

SENATE, No. 3489

STATE OF NEW JERSEY
220th LEGISLATURE

INTRODUCED JANUARY 19, 2023

Sponsored by:

Senator BOB SMITH

District 17 (Middlesex and Somerset)

Senator JEAN STANFIELD

District 8 (Atlantic, Burlington and Camden)

SYNOPSIS

Requires BPU to study and implement methods to allow additional distributed energy sources to interconnect to electrical grid.

CURRENT VERSION OF TEXT

As introduced.



(Sponsorship Updated As Of: 1/19/2023)

1 AN ACT concerning distributed energy sources 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. a. The Board of Public Utilities shall conduct a study for the
8 purpose of identifying, researching, and quantifying the effects of
9 short-term solutions that could open segments of the electrical
10 transmission and distribution system that are currently closed to
11 new distributed energy generation sources.

12 b. The board shall consider the following potential solutions, as
13 well as any additional potential solutions identified by the board:

14 (1) permitting the flow of electricity, through an electrical
15 substation, from the distribution system to the transmission system;

16 (2) requiring solar inverters to include technology that allows the
17 inverter to autonomously control the reactive power passing through
18 the inverter;

19 (3) requiring energy storage systems to include technology that
20 allows the power input and output of the system to vary in relation
21 to the demand for electric power in the transmission and
22 distribution system at a given time; and

23 (4) requiring solar photovoltaic systems to include technology
24 that enables the power output of the system to autonomously
25 respond to weather conditions.

26 c. No later than one year after the effective date of this act, the
27 board shall prepare and submit to the Governor and, pursuant to
28 section 2 of P.L.1991, c.164 (C.52:14-19.1), to the Legislature, a
29 report containing the findings and recommendations of the board,
30 including any recommendations for legislative, regulatory, or local
31 governmental action to open up additional segments of the
32 transmission and distribution system to new distributed energy
33 generation sources.

34 d. As used in this section:

35 "Board" means the Board of Public Utilities.

36 "Reactive power" means the portion of alternating current
37 electricity, measured in volt-amperes reactive, that cannot do useful
38 work due to a misalignment of the current and voltage waveforms
39 of the electricity.

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

42

43 2. No later than one year after the board transmits the report
44 required pursuant to subsection c. of section 1 of this act, the board
45 shall adopt, pursuant to the "Administrative Procedure Act,"
46 P.L.1968, c.410 (C.52:14B-1 et seq.), rules and regulations that
47 implement the report's recommendations for regulatory action. The
48 rules and regulations shall initially implement the recommendations

1 as a pilot program in a small region or regions of the State, and
2 then, if the pilot program is determined by the board to be
3 successful, the board shall provide for Statewide implementation of
4 the rules and regulations.

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6 3. This act shall take effect immediately.
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9 STATEMENT
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11 This bill would require the Board of Public Utilities (BPU) to
12 conduct a study for the purpose of identifying, researching, and
13 quantifying the effects of short-term solutions that could open
14 segments of the electrical transmission and distribution system that
15 are currently closed to new distributed energy generation sources.

16 The bill would require the BPU to consider the following
17 potential solutions, as well as any additional potential solutions
18 identified by the BPU:

19 (1) permitting the flow of electricity, through an electrical
20 substation, from the distribution system to the transmission system;

21 (2) requiring solar inverters to include technology that allows the
22 inverter to autonomously control the reactive power passing through
23 the inverter;

24 (3) requiring energy storage systems to include technology that
25 allows the power input and output of the system to vary in relation
26 to the demand for electric power in the transmission and
27 distribution system at a given time; and

28 (4) requiring solar photovoltaic systems to include technology
29 that enables the power output of the system to autonomously
30 respond to weather conditions.

31 As defined by the bill, "reactive power" means the portion of
32 alternating current electricity, measured in volt-amperes reactive,
33 that cannot do useful work due to a misalignment of the current and
34 voltage waveforms of the electricity.

35 The bill would require the BPU to submit a final report on its
36 study to the Governor and the Legislature within one year after the
37 bill's effective date, which contains recommendations for
38 legislative, regulatory, or local governmental action. The bill would
39 also require the BPU to adopt rules and regulations to implement
40 the recommended regulatory action, within one year after the final
41 report is published. The bill would direct the BPU to initially apply
42 the recommendations as a pilot program and then, if successful,
43 provide for Statewide implementation of the rules and regulations.