

**SENATE, No. 3464**

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**STATE OF NEW JERSEY**

**221st LEGISLATURE**

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INTRODUCED JUNE 20, 2024

**Sponsored by:**

**Senator BOB SMITH**

**District 17 (Middlesex and Somerset)**

**SYNOPSIS**

Requires electric public utilities to upgrade certain portions of electric transmission and distribution system with advanced conductors.

**CURRENT VERSION OF TEXT**

As introduced.



1 AN ACT concerning the electric transmission and distribution  
2 system and supplementing Title 48 of the Revised Statutes.

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

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7 1. a. As used in this section:

8 "Advanced conductor" means an overhead electricity conductor  
9 that has a direct current electrical resistance at least 10 percent  
10 lower than existing conductors of a similar diameter on the  
11 transmission and distribution system, based on established direct  
12 current resistance at standard pressure and a temperature of 20  
13 degrees Celsius.

14 "Advanced reconductoring" means the replacement of  
15 conventional overhead electricity conductors with advanced  
16 conductors.

17 "Board" means the Board of Public Utilities.

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

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

22 b. Each electric public utility shall, wherever practicable,  
23 upgrade its portion of the transmission and distribution system  
24 using advanced reconductoring, both in the course of routine  
25 maintenance to the system, and through standalone primary wire  
26 replacement projects.

27 c. No later than one year after the effective date of this act, each  
28 electric public utility shall conduct an assessment of its portion of  
29 the transmission and distribution system in order to determine the  
30 most cost effective and beneficial locations to be upgraded through  
31 advanced reconductoring. No later than three months after the  
32 electric public utility completes the assessment, it shall make a  
33 filing with the board outlining the locations it proposes to upgrade.

34 d. An electric public utility may petition the board to include in  
35 the utility's rate base the reasonable costs of advanced  
36 reconductoring projects it undertakes pursuant to this section.

37 e. The board may develop criteria for what constitutes  
38 reasonable costs for advanced reconductoring projects. In  
39 establishing the criteria, the board may consider decreased electrical  
40 losses and any other relevant consumer, environmental, and system  
41 benefits provided by advanced conductors.

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43 2. This act shall take effect immediately.

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#### STATEMENT

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48 This bill would direct each electric public utility in the State to  
49 upgrade the utility's portion of the electric transmission and

1 distribution system with advanced conductors, wherever  
2 practicable, both in the course of routine maintenance to the system,  
3 and through standalone primary wire replacement projects.

4 The bill would require each public utility, no later than one year  
5 after the effective date of the bill, to conduct an assessment of its  
6 portion of the transmission and distribution system in order to  
7 determine the most cost effective and beneficial locations to be  
8 upgraded through advanced reconductoring. No later than three  
9 months after the electric public utility completes the assessment, it  
10 would be required to make a filing with the Board of Public  
11 Utilities (BPU) outlining the locations it proposes to upgrade.

12 The bill would also authorize electric public utilities to petition  
13 the BPU to include the reasonable costs of these projects in the  
14 utility's rate base, allowing the costs to be recovered from  
15 ratepayers. The bill would authorize the BPU to develop criteria for  
16 what constitutes "reasonable costs" for advanced reconductoring  
17 projects.

18 Most power lines in the United States consist of steel cores  
19 surrounded by strands of aluminum. Advanced conductors use  
20 alternative designs or materials, for example smaller, lighter cores  
21 composed of carbon fiber, which can be surrounded by additional  
22 aluminum. Advanced conductors decrease the electric resistance of  
23 the power line and allow it to carry additional electric current. In  
24 addition, the cost of upgrading existing lines to advanced  
25 conductors is usually cheaper than the cost of constructing new  
26 power lines.