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 Nuclear Diversity Certificate program.

CURRENT VERSION OF TEXT  
Introduced Pending Technical Review by Legislative Counsel.
AN ACT concerning nuclear energy and supplementing P.L.1999, c.23.

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

1. a. The Legislature finds and declares that:

(1) 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.

(2) The December 2015 Update to the New Jersey Energy Master Plan recommends that this State ensure that 70 percent of the State’s electric needs are generated by clean energy sources by 2050. Nuclear power is a critical source of zero emissions energy as the State reduces its reliance on fossil fuels and transitions to clean energy.

(3) Nuclear power is a critical component of the State’s clean energy portfolio because nuclear power plants do not emit greenhouse gases and other pollutants; in addition, nuclear power is an important element of a diverse energy portfolio that currently supplies approximately 40 percent of New Jersey’s electric power needs.

(4) Nuclear power plants that currently provide electricity in New Jersey are at risk for premature retirement due to a variety of factors.

(5) There is a trend toward a less diverse energy portfolio nationwide as: the share of coal-fired power plants is declining; the share of clean energy, such as wind and solar, may be limited by external constraints in the near-term; and the share of natural gas-fired power plants is increasing.

(6) The North American Electric Reliability Corporation, the entity charged by federal law to develop and enforce reliability standards for the bulk power system, issued its 2016 Long-Term Reliability Assessment in December 2016, stating that “reliance on a single fuel increases vulnerabilities, particularly during extreme weather conditions,” that “over the past decade several areas have significantly increased their dependence on natural gas,” and that regulators and legislators should consider the uncertainties in generation retirements and generation mix changes that can manifest and have reliability impacts.

(7) Fuel assurance is a growing consideration for the electric power delivery system. Capacity challenges on existing natural gas pipelines combined with the difficulty in siting and constructing new natural gas pipelines, along with competing uses for natural gas, such as building heating, have created supply constraints in the past, and those constraints could impact system reliability.

(8) Recent severe weather events have demonstrated the need to improve the resilience of the electric power delivery system. The
mix of generation resources serving New Jersey residents must be
capable of handling high-impact, low probability weather events.
Having a mix of resources and fuels available when a major
disturbance occurs is essential.
(9) The electric power demand in this State currently met by
nuclear power plants would not be met by renewable energy sources
if those nuclear power plants cease production. Therefore, electric
demand in this State would be met in the near term primarily by
increased reliance on existing and new natural gas-fired generation
and, secondarily, by increased reliance on coal-fired generation.

b. The Legislature therefore determines that:
(1) In light of the primacy of natural gas use for heating
buildings in New Jersey, increased reliance on natural gas-fired
power plants will render the electric generation and delivery
systems less resilient and more vulnerable to the impacts of extreme
winter weather, natural gas pipeline accidents, and other factors
affecting the deliverability of natural gas to electric power plants in
and around this State.
(2) An increase in the proportion of New Jersey’s electricity
demand met by natural gas and coal caused by the premature
retirement of nuclear power plants will result in a substantial
increase in emissions of several pollutants and associated adverse
public health and environmental impacts.
(3) Increased reliance on natural gas and coal-fired power plants
will substantially impede the State’s ability to meet its existing air
quality and emissions standards and requirements.
(4) In this State, the model of providing credits to zero- or low-
emission energy generation sources as compensation for their
environmental attributes has proven successful for generators of
Class I and Class II renewable energy, which receive renewable
energy certificates, including solar electric power generators, which
receive solar renewable energy certificates.
(5) A program that recognizes and compensates nuclear power
plant operators in a manner similar to other non-emitting energy
generation resources, to the extent required to prevent the loss of
nuclear energy, which the State’s residents and businesses rely on
for approximately 40 percent of their electricity needs, would
further this State’s interest in environmental protection and
maintaining a diverse mix of energy sources.

2. As used in this act:
“Board,” “electric public utility,” and “energy year” or “EY”
shall have the same meaning as provided in section 3 of P.L.1999,
c.23 (C.48:3-51).
“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 this act.
“Eligibility period” means the period of time, measured in energy years, during which a selected nuclear power plant may receive a NDC pursuant to section 3 of this act.

“Nuclear diversity certificate” or “NDC” means a certificate, issued by the board or its designee, representing the environmental and fuel diversity 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 the provisions of section 3 this act.

“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 this act.

3. a. No later than 30 days after the effective date of this act, a nuclear power plant seeking to participate in the program established by this act shall provide to the board certified cost projections over the next three energy years, including operation and maintenance expenses, fuel expenses, non-fuel capital expenses, the cost of operational 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 and air quality attributes are at risk of loss because the nuclear power plant is cash negative on an annual basis, or alternatively is not covering its costs including its cost of capital on an annual basis. A nuclear plant seeking to participate in the program shall further provide, no later than 30 days after the effective date of this act, 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 not subject to public disclosure, notwithstanding any law to the contrary, including the common law.

b. Notwithstanding any law, regulation, rule, or order to the contrary, the board shall complete a proceeding no later than 180 days after the effective date of this act to allow for the commencement of a program allowing for the issuance by the board of a nuclear diversity certificate. In this proceeding, the board shall adopt, after notice, the opportunity for comment, and public hearing, an order establishing a NDC program for selected nuclear power plants which shall include, but need not be limited to:

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

2. the establishment of a mechanism for each electric public utility to purchase NDCs from selected nuclear power plants and a
mechanism for the board to effectuate the provisions of subsection i. of section 3 of this act.

c. No later than 210 days after the effective date of this act, a nuclear power plant seeking to participate in the program established by this act shall submit its application to the board.

d. Notwithstanding any law, regulation, rule, or order to the contrary, the board shall complete a proceeding no later than 300 days after the effective date of this act 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 NDCs, and establishing which eligible nuclear power plants have been selected to receive NDCs, pursuant to this section. If the board determines, in its discretion, that no nuclear plant that applies in accordance with subsection c. of section 3 of this act satisfies the objectives of this act, then the board shall be under no obligation to certify any nuclear power plant as an eligible nuclear power plant.

e. In order to be certified by the board as an eligible nuclear power plant, in addition to the requirements imposed by subsection a. of this section, a nuclear power plant shall:

   (1) be licensed to operate by the United States Nuclear Regulatory Commission by the effective date of this act and through 2030 or later;

   (2) demonstrate to the satisfaction of the board that it makes a significant and material contribution to the diversity and resiliency of the energy resource mix for electricity delivered in this State;

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

   (4) 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 not subject to public disclosure, notwithstanding any law to the contrary, including the common law, that the nuclear power plant’s fuel diversity and air quality attributes are at risk of loss because the nuclear power plant is cash negative on an annual basis, or alternatively is not covering its costs including its cost of capital on an annual basis, and that the nuclear power plant will cease operations within three years unless the nuclear power plant experiences a material financial change;

   (5) certify annually that the nuclear power plant does not receive any direct or indirect payment or credit under a law of this State, other state or federal law, or regional compact, despite its reasonable best efforts to obtain any such payment or credit, for its fuel diversity,
resilience, or environmental attributes that will eliminate the need for
the nuclear power plant to retire prematurely, except for any payment
or credit received under the provisions of this act; and

(6) 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 NDC
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 this act, and shall also
consider other relevant factors such as sustainability or long-term
commitment to nuclear energy production in a manner that benefits
New Jersey’s air quality and fuel diversity. 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 NDCs 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 until the combined
number of megawatt-hours of electricity produced in EY 2017 by all
selected nuclear power plants equals 40 percent of the total number of
megawatt-hours of electricity distributed by electric public utilities in
this State in EY 2017. The board shall not select an eligible nuclear
power plant to receive NDCs if the addition of the electricity produced
by that nuclear power plant in EY 2017 to the electricity produced in
EY 2017 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 this State in EY
2017.

(2) A selected nuclear power plant shall be eligible to receive
NDCs 300 days after the effective date of this act. In the first energy
year in which an eligible nuclear power plant is selected, the nuclear
power plant shall receive a number of NDCs 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 NDCs 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 NDCs
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 NDCs for additional
eligibility periods of three energy years, consistent with the provisions of this act.

(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 NDCs, except with respect to nuclear power plant shutdowns for necessary maintenance and refueling.

i. (1) The board shall determine the price of a NDC 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 this 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 this State shall be required to begin to purchase NDCs 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 NDCs and within 90 days after the conclusion of each subsequent energy year. The number of NDCs an electric public utility shall be required to purchase shall equal the total number of NDCs 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 this State by the electric public utility as compared to other electric public utilities in this State.

(3) To ensure that a selected nuclear power plant shall not receive double-payment for its fuel diversity, resilience, or 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 of this State, other state law or federal law, or regional compact referenced in paragraph (5) of subsection e. of this section. Notwithstanding paragraph (2) of subsection i. of this section, the number of NDCs purchased by each electric public utility from a selected nuclear power plant for an energy year shall be reduced by the number of NDCs equal in value to the dollar amount determined by the board in this paragraph, multiplied by the percentage of electricity distributed in this State by the electric public utility as compared to other electric public utilities in this State.

j. (1) The board shall order the full recovery of all costs associated with the electric public utility’s required procurement of NDCs, and with the board’s implementation of the NDC program under this act, through a non-bypassable, irrevocable charge imposed on the electric public utility’s retail distribution customers. Within 150 days of the effective date of this act, 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, unless
the board elects to reduce this charge pursuant to paragraph (3) of this
subsection. Within 60 days of 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 NDCs, 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 NDCs, and to
reimburse the board for reasonable, verifiable costs it incurs to
implement the NDC program pursuant to this act to the extent the
board’s costs exceed the application fees collected by the board
pursuant to paragraph (6) of subsection e. of this section.

(2) Notwithstanding any provision of this act to the contrary, an
electric public utility shall not be required to purchase any additional
number of NDCs if the cost of the additional number of NDCs 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 NDC
program pursuant to subsections b., c., and d. of this section, which
costs shall be remitted to the board from the NDC 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 NDC program remains affordable to
New Jersey customers, the board may, in its discretion, reduce the per-
kilowatt hour charge imposed in paragraph (1) of this subsection,
provided that the board determines that a reduced charge will
nonetheless be sufficient to achieve the State’s fuel diversity and air
quality objectives by preventing the premature retirement of the
nuclear power plants that meet the eligibility criteria established
pursuant to subsections e. and f. of this section.

(b) If the board reduces the per-kilowatt hour charge imposed in
paragraph (1) of this subsection pursuant to subparagraph (a) of this
paragraph and makes the reduction applicable to the initial eligibility
period described in paragraph (1) of subsection h. of this section, the
board shall make its determination no later than 120 days after the
effective date of this act. 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 the 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.

(c) For the second three energy year eligibility period described in paragraph (2) of subsection h. of this section, the per-kilowatt hour charge shall be the charge set forth in paragraph (1) of this subsection, unless the board reduces the per-kilowatt hour charge pursuant to subparagraph (a) of this paragraph. The board may reduce the per-kilowatt hour charge as provided for in paragraph (1) of this subsection for the second eligibility period if, during any of the two prior energy years, there is a .75 percent increase in the load weighted residential statewide basic generation service rate for the Statewide average residential customer based on two prior basic generation service auctions. The load weighting shall be based upon the kilowatt hours included in each public utility’s approved basic generation service. If the board reduces the per-kilowatt hour charge provided for within paragraph (1) of this subsection for the second three energy year eligibility period, the board shall make its determination no later than 10 months prior to the commencement of the second eligibility period. Within 30 days thereafter, each electric public utility shall file a tariff consistent with the board’s determination. Within 60 days after the filing of the tariff, after notice, the opportunity for comment, and public hearing, the board shall approve the tariff, provided that it is consistent with the board’s determination pursuant to this paragraph.

(d) For every subsequent eligibility period provided for in paragraph (2) of subsection h. of this section other than the first eligibility period, the per-kilowatt hour charge shall be the charge established pursuant to paragraph (1) of this subsection, unless the board reduces the per-kilowatt hour charge pursuant to subparagraph (a) of this paragraph. The board may reduce the per-kilowatt hour charge provided for within paragraph (1) of this subsection for subsequent eligibility periods other than the first subsequent eligibility period if, during any of the three prior energy years, there is a .75 percent increase in the load weighted residential Statewide basic generation service rate for the statewide average residential customer based on three prior basic generation service auctions. The load weighting shall be based upon the kilowatt hours included in each electric public utility’s approved basic generation service. If the board reduces the per-kilowatt hour charge, the board shall make its determination no later than 10 months prior to the commencement of that period. Within 30 days thereafter, each electric public utility shall file a tariff consistent with the board’s determination. Within 60 days after the filing of the tariff, after notice, the opportunity for comment, and public hearing, the board shall approve the tariff, provided that it is consistent with the board’s determination pursuant to this paragraph. In such a case, the reduced per-kilowatt charge shall be applicable to the remainder of the subsequent eligibility period.

k. (1) A selected nuclear power plant shall be excused from performance, including but not limited to the sale of NDCs, 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 the 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 NDC, 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 NDCs, and the capital expenditures are expenditures that a prudent owner or operator of a selected nuclear power plant would not undertake.

(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 NDCs from the selected nuclear power plant in an amount equal to the compensation received for the sale of NDCs since the board’s last determination of the selected nuclear power plant’s eligibility to receive NDCs. 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) If a selected nuclear power plant ceases operations for any reason prior to the end of its United States Nuclear Regulatory Commission license, the plant’s owner shall, within 90 days of filing with the Nuclear Regulatory Commission to cease operations, 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.

4. This act shall take effect immediately.
This bill directs the Board of Public Utilities (board) to establish a Nuclear Diversity Certificate (NDC) program. Under the bill, a NDC is a certificate, issued by the board or its designee, representing the environmental and fuel diversity attributes of one megawatt-hour of electricity generated by an eligible nuclear power plant selected by the board to participate in the NDC program.

To participate in the NDC program, a nuclear power plant is required to: (1) be licensed to operate by the United States Nuclear Regulatory Commission by the effective date of 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 diversity and resiliency of the energy resource mix for electricity delivered in the State; (3) 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; (4) provide financial information to the board demonstrating that the plant will cease operations unless the nuclear power plant experiences a material financial change; (5) certify annually to the board that the nuclear power plant does not receive any direct or indirect payment or credit under a law of the State, other state or federal law, or regional compact, that would eliminate the need for the nuclear power plant to retire prematurely, despite its reasonable best efforts to obtain any such payment or credit; and (6) submit an application fee to the board in an amount to be determined by the board, but which is not to exceed $250,000, to be used to defray the costs incurred by the board to administer the NDC program.

The board is to determine the price of an NDC each energy year under the formula provided in the bill. Within 90 days after the conclusion of an energy year, each electric public utility (utility) in the State is required to pay each nuclear power plant that received NDCs for that prior energy year for the total number of NDCs received by the nuclear power plant multiplied by the percentage of electricity the utility distributed in the State as compared to other utilities in the State.

The board is to order the full recovery of all costs associated with the utility’s procurement of NDCs through a non-bypassable, irrevocable charge imposed on the customers of the utility in the amount of $0.004 per kilowatt hour charge. This charge may be reduced by the board if certain conditions are met as specified in the bill. Excess monies collected by utilities through the charge are to be refunded to their customers.

A nuclear power plant selected by the board to participate in the program is to initially receive NDCs through the end of the first energy year in which the plant was selected, plus an additional three energy years thereafter, and then is subject to review by the board.
triennially for renewed eligibility for additional, three energy year periods.

A nuclear power plant selected by the board to participate in the program may suspend or cease operations under certain circumstances, including circumstances in which events prevent the selected nuclear power plant from continuing operations despite the selected nuclear power plant’s reasonable efforts to continue operations. If a selected nuclear power plant ceases operations during an eligibility period for any reason other than those specified in the bill, the selected nuclear power plant is to pay a charge to the utilities that purchased NDCs from the selected nuclear power plant in an amount equal to the compensation received for the sale of NDCs since the board’s last determination of the selected nuclear power plant’s eligibility to receive NDCs.