. In determining the appropriate level of spending and appropriate procurement targets, the board shall consider the impact on electric customer bills and shall ensure that program results in cost savings to ratepayers, taking into account, among other things, avoided distribution

system upgrades, and impact on energy, capacity, and auxiliary services markets.

d. Each electric public utility shall file an annual report with the board to demonstrate its compliance with its approved implementation and reporting plan and the board's minimum requirements. If the electric public utility fails to achieve required program metrics, including, but not limited to, required peak demand reduction, customer enrollment, and avoided energy system cost, the board may disallow recovery of all or some costs, unless such failure is due to factors beyond the electric public utility's control and reasonable ability to predict.

9. (New section) a. The board shall establish, by board order, a demand optimization program for electric public utilities to optimize demand, reduce system peak demand, increase resource adequacy, reduce or defer the need for costly distribution system infrastructure upgrades, and help maintain grid reliability through grid flexibility services provided by distributed energy resource aggregations in the State. The program shall be designed to result in peak demand reduction of 500 megawatts by 2030.

b. No later than 12 months after the effective date of P.L. , c. (C.) (pending before the Legislature as this bill), the board shall establish minimum requirements for the demand optimization program, including, but not limited to:

(1) the allocation of the system peak demand reduction target that must be achieved by each electric public utility;

(2) grid flexibility services provided by the demand optimization program, which shall include, at a minimum, contribution toward system wide peak load reduction, and may also include local peak demand reduction, locational value, the avoidance or deferral of transmission or distribution upgrades for expanding integration capacity expansion, voltage support or other ancillary services, and such other functions and grid flexibility service opportunities that the board determines are supportive of efficient planning and utilization of the electric distribution grid;

(3) a process for allowing customers to combine load modification behavior with battery storage, non-battery storage, electric vehicle technologies, and other distributed energy resources that offer generation or load profile modification to enroll such devices in the program;

(4) the specific distributed energy resources that should be included, which shall include, but need not be limited to, battery energy storage systems, managed electric vehicle charging, bidirectional electric vehicle operation, smart thermostat demand response, smart inverter voltage support, grid-interactive water heaters, and commercial and industrial automated demand response;

(5) technical requirements for the development of a distributed energy resource registry, a distributed energy resource management

system, and other data infrastructure and technology platforms developed to enable the demand optimization program, prioritizing open standards and interoperability for data, devices, and controls that are orchestrated through grid edge distributed energy resource management systems under market development;

(6) standards for electric public utility technology that are compatible with a competitive market for third-party aggregations participating in PJM wholesale markets in compliance with FERC Order 2222;

(7) standards for electric public utility selection of developers and vendors, including use of competitive procurement processes where practicable;

(8) performance terms for customers participating in the program, including measurement and verification, compensation levels, and non-performance penalties;

(9) requirements to ensure that low- and moderate-income customers and customers in overburdened communities are included in and benefit from the program; and

(10) any categories of costs associated with the electric public utilities' implementation of the program that may be recovered from ratepayers.

c. After the board issues minimum filing requirements, each electric public utility shall file an implementation and reporting plan with the board for its proposed demand optimization program. The board shall review each plan for cost effectiveness, conformance with program requirements, and conformance to the utility's filed grid modernization plan, and may request changes to the submitted plan prior to board action. The board may approve, approve in part, or deny each submitted plan, and shall determine the appropriate level of spending for each electric public utility's demand optimization program and establish an appropriate rate of return on equity, which may be less than the rate of return established in the electric public utility's most recent base rate case. In determining whether to approve a plan and the appropriate level of spending, the board shall consider impacts on electric customer bills and shall ensure that the program results in cost savings to ratepayers, taking into account potential capacity market savings, avoided system costs, reduced peak demand and deferred distribution system upgrades, and the level of system integration capacity anticipated.

d. Each electric public utility shall file an annual report with the board to demonstrate compliance with its approved implementation plan and the board's minimum requirements. If the electric public utility fails to achieve required program metrics, including, but not limited to, required peak demand reduction, integration capacity expansion, customer enrollment, and avoided energy system cost, the board may disallow recovery of all or some costs, unless such

failure is due to factors beyond the electric public utility's control and reasonable ability to predict.

10. Section 11 of P.L.1973, c.185 (C.13:19-11) is amended to read as follows:

11. Notwithstanding the applicant's compliance with the criteria listed in section 10 of P.L.1973, c.185 (C.13:19-10), if the commissioner finds that the proposed development would violate or tend to violate the purpose and intent of **[**this act**]** P.L.1973, c.185 (C.13:19-1 et seq.) as specified in section 2 of P.L.1973, c.185 (C.13:19-2), or that the proposed development would materially contribute to an already serious and unacceptable level of environmental degradation or resource exhaustion, the commissioner may deny the permit application, or the commissioner may issue a permit subject to such conditions as the commissioner finds reasonably necessary to promote the public health, safety and welfare, to protect public and private property, wildlife and marine fisheries, and to preserve, protect and enhance the natural environment. The construction and operation of a nuclear electricity generating facility shall, however, not be approved by the commissioner unless the commissioner finds that the proposed method for the storage or disposal of radioactive waste material to be produced or generated by the facility will be safe, conforms to standards established by the Nuclear Regulatory Commission, and will effectively remove danger to life and the environment from such waste material.
(cf: P.L.1993, c.190, s.12)

11. Section 12 of P.L.1973, c.185 (C.48:3-60) is amended to read as follows:

12. a. Simultaneously with the starting date for the implementation of retail choice as determined by the board pursuant to subsection a. of section 5 of P.L.1999, c.23 (C.48:3-53), the board shall permit each electric public utility and gas public utility to recover some or all of the following costs through a societal benefits charge that shall be collected as a non-bypassable charge imposed on all electric public utility customers and gas public utility customers, as appropriate:

(1) the costs for the social programs for which rate recovery was approved by the board prior to April 30, 1997. For the purpose of establishing initial unbundled rates pursuant to section 4 of P.L.1999, c.23 (C.48:3-52), the societal benefits charge shall be set to recover the same level of social program costs as is being collected in the bundled rates of the electric public utility on the effective date of P.L.1999, c.23 (C.48:3-49 et al.). The board may subsequently order, pursuant to its rules and regulations, an increase or decrease in the societal benefits charge to reflect changes in the costs to the utility of administering existing social programs.

Nothing in P.L.1999, c.23 (C.48:3-49 et al.) shall be construed to abolish or change any social program required by statute or board order or rule or regulation to be provided by an electric public utility. Any such social program shall continue to be provided by the utility until otherwise provided by law, unless the board determines that it is no longer appropriate for the electric public utility to provide the program, or the board chooses to modify the program;

(2) nuclear plant decommissioning costs;

(3) the costs of demand side management programs that were approved by the board pursuant to its demand side management regulations prior to April 30, 1997. For the purpose of establishing initial unbundled rates pursuant to section 4 of P.L.1999, c.23 (C.48:3-52), the societal benefits charge shall be set to recover the same level of demand side management program costs as is being collected in the bundled rates of the electric public utility on the effective date of P.L.1999, c.23 (C.48:3-49 et al.). Within four months of the effective date of P.L.1999, c.23 (C.48:3-49 et al.), and every four years thereafter, the board shall initiate a proceeding and cause to be undertaken a comprehensive resource analysis of energy programs, and within eight months of initiating such proceeding and after notice, provision of the opportunity for public comment, and public hearing, the board, in consultation with the Department of Environmental Protection, shall determine the appropriate level of funding for energy efficiency, light, medium, and heavy-duty plug-in electric vehicles, including school buses, and associated plug-in electric vehicle charging infrastructure, energy storage, and Class I renewable energy programs that provide environmental benefits above and beyond those provided by standard offer or similar programs in effect as of the effective date of P.L.1999, c.23 (C.48:3-49 et al.); provided that the funding for such programs be no less than 50 percent of the total Statewide amount being collected in electric and gas public utility rates for demand side management programs on the effective date of P.L.1999, c.23 (C.48:3-49 et al.) for an initial period of four years from the issuance of the first comprehensive resource analysis following the effective date of P.L.1999, c.23 (C.48:3-49 et al.), and provided that 25 percent of this amount shall be used to provide funding for Class I renewable energy projects in the State. In each of the following fifth through eighth years, the Statewide funding for such programs shall be no less than 50 percent of the total Statewide amount being collected in electric and gas public utility rates for demand side management programs on the effective date of P.L.1999, c.23 (C.48:3-49 et al.), except that as additional funds are made available as a result of the expiration of past standard offer or similar commitments, the minimum amount of funding for such programs shall increase by an additional amount equal to 50 percent of the additional funds made available, until the minimum

amount of funding dedicated to such programs reaches $140,000,000 total. After the eighth year the board shall make a determination as to the appropriate level of funding for these programs. Such programs shall include a program to provide financial incentives for the installation of Class I renewable energy projects in the State, and the board, in consultation with the Department of Environmental Protection, shall determine the level and total amount of such incentives as well as the renewable technologies eligible for such incentives which shall include, at a minimum, photovoltaic, wind, and fuel cells. The board shall simultaneously determine, as a result of the comprehensive resource analysis, the programs to be funded by the societal benefits charge, the level of cost recovery and performance incentives for old and new programs and whether the recovery of demand side management programs' costs currently approved by the board may be reduced or extended over a longer period of time. The board shall make these determinations taking into consideration existing market barriers and environmental benefits, with the objective of transforming markets, capturing lost opportunities, making energy services more affordable for low income customers and eliminating subsidies for programs that can be delivered in the marketplace without electric public utility and gas public utility customer funding. In addition to the determinations above, the board shall allocate sufficient funding from the societal benefits charge to cover the remaining cost of fully funding incentive awards issued for transmission-scale energy storage systems that are eligible projects pursuant to P.L.2025, c.136 (C.48:3-121.2 et al.), after accounting for funding allocated to this purpose from other sources;

(4) manufactured gas plant remediation costs, which shall be determined initially in a manner consistent with mechanisms in the remediation adjustment clauses for the electric public utility and gas public utility adopted by the board; and

(5) the cost, of consumer education, as determined by the board, which shall be in an amount that, together with the consumer education surcharge imposed on electric power supplier license fees pursuant to subsection h. of section 29 of P.L.1999, c.23 (C.48:3-78) and the consumer education surcharge imposed on gas supplier license fees pursuant to subsection g. of section 30 of P.L.1999, c.23 (C.48:3-79), shall be sufficient to fund the consumer education program established pursuant to section 36 of P.L.1999, c.23 (C.48:3-85).

b. There is established in the Board of Public Utilities a nonlapsing fund to be known as the "Universal Service Fund." The board shall determine: the level of funding and the appropriate administration of the fund; the purposes and programs to be funded with monies from the fund; which social programs shall be provided by an electric public utility as part of the provision of its regulated services which provide a public benefit; whether the funds

appropriated to fund the "Lifeline Credit Program" established pursuant to P.L.1979, c.197 (C.48:2-29.15 et seq.), the "Tenants' Lifeline Assistance Program" established pursuant to P.L.1981, c.210 (C.48:2-29.30 et seq.), the funds received pursuant to the Low Income Home Energy Assistance Program established pursuant to 42 U.S.C. s.8621 et seq., and funds collected by electric and gas public utilities, as authorized by the board, to offset uncollectible electricity and natural gas bills should be deposited in the fund; and whether new charges should be imposed to fund new or expanded social programs.

c. Upon designating a qualified advanced nuclear reactor project pursuant to section 6 of P.L. , c. (C.) (pending before the Legislature as this bill), the board shall establish, by board order, a non-bypassable charge to be known as the advanced nuclear development charge, or ANDC, which shall be imposed on all electric utility customers. The board shall determine the amount of the charge necessary to provide the agreed-upon funding for costs not exceeding the verified total construction cost estimate and any allowable cost increases approved by the board pursuant to subsection g. of section 5 and subsection c. of section 6 of P.L. , c. (C.) (pending before the Legislature as this bill), and shall establish, and adjust from time to time as necessary, the amount that each electric public utility is required to collect accordingly. The board shall require each electric public utility to begin assessing the charge on all customer bills no later than 180 days after the designation of a qualified advanced nuclear reactor project, or other date specified by the board. Monies collected through the ANDC shall be deposited in the "Advanced Nuclear Development Fund" for the purposes described in subsection d. of this section.

d. There is established in the Board of Public Utilities a nonlapsing fund to be known as the "Advanced Nuclear Development Fund." The monies in the fund shall be used to support the development of one or more qualified advanced nuclear reactor projects by providing funding for: (1) a portion of costs incurred for the construction of the project; and (2) a portion of the project's allowable cost increases determined by the board to be reasonable and prudent and pursuant to the cost-sharing structure described at subsection g. of section 5 of P.L. , c. (C.) (pending before the Legislature as this bill). The level of funding to be provided to a qualified advanced nuclear reactor project shall be established by the board in any order designating a qualified advanced nuclear reactor project pursuant to section 6 of P.L. , c. (C.) (pending before the Legislature as this bill). The level of funding to be provided to the qualified advanced nuclear reactor project for allowable cost increases greater than 20 percent above the verified total construction cost estimate may be increased

pursuant to subsection c. of section 6 of P.L. , c. (C.) (pending before the Legislature as this bill).

e. The "Advanced Nuclear Development Fund" shall be administered by the board and shall be credited with:

(1) monies received from the ANDC pursuant to subsection c. of this section;

(2) such monies as are appropriated by the Legislature for this purpose; and

(3) any return on investment of monies deposited in the fund.

f. The board shall disburse the monies collected in the "Advanced Nuclear Development Fund" to the qualified advanced nuclear reactor project entity based on the construction milestone and payment schedule agreed to and specified in the board's order issued pursuant to section 6 of P.L. , c. (C.) (pending before the Legislature as this bill). The disbursement of funds shall be directed by the board upon submission of documentation satisfactory to the board of costs incurred and construction progress, and a determination by the board that such costs were prudently incurred. Submissions shall include proof of actual expenditures and any other information the board deems necessary to verify eligibility for disbursement of funds. The board shall not disburse monies for any qualified advanced nuclear reactor project until the project has been issued a construction permit, combined construction permit and operating license, or Limited Work Authorization by the United States Nuclear Regulatory Commission.

g. When all disbursements to any qualified advanced nuclear reactors have been made pursuant to subsection f. of this section, or if the designation of the qualified advanced nuclear reactor has been terminated by the board, the board shall direct each electric public utility to immediately cease collecting the ANDC.

h. As used in this section:

"Advanced nuclear development charge" or "ANDC" means a charge imposed by an electric public utility at a level determined by the board, pursuant to the provisions of subsections c. through g. of this section.

"Qualified advanced nuclear reactor project," means the same as the term "qualified project" is defined in section 3 of P.L. , c. (C.) (pending before the Legislature as this bill).

(cf: P.L.2025, c.136, s.7)

12. The board may establish such rules and regulations as it deems necessary to implement the provisions of P.L. , c. (C.) (pending before the Legislature as this bill). Any rules established by the board pursuant to this section 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 32 seq.)

13. This act shall take effect immediately.

STATEMENT

This bill, to be known as the "New Jersey Energy Security and Affordability Act," would establish three new programs in the Board of Public Utilities (BPU): (1) a program to incentivize the development of advanced nuclear reactors in the State, (2) a program to support the installation of 500 megawatts of battery storage capacity in the State by 2030, and (3) a program to reduce peak demand on the electric grid.

Under the advanced nuclear program established by the bill, the BPU would issue a request for expressions of interest and information for the construction of at least one advanced nuclear reactor to generate at least 1,100 megawatts of electric power in the State. The bill would establish certain conditions that are required to be met in order for the BPU to approve an advanced nuclear reactor project, including that the project will significantly contribute to meeting the State's energy reliability, resilience, and capacity needs at a reasonable cost to ratepayers. If approved, a qualified advanced nuclear reactor project would be authorized to receive financial support through an advanced nuclear development charge (ANDC) and advanced nuclear energy certificates (ANECs). Under the ANDC, a qualified advanced nuclear reactor project would be eligible to receive funding for a negotiated percentage of construction costs through a non-bypassable charge which would be imposed on all electric utility customers and deposited into a fund to be known as the Advanced Nuclear Development Fund. Under the ANEC program, a certain percentage of the electric power sold in the State would be required to be from advanced nuclear reactors, and electric utilities would satisfy this requirement by purchasing a certain number of ANECs each year.

The bill would also direct the BPU to establish a distributed capacity program, which would be designed to support the development by electric public utilities of 500 megawatts of battery storage capacity in the State by 2030. The bill would require the BPU to establish minimum requirements for the program, but electric public utilities would be responsible for implementation. Each electric public utility would be required to file an implementation and reporting plan with the BPU, as well as an annual report.

The bill would further require the BPU to establish, by board order, a demand optimization program for electric public utilities to

reduce system peak demand, increase resource adequacy, reduce or defer the need for costly distribution system infrastructure upgrades, and help maintain grid reliability through grid flexibility services provided by distributed energy resource aggregations in the State. The program would be required to be designed to result in peak demand reduction of 500 megawatts by 2030. Again, the bill would require the BPU to establish minimum requirements for the program, but electric public utilities would be responsible for implementation, and each electric public utility would be required to file an implementation and reporting plan with the BPU, as well as an annual report.

Finally, the bill would amend the "Coastal Area Facility Review Act" (CAFRA), P.L.1973, c.185 (C.13:19-1 et seq.), to provide that nuclear facilities may be approved under CAFRA if the Commissioner of Environmental Protection finds that the proposed method for the storage of radioactive waste material to be produced or generated by the facility will be safe, will conform to standards established by the Nuclear Regulatory Commission, and will effectively remove danger to life and the environment from waste material.