

[First Reprint]

ASSEMBLY, No. 4893

STATE OF NEW JERSEY
220th LEGISLATURE

INTRODUCED DECEMBER 5, 2022

Sponsored by:

Assemblyman JOHN F. MCKEON

District 27 (Essex and Morris)

SYNOPSIS

Establishes incentive program for installation of energy storage systems.

CURRENT VERSION OF TEXT

As reported by the Assembly Telecommunications and Utilities Committee on June 5, 2023, with amendments.



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 ¹**[,]**¹ to a system that includes local
11 energy sources located close to customers, who increasingly both
12 produce 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 ¹₁¹ enhances
21 grid 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 ¹**[to]** with¹ the transmission and distribution system
29 offer distinctive advantages, including, but not limited to, lower
30 costs and responsiveness to price signals from the wholesale
31 electricity 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:

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.

Matter enclosed in superscript numerals has been adopted as follows:

¹Assembly ATU committee amendments adopted June 5, 2023.

1 “All-in system cost” means the total cost of purchasing and
2 installing a new energy storage system, including the costs of
3 hardware, siting, installation, permitting, and interconnection.

4 “Board” means the Board of Public Utilities.

5 “Customer-sited energy storage system” means an energy storage
6 system that operates in parallel with an electric distribution system,
7 is connected on the customer side of the meter, and is owned by the
8 customer or another party that is not the electric public utility that
9 provides electric power to the customer.

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

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

22 “Front-of-the-meter energy storage system” means an energy
23 storage system that is interconnected ¹~~to~~ with¹ the transmission
24 and distribution system on the utility side of the meter. “Front-of-
25 the-meter energy storage system” shall include an energy storage
26 system that is subject to a tariff from an electric public utility or
27 from PJM.

28 “Gap analysis” means an analysis that determines the difference
29 between the average all-in system costs of energy storage systems,
30 considering each energy storage technology and application, and the
31 prevailing revenue stream opportunities to support the economics of
32 the energy storage systems.

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

35 “Performance incentive” means a series ¹of¹ recurring monetary
36 payments paid by an electric public utility to an owner of an energy
37 storage system who participates in the pilot program to compensate
38 for the benefits to the transmission and distribution system provided
39 by the system.

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

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

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

1 “Upfront incentive” means a one-time monetary payment from
2 the board to an owner of an energy storage system who participates
3 in the pilot program to mitigate the upfront costs of the system.
4

5 3. a. No later than 90 days ¹[of] after¹ the effective date of this
6 act, the board shall initiate a proceeding to develop a pilot program
7 to incentivize the installation of new energy storage systems in the
8 State. The pilot program shall include an upfront incentive as set
9 forth in section 4 of this act and a performance incentive as set forth
10 in section 5 of this act for owners of energy storage systems that are
11 approved by the board to participate in the program. The provisions
12 of the pilot program shall be based upon the best available data
13 from similarly designed programs in other states.

14 At the completion of the proceeding or 180 days after the
15 effective date of this act, whichever occurs sooner, the board shall
16 issue a board order establishing the pilot program. The order shall
17 include ¹;¹ the incentive amounts established for customer-sited
18 energy storage systems and front-of-the-meter energy storage
19 systems pursuant to sections 4 and 5 of this act ¹[,] ¹;¹ a
20 methodology for determining compensation amounts for tariffs filed
21 for front-of-the-meter energy storage systems not subject to a tariff
22 from PJM pursuant to section 6 of this act ¹[act,] ¹;¹ and an
23 application process for persons who wish to participate in the pilot
24 program. The upfront incentive amounts shall be based on the
25 nameplate storage capacity of the energy storage system, as
26 measured in kilowatt hours of alternating current power output.

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

32 (1) becomes operable on or after the date of the pilot program’s
33 establishment; and

34 (2) is either:

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

38 (b) a ¹[front-of-the meter] front-of-the-meter¹ energy storage
39 system located in the service area of an electric public utility.

40 c. The board shall reserve at least one third of the upfront
41 incentives provided to customer-sited energy storage systems for
42 customer classes or deployment scenarios that face greater
43 economic hurdles, including, but not limited to ¹;¹ low-to-moderate
44 income customers ¹[,] ¹ and customers sited in overburdened
45 communities.

46 d. In the course of developing the pilot program, the board
47 shall consider revising the eligibility requirement for net-metering

1 for solar energy systems that requires that the capacity of the solar
2 energy system be no greater than the annualized electricity usage of
3 the facility to which the solar energy system supplies electricity, in
4 order to accommodate the inclusion of energy storage system
5 capacity, as well as the potential for future electric vehicle capacity.
6 The board shall include its recommendation in the report required
7 by section 7 of this act.

8 e. The pilot program shall be designed to achieve or exceed,
9 together with other programs established by the board, the energy
10 storage goals established by subsection d. of section 1 ¹[.] ¹of¹
11 P.L.2018, c.17 (C.48:3-87.8).

12 f. The program shall not prevent energy storage systems from
13 providing services to, or participating in, the wholesale market.
14 Any evaluation of costs and benefits of energy storage systems shall
15 include benefits that accrue directly or indirectly to ratepayers due
16 to the participation of the energy storage systems in wholesale
17 markets.

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

21

22 4. a. The pilot program shall include an upfront incentive for
23 the owner of a customer-sited energy storage system or front-of-the-
24 meter energy storage system, which shall be based on the installed
25 capacity of the energy storage system and provided in dollars per
26 kilowatt-hour ¹[.]¹ and shall not exceed 40 percent of the project's
27 all-in cost. When determining the amount of the upfront incentive
28 offered to an energy storage system, the board shall perform a gap
29 analysis to ensure that the incentive to the owner incorporates
30 consideration of the difference between available revenue streams,
31 including any performance incentive offered under the pilot
32 program, and the all-in system costs of the energy storage system.
33 The board may develop a system of incentive bonuses to
34 differentiate between projects by attributes¹,¹ including, but not
35 limited to, those serving low- and middle-income communities.
36 After the expiration of the pilot program, the board may reduce or
37 eliminate the upfront incentive commensurate with a Statewide
38 reduction in all-in system costs for energy storage systems or an
39 increase in revenue streams available to owners of energy storage
40 systems.

41 b. The board shall establish qualifications and requirements an
42 applicant shall be required to meet in order to be eligible for an
43 upfront incentive pursuant to this section, which may be more
44 stringent than the requirements of subsection b. of section 3 of this
45 act.

46 c. For energy storage systems with 25 kilowatts of nameplate
47 storage capacity or greater, the board shall require the applicant for
48 an upfront incentive to pay to the board a refundable deposit, which

1 shall be refunded once the energy storage system is determined by
2 the board to be operable and in use. The board shall develop a
3 formula for calculating the deposit amount, in which the amount of
4 the deposit is proportional to the nameplate capacity of the energy
5 storage system.

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

8 ¹[(1)] (a)¹ for customer-sited energy storage systems, no later
9 than 18 months after the date the board approves the applicant's
10 application; and

11 ¹[(2)] (b)¹ for front-of-the-meter energy storage systems, no
12 later than 40 months after the date the board approves the
13 applicant's application.

14 ¹(2)¹ An applicant that does not comply with the project
15 timeline requirements of this subsection shall not be refunded the
16 deposit paid to the board pursuant to subsection c. of this section.
17 The deposit shall be transferred by the board to the General Fund.
18 The board may waive or extend the project timeline requirements
19 established by this subsection for an applicant that demonstrates
20 extenuating circumstances that caused a delay in the completion of
21 the energy storage project, including any delays caused by an
22 electric public utility or PJM.

23 e. The board shall limit upfront incentives to one award per
24 electric meter, for customer-sited energy storage systems.

25 f. The board shall allocate at least \$60 million per year, for the
26 duration of the pilot program, from moneys collected from the
27 societal benefits charge imposed pursuant to section 12 of P.L.1999,
28 c.23 (C.48:3-60) to fund upfront incentives pursuant to this section.
29 After the expiration of the pilot program, the board may determine
30 the appropriate amount of funds to allocate to upfront incentives.

31

32 5. a. The pilot program shall include a performance incentive to
33 compensate the owner of a customer-sited energy storage system or
34 front-of-the-meter energy storage system. The purpose of the
35 performance payment shall be to:

36 (1) provide fair compensation for the full value of services
37 provided by the energy storage system, including improving the
38 efficiency of the transmission and distribution system and reducing
39 the peak demand placed on electricity generators;

40 (2) increase the number of cost-effective energy storage systems
41 that are connected to the transmission and distribution system;

42 (3) facilitate the integration of distributed sources of electricity
43 generation; and

44 (4) increase the resilience of the transmission and distribution
45 systems through the deployment of back-up power.

46 b. The board shall require each electric public utility in the

1 State to offer an appropriate performance incentive, for a period to
2 be determined by the board, to an owner of an energy storage
3 system that participates in the program, which compensates for the
4 operational attributes of the system, including, but not limited to,
5 capacity, demand response, load shifting, generation shifting,
6 locational value, and voltage support. The costs of the performance
7 incentives shall be apportioned to ratepayers using a methodology
8 approved by the board.

9 c. The board shall establish qualifications and requirements an
10 applicant shall be required to meet in order to be eligible for ¹~~an~~
11 a¹ performance incentive pursuant to this section, which may be
12 more stringent than the requirements of subsection b. of section 3 of
13 this act.

14

15 6. In addition to the upfront incentive established pursuant to
16 section 4 of this act, and the performance incentive established
17 pursuant to section 5 of this act, each electric public utility in the
18 State shall file a tariff with the board, no later than 12 months after
19 the effective date of this act, that ¹~~would~~ shall¹ apply only to
20 front-of-the-meter energy storage systems that are not subject to a
21 tariff from PJM. The tariff shall be formulated to provide front-of-
22 the-meter energy storage systems with compensation for their value
23 to the grid, as described in section 5 of this act. The tariff shall
24 establish a new rate design for front-of-the-meter energy storage
25 systems that accurately reflects cost causation, based on a cost of
26 service study. The tariff may distinguish between different sizes
27 and types of energy storage systems. The tariff shall exempt front-
28 of-the-meter energy storage systems from charges intended for
29 customers who consume electricity, including, but not limited to,
30 the societal benefits charge imposed pursuant to section 12 of
31 P.L.1999, c.23 (C.48:3-60).

32

33 7. No later than one year after the date of the pilot program's
34 establishment, the board shall conduct a review of the program and
35 submit a report, pursuant to section 2 of P.L.1991, c.164 (C.52:14-
36 19.1), to the Legislature that includes, but need not be limited to,
37 details about the recipients of incentive payments, the total costs of
38 upfront incentives provided through the program, an evaluation of
39 the extent of energy storage capacity that has been deployed in the
40 State as a result of the program, an evaluation of the distribution of
41 different energy storage technologies deployed, and an analysis of
42 the maturity of the energy storage market in the State.

43

44 8. No later than three years after the effective date of this act,
45 the board, pursuant to the "Administrative Procedure Act,"
46 P.L.1968, c.410 (C.52:14B-1 et seq.), shall adopt rules and

1 regulations establishing a permanent energy storage incentive
2 program. The permanent program shall be consistent with the
3 provisions of this act.

4

5 9. This act shall take effect immediately.