

SENATE, No. 225

STATE OF NEW JERSEY 221st LEGISLATURE

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Sponsored by:

Senator BOB SMITH

District 17 (Middlesex and Somerset)

Senator LINDA R. GREENSTEIN

District 14 (Mercer and Middlesex)

Co-Sponsored by:

Senator Diegnan

SYNOPSIS

Establishes incentive program for installation of energy storage systems.

CURRENT VERSION OF TEXT

As reported by the Senate Environment and Energy Committee with technical review.



1 AN ACT concerning energy storage systems and supplementing
2 Title 48 of the Revised Statutes.

3

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

6

7 1. The Legislature finds and declares that:

8 a. The electric grid is evolving from a system that relies on
9 one-way, long-distance transmission of electricity from centralized
10 power plants to customers to a system that includes local energy
11 sources located close to customers, who increasingly both produce
12 and consume electricity;

13 b. Energy storage systems, located throughout the electric grid,
14 can facilitate greater energy independence and energy security for
15 the State's electric customers by providing increased stability of the
16 power supply, smoother integration of renewable energy sources, a
17 reduction in the peak demand placed on centralized power plants,
18 and cost savings;

19 c. Locating energy sources and energy storage systems in high
20 value locations, often near the point of consumption, enhances grid
21 stability and increases efficiency;

22 d. Empowering New Jerseyans to take a more active role in the
23 State's electric grid would leverage private capital, protect
24 customers from rising energy costs, and promote greater
25 understanding and engagement with the challenges associated with
26 updating the State's electric grid;

27 e. Front-of-the-meter energy storage systems that are
28 interconnected with the transmission and distribution system offer
29 distinctive advantages, including, but not limited to, lower costs and
30 responsiveness to price signals from the wholesale electricity
31 market or electric public utility;

32 f. There are currently significant barriers that disincline New
33 Jersey electric customers from obtaining the benefits of energy
34 storage systems, including inadequate valuation of energy storage;
35 and

36 g. It is fitting, proper, and in the public interest to encourage
37 the installation of energy storage systems by providing monetary
38 incentives to new energy storage systems and renewable energy
39 sources paired with energy storage systems, and to compensate
40 front-of-the-meter energy storage systems for their value to the grid,
41 until these barriers are removed by market forces.

42

43 2. As used in this act:

44 "All-in system cost" means the total cost of purchasing and
45 installing a new energy storage system, including the costs of
46 hardware, siting, installation, permitting, and interconnection.

47 "Board" means the Board of Public Utilities.

48 "Customer-sited energy storage system" means an energy storage
49 system that operates in parallel with an electric distribution system,

1 is connected on the customer side of the meter, and is owned by the
2 customer or another party that is not the electric public utility that
3 provides electric power to the customer.

4 “Electric public utility” means a public utility, as that term is
5 defined in R.S.48:2-13, that transmits and distributes electricity to
6 end users within the State.

7 “Energy storage system” means a commercially available
8 technology that is capable of absorbing energy, storing such energy
9 for a period of time, and redelivering the energy after it has been
10 stored to provide direct or indirect benefits to the broader electricity
11 system, including, but not limited to, a battery system, pumped
12 hydroelectric system, compressed air system, flywheel, or a
13 hydrogen production, storage, or fuel cell system, provided that the
14 hydrogen is produced through electrolysis using electricity from a
15 renewable source.

16 “Front-of-the-meter energy storage system” means an energy
17 storage system that is interconnected with the transmission and
18 distribution system on the utility side of the meter. “Front-of-the-
19 meter energy storage system” shall include an energy storage
20 system that is subject to a tariff from an electric public utility or
21 from PJM.

22 “Gap analysis” means an analysis that determines the difference
23 between the average all-in system costs of energy storage systems,
24 considering each energy storage technology and application, and the
25 prevailing revenue stream opportunities to support the economics of
26 the energy storage systems.

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

29 “Performance incentive” means a series of recurring monetary
30 payments paid by an electric public utility to an owner of an energy
31 storage system who participates in the pilot program to compensate
32 for the benefits to the transmission and distribution system provided
33 by the system.

34 “Pilot program” means the pilot program to incentivize the
35 installation of new energy storage systems in the State developed by
36 the board pursuant to section 3 of this act.

37 “PJM Interconnection, L.L.C.” or “PJM” means the same as the
38 term is defined in section 3 of P.L.1999, c.23 (C.48:3-51).

39 “Transmission and distribution system” means the same as the
40 term is defined in section 3 of P.L.1999, c.23 (C.48:3-51).

41 “Upfront incentive” means a one-time monetary payment from
42 the board to an owner of an energy storage system who participates
43 in the pilot program to mitigate the upfront costs of the system.

44

45 3. a. No later than 90 days after the effective date of this
46 act, the board shall initiate a proceeding to develop a pilot program
47 to incentivize the installation of new energy storage systems in the
48 State. The pilot program shall include an upfront incentive as set
49 forth in section 4 of this act and a performance incentive as set forth

1 in section 5 of this act for owners of energy storage systems that are
2 approved by the board to participate in the program. The provisions
3 of the pilot program shall be based upon the best available data
4 from similarly designed programs in other states.

5 At the completion of the proceeding or 180 days after the
6 effective date of this act, whichever occurs sooner, the board shall
7 issue a board order establishing the pilot program. The order shall
8 include: the incentive amounts established for customer-sited
9 energy storage systems and front-of-the-meter energy storage
10 systems pursuant to sections 4 and 5 of this act; a methodology for
11 determining compensation amounts for tariffs filed for front-of-the-
12 meter energy storage systems not subject to a tariff from PJM
13 pursuant to section 6 of this act; and an application process for
14 persons who wish to participate in the pilot program. The upfront
15 incentive amounts shall be based on the nameplate storage capacity
16 of the energy storage system, as measured in kilowatt hours of
17 alternating current power output.

18 b. Stand-alone energy storage systems or energy storage
19 systems that are paired with a renewable source of electric power,
20 including, but not limited to, a solar photovoltaic array, shall be
21 eligible for the program. However, the pilot program shall be
22 available only to an energy storage system that:

23 (1) becomes operable on or after the date of the pilot program's
24 establishment; and

25 (2) is either:

26 (a) a customer-sited energy storage system that is owned,
27 leased, or operated by a residential or non-residential customer of
28 an electric public utility; or

29 (b) a front-of-the-meter energy storage system located in the
30 service area of an electric public utility.

31 c. The board shall reserve at least one third of the upfront
32 incentives provided to customer-sited energy storage systems for
33 customer classes or deployment scenarios that face greater
34 economic hurdles, including, but not limited to, low-to-moderate
35 income customers and customers sited in overburdened
36 communities.

37 d. In the course of developing the pilot program, the board
38 shall consider revising the eligibility requirement for net-metering
39 for solar energy systems that requires that the capacity of the solar
40 energy system be no greater than the annualized electricity usage of
41 the facility to which the solar energy system supplies electricity, in
42 order to accommodate the inclusion of energy storage system
43 capacity, as well as the potential for future electric vehicle capacity.
44 The board shall include its recommendation in the report required
45 by section 7 of this act.

46 e. The pilot program shall be designed to achieve or exceed,
47 together with other programs established by the board, the energy
48 storage goals established by subsection d. of section 1 of P.L.2018,
49 c.17 (C.48:3-87.8).

1 f. The program shall not prevent energy storage systems from
2 providing services to, or participating in, the wholesale market.
3 Any evaluation of costs and benefits of energy storage systems shall
4 include benefits that accrue directly or indirectly to ratepayers due
5 to the participation of the energy storage systems in wholesale
6 markets.

7 g. The pilot program shall be closed immediately upon the
8 adoption of the rules and regulations required pursuant to section 8
9 of this act.

10

11 4. a. The pilot program shall include an upfront incentive
12 for the owner of a customer-sited energy storage system or front-of-
13 the-meter energy storage system, which shall be based on the
14 installed capacity of the energy storage system and provided in
15 dollars per kilowatt-hour and shall not exceed 40 percent of the
16 project's all-in cost. When determining the amount of the upfront
17 incentive offered to an energy storage system, the board shall
18 perform a gap analysis to ensure that the incentive to the owner
19 incorporates consideration of the difference between available
20 revenue streams, including any performance incentive offered under
21 the pilot program, and the all-in system costs of the energy storage
22 system. The board may develop a system of incentive bonuses to
23 differentiate between projects by attributes, including, but not
24 limited to, those serving low- and middle-income communities.
25 After the expiration of the pilot program, the board may reduce or
26 eliminate the upfront incentive commensurate with a Statewide
27 reduction in all-in system costs for energy storage systems or an
28 increase in revenue streams available to owners of energy storage
29 systems.

30 b. The board shall establish qualifications and requirements an
31 applicant shall be required to meet in order to be eligible for an
32 upfront incentive pursuant to this section, which may be more
33 stringent than the requirements of subsection b. of section 3 of this
34 act.

35 c. For energy storage systems with 25 kilowatts of nameplate
36 storage capacity or greater, the board shall require the applicant for
37 an upfront incentive to pay to the board a refundable deposit, which
38 shall be refunded once the energy storage system is determined by
39 the board to be operable and in use. The board shall develop a
40 formula for calculating the deposit amount, in which the amount of
41 the deposit is proportional to the nameplate capacity of the energy
42 storage system.

43 d. (1) The board shall require an applicant for an upfront
44 incentive to complete the energy storage project:

45 (a) for customer-sited energy storage systems, no later than 18
46 months after the date the board approves the applicant's
47 application; and

- 1 (b) for front-of-the-meter energy storage systems, no later than
2 40 months after the date the board approves the applicant's
3 application.
- 4 (2) An applicant that does not comply with the project timeline
5 requirements of this subsection shall not be refunded the deposit
6 paid to the board pursuant to subsection c. of this section. The
7 deposit shall be transferred by the board to the General Fund. The
8 board may waive or extend the project timeline requirements
9 established by this subsection for an applicant that demonstrates
10 extenuating circumstances that caused a delay in the completion of
11 the energy storage project, including any delays caused by an
12 electric public utility or PJM.
- 13 e. The board shall limit upfront incentives to one award per
14 electric meter, for customer-sited energy storage systems.
- 15 f. The board shall allocate at least \$60 million per year, for the
16 duration of the pilot program, from moneys collected from the
17 societal benefits charge imposed pursuant to section 12 of P.L.1999,
18 c.23 (C.48:3-60) to fund upfront incentives pursuant to this section.
19 After the expiration of the pilot program, the board may determine
20 the appropriate amount of funds to allocate to upfront incentives.
21
- 22 5. a. The pilot program shall include a performance
23 incentive to compensate the owner of a customer-sited energy
24 storage system or front-of-the-meter energy storage system. The
25 purpose of the performance payment shall be to:
- 26 (1) provide fair compensation for the full value of services
27 provided by the energy storage system, including improving the
28 efficiency of the transmission and distribution system and reducing
29 the peak demand placed on electricity generators;
- 30 (2) increase the number of cost-effective energy storage systems
31 that are connected to the transmission and distribution system;
- 32 (3) facilitate the integration of distributed sources of electricity
33 generation; and
- 34 (4) increase the resilience of the transmission and distribution
35 systems through the deployment of back-up power.
- 36 b. The board shall require each electric public utility in the
37 State to offer an appropriate performance incentive, for a period to
38 be determined by the board, to an owner of an energy storage
39 system that participates in the program, which compensates for the
40 operational attributes of the system, including, but not limited to,
41 capacity, demand response, load shifting, generation shifting,
42 locational value, and voltage support. The costs of the performance
43 incentives shall be apportioned to ratepayers using a methodology
44 approved by the board.
- 45 c. The board shall establish qualifications and requirements an
46 applicant shall be required to meet in order to be eligible for a
47 performance incentive pursuant to this section, which may be more
48 stringent than the requirements of subsection b. of section 3 of this
49 act.

1 6. In addition to the upfront incentive established pursuant to
2 section 4 of this act, and the performance incentive established
3 pursuant to section 5 of this act, each electric public utility in the
4 State shall file a tariff with the board, no later than 12 months after
5 the effective date of this act, that shall apply only to front-of-the-
6 meter energy storage systems that are not subject to a tariff from
7 PJM. The tariff shall be formulated to provide front-of-the-meter
8 energy storage systems with compensation for their value to the
9 grid, as described in section 5 of this act. The tariff shall establish a
10 new rate design for front-of-the-meter energy storage systems that
11 accurately reflects cost causation, based on a cost of service study.
12 The tariff may distinguish between different sizes and types of
13 energy storage systems. The tariff shall exempt front-of-the-meter
14 energy storage systems from charges intended for customers who
15 consume electricity, including, but not limited to, the societal
16 benefits charge imposed pursuant to section 12 of P.L.1999, c.23
17 (C.48:3-60).

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19 7. No later than one year after the date of the pilot program's
20 establishment, the board shall conduct a review of the program and
21 submit a report, pursuant to section 2 of P.L.1991, c.164 (C.52:14-
22 19.1), to the Legislature that includes, but need not be limited to,
23 details about the recipients of incentive payments, the total costs of
24 upfront incentives provided through the program, an evaluation of
25 the extent of energy storage capacity that has been deployed in the
26 State as a result of the program, an evaluation of the distribution of
27 different energy storage technologies deployed, and an analysis of
28 the maturity of the energy storage market in the State.

29

30 8. No later than three years after the effective date of this act,
31 the board, pursuant to the "Administrative Procedure Act,"
32 P.L.1968, c.410 (C.52:14B-1 et seq.), shall adopt rules and
33 regulations establishing a permanent energy storage incentive
34 program. The permanent program shall be consistent with the
35 provisions of this act.

36

37 9. This act shall take effect immediately.