CHAPTER 34

AN ACT concerning electric transmission planning and supplementing Title 48 of the Revised Statutes.

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

C.48:7-30 Short title.

1. This act shall be known and may be cited as the "Advanced Grid Technologies Act."

C.48:7-31 Findings, declarations.

2. The Legislature finds and declares that:

a. Electric transmission facilities serving New Jersey customers face unprecedented demands from rising load growth, lengthy interconnection queues, and the continuous need to provide adequate, reliable, and efficient electric service to customers;

b. In Order No. 1920 and other related proceedings, the Federal Energy Regulatory Commission (FERC) recognized that advanced transmission technologies are essential tools for modern grid planning that should be meaningfully considered in transmission planning processes;

c. Advanced transmission technologies, including grid-enhancing technologies and high-performance conductors, have in certain instances demonstrated significant consumer savings, reliability improvements, and capacity gains in deployments within the United States and internationally, often with benefit-to-cost ratios substantially exceeding those of traditional transmission alternatives;

d. Electric public utilities undertake transmission projects to address local transmission upgrades outside the regional transmission planning process reviewed and approved by PJM Interconnection, L.L.C. (PJM) for regional reliability, operational performance, or economic purposes. These projects are commonly referred to as supplemental projects in PJM's Attachment M-3 process and have historically received limited to no oversight from PJM and State regulatory authorities, even though costs for these supplemental projects are passed through to utility customers;

e. Often, the use of formula rates at FERC fails to effectively incentivize electric public utilities to adopt advanced transmission technologies. However, regulatory mechanisms that align utility financial interests with consumer savings could successfully incentivize such adoption;

f. For more than a century, state regulatory authorities have exercised authority over the construction of electric transmission facilities through certificates of public convenience and necessity. Moreover, FERC has acknowledged the consultative role of state regulatory authorities in PJM's Attachment M-3 process; and

g. It is therefore in the public interest for New Jersey to establish a process for issuing certificates of public convenience and necessity for supplemental projects undertaken by electric public utilities in the State, which process shall require meaningful consideration of cost-effective advanced transmission technologies and provide for expedited review where such technologies are deployed in a cost-effective manner in order to meet applicable grid performance benchmarks.

C.48:7-32 Definitions.

3. As used in P.L.2026, c.34 (C.48:7-30 et seq.):

"Advanced conductor" means a conductor used in an electric transmission system, which conductor has: (1) a similar diameter and weight as a traditional aluminum conductor steel reinforced conductor; (2) a direct electrical resistance that is at least 10 percent lower than a traditional aluminum conductor steel reinforced cable of a similar diameter and weight; and

(3) an energy-carrying capacity that is at least 75 percent greater than a traditional aluminum conductor steel reinforced conductor of a similar diameter and weight. "Advanced conductor" shall include a carbon fiber conductor, a composite core conductor, and a superconductor.

"Advanced power flow control technology" means power electronic-based devices that: (1) actively change how power flows through the transmission system without changing generator dispatch or network topology; and (2) divert power flow from congested lines to other circuits with spare capacity for more efficient use of transmission assets.

"Advanced transmission technologies" or "ATTs" means software or hardware technologies that increase the capacity, efficiency, reliability, or safety of an existing or new electric transmission system, including: (1) grid-enhancing technologies, including, but not limited to, dynamic line rating, advanced power flow controllers, and topology optimization; (2) advanced conductors; and (3) other technologies designed to reduce transmission congestion or increase the capacity, efficiency, reliability, or safety of an existing or new electric transmission system.

"Board" means the New Jersey Board of Public Utilities or its successor.

"Certificate" means a certificate of public convenience and necessity issued pursuant to P.L.2026, c.34 (C.48:7-30 et seq.).

"Cost-effective" or "cost-effectiveness" means that a supplemental project or component thereof produces benefits that justify its costs when evaluated on a life-cycle basis over the useful life of the investment, which benefits include, but are not limited to, reductions of both central and distributed generation interconnection, reduced line losses, reduced curtailment, reduced transmission congestion, reductions in energy or capacity prices, and reliability and resilience improvements. However, "cost-effectiveness" shall not be determined solely based on nominal capital costs.

"Dynamic line rating" means a methodology for determining the real-time ampacity of transmission lines based on actual and forecasted environmental and operational conditions.

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

"Grid performance benchmarks" means grid performance standards, benchmarks, and planning criteria identified by the board after a public proceeding pursuant to section 7 of P.L.2026, c.34 (C.48:7-36).

"NERC" means the North American Electric Reliability Corporation.

"PJM Interconnection, L.L.C." or "PJM" means the same as the term is defined in section 3 of P.L.1999, c.23 (C.48:3-51) or any successor entity.

"Supplemental project" or "project" means a project planned by a transmission owner through the PJM local transmission owner planning process under Attachment M-3 of PJM's Open Access Transmission Tariff or any successor tariff provision to: (1) construct a new transmission line of a design capacity of 100 kilovolts or more, whether overhead or underground, including submarine cable, and a length of one mile or more, including associated equipment such as substations; or (2) expand, enhance, rebuild, replace, or modify an existing transmission line of a design capacity of 100 kilovolts or more, whether overhead or underground, including submarine cable and associated equipment such as substations. "Supplemental project" does not include: (1) a project, or discrete component of a project, that has been deemed necessary and approved by the PJM Board of Managers to comply with PJM system reliability, operational performance, market efficiency, or public policy needs; or (2) a project that is undertaken solely for routine maintenance of an existing transmission line.

"Topology optimization" means any software or hardware technology that identifies reconfigurations of the electric grid and can enable the routing of power flows around congested or overloaded distribution or transmission elements.

"Virtual power plant" means an aggregation of distributed energy resources, including, but not limited to, behind-the-meter generation, energy storage, and controllable loads, that participate in or support the operation of the electric grid as a coordinated resource through software-based control and dispatch.

C.48:7-33 Certificate of public convenience and necessity required prior to construction, electric public utility.

4. a. Prior to constructing a supplemental project in this State, an electric public utility shall apply to the Board of Public Utilities for a certificate of public convenience and necessity. The utility shall include in its application for a certificate to the board:

(1) any information the board deems necessary to review the application;

(2) an explanation of whether the supplemental project will deploy advanced transmission technologies, either in addition to or in lieu of traditional transmission investments, the cost effectiveness of the deployment of such technologies, and the benefits thereof, including a demonstration that the project will meet the applicable grid performance benchmarks established by the board pursuant to section 7 of P.L.2026, c.34 (C.48:7-36);

(3) if an electric public utility decides not to deploy ATTs in the project in a material manner, as determined by the board, a justification for that decision and a third-party analysis of the cost-effectiveness of the project as compared to the deployment of ATTs ;

(4) a request for review under section 5 or 6 of P.L.2026, c.34 (C.48:7-34 or C.48:7-35); and

(5) for applications processed under section 5 or 6 of P.L.2026, c.34 (C.48:7-34 or C.48:7-35), an application fee, which fee shall be recoverable through rates, in an amount to be determined by the board to cover the cost of the board's review.

b. Within 30 days of receiving a completed application submitted pursuant to subsection a. of this section, the board shall determine whether to review the application under section 5 or 6 of P.L.2026, c.34 (C.48:7-34 or C.48:7-35). The board shall review an application under the provisions of section 5 of P.L.2026, c.34 (C.48:7-34) only if the utility has made a prima facie showing that the conditions set forth in paragraph (1) of subsection a. of section 5 of P.L.2026, c.34 (C.48:7-34) are satisfied. All other applications shall be reviewed under the provisions of section 6 of P.L.2026, c.34 (C.48:7-35).

c. The board shall permit the public to participate in, and have access to, the electric public utility's application submitted pursuant to subsection a. of this section, including work papers and project scenarios. The board shall establish a public comment period of at least 30 days for each application. However, nothing in this section shall prohibit an electric public utility from requesting, or the board from approving, the protection of confidential or proprietary information under applicable law to the extent necessary to ensure the security of the electric grid and the intellectual property of the utility applying for a certificate pursuant to subsection a. of this section. The electric public utility may request any information provided pursuant to subsection a. of this section be confidential and not be made publicly available, and the request shall be subject to approval by the board. However, the Division of Rate Counsel and the PJM Independent Market Monitor shall have access to any material deemed confidential, as approved by the board pursuant to this subsection, provided the division and the market monitor are subject to a non-disclosure agreement.

d. An electric public utility shall not apply for a certificate pursuant to this section until PJM has completed its review of the project under Attachment M-3 of the PJM Open Access Transmission Tariff. An application under this section shall include, as an exhibit, the complete record of the PJM Attachment M-3 process.

C.48:7-34 Requirements for approval, certificate of public convenience and necessity.

5. a. The Board of Public Utilities shall approve an application for a certificate of public convenience and necessity submitted by an electric public utility pursuant to section 4 of P.L.2026, c.34 (C.48:7-33) if the board finds that:

(1) the supplemental project meets the applicable grid performance benchmarks established by the board pursuant to section 7 of P.L.2026, c.34 (C.48:7-36) through the proposed deployment of advanced transmission technologies;

(2) the utility can efficiently manage and supervise the construction process and has taken sufficient action to ensure adequate and efficient construction and supervision of the construction; and

(3) the utility can finance the proposed construction without significant adverse financial consequences for the utility or its customers .

b. As part of the application satisfying the requirements in paragraph (1) of subsection a. of this section, the utility shall present a cost-effectiveness analysis, which shall be subject to rebuttal by a party to the proceeding. As part of the approval process for a certificate under this section, the board shall make a finding as to any disputed cost-effectiveness analysis. The board may condition its approval of a certificate under this section on changes to the utility's application that the board deems to be in the public interest.

c. The board shall issue an order with its determination regarding an application for a certificate submitted pursuant to section 4 of P.L.2026, c.34 (C.48:7-33) and reviewed under this section no later than 120 days after the submission of a completed application. The board may extend this period by an additional period not to exceed 30 days upon a specific finding, made on the record, that an extension will serve the public interest.

d. Nothing in this section shall authorize the board to conduct a siting review of the supplemental project. The board shall not consider the environmental impacts of the project in the board's determination under this section.

C.48:7-35 Approval of certificate of public convenience and necessity application, other circumstances, post-notice, hearing.

6. a. The Board of Public Utilities shall, after notice and hearing, approve an electric public utility's application for a certificate of public convenience and necessity submitted pursuant to section 4 of P.L.2026, c.34 (C.48:7-33) that has not been approved pursuant to section 5 of P.L.2026, c.34 (C.48:7-34) if the board finds that:

(1) the supplemental project is necessary to provide safe, adequate, and reliable service to the utility's customers and is a reasonable and cost-effective means of satisfying those service needs;

(2) the utility can efficiently manage and supervise the construction process and has taken sufficient action to ensure adequate and efficient construction and supervision of the construction; and

(3) the utility can finance the proposed construction without significant adverse financial consequences for the utility or its customers .

b. In determining whether the project is a reasonable and cost-effective means of meeting the requirements of paragraph (1) of subsection a. of this section, the board shall consider whether, and to what extent, the project:

(1) reduces energy and capacity prices for customers in the State, including the potential to reduce future price increases or price volatility;

(2) enhances the reliability and resilience of the utility's transmission or distribution system;

(3) facilitates the connection of new load or generation resources to the electric grid;

(4) provides benefits to customers in the State, including, but not limited to, reduced line losses, reduced curtailment of energy generation resources, and reduced transmission congestion; and

(5) is supported by the preponderance of the evidence in the utility's justification submitted pursuant to paragraph (3) of subsection a. of section 4 of P.L.2026, c.34 (C.48:7-33) for any decision not to deploy ATTs.

c. The board shall issue an order with its determination regarding an application for a certificate submitted pursuant to section 4 of P.L.2026, c.34 (C.48:7-33) and reviewed under this section no later than 180 days after the submission of a completed application. The board may extend this period by an additional period not to exceed 90 days. The board may condition its approval of a certificate under this section on changes to the utility's application that the board deems to be in the public interest.

d. The board shall confine its review of a supplemental project under this section to the enumerated criteria in subsections a. and b. of this section. Nothing in this section shall authorize the board to conduct a siting review of the project. The board shall not consider the environmental impacts of the project in the board's determination under this section.

C.48:7-36 Grid performance benchmarks incorporating federal guidance, industry consensus standards.

7. The Board of Public Utilities shall establish, and review and update at least once every three years, grid performance benchmarks that incorporate federal guidance and industry consensus standards, including, but not limited to, planning requirements adopted by the Federal Energy Regulatory Commission pursuant to Order No. 1920 and any modifications thereto, reliability standards of the North American Electric Reliability Corporation, and benchmarks published by the United States Department of Energy, including the National Transmission Planning Study. While establishing the grid performance benchmarks, the board shall conduct stakeholder meetings and provide an opportunity to submit written comments in response to the formation of such benchmarks and to any related straw proposals from the board.

The grid performance benchmarks established by this section shall include, at a minimum, criteria addressing: compliance with applicable reliability standards of NERC or the applicable distribution-system reliability standards adopted by the board; measurable reductions in transmission congestion or improvements in transfer capability, or measurable improvements in distribution-system performance metrics, including outage frequency and duration; demonstrated cost-effectiveness when evaluated on a life-cycle basis over the useful life of the investment; and consistency with applicable federal transmission planning requirements.

Nothing in this section shall conflict with federally established grid performance benchmarks, including NERC Reliability Standards. Nothing in this section shall affect FERC's jurisdiction over the planning of electric transmission facilities.

C.48:7-37 Rules, regulations.

8. a. Within 270 days after the date of enactment of P.L.2026, c.34 (C.48:7-30 et seq.), and notwithstanding the provisions of the "Administrative Procedure Act," P.L.1968, c.410 (C.52:14B-1 et seq.) to the contrary, the Board of Public Utilities shall, immediately upon filing proper notice with the Office of Administrative Law, adopt rules and regulations as may be necessary for the implementation of P.L.2026, c.34 (C.48:7-30 et seq.), including, but not limited to, rules and regulations:

(1) establishing a process through which electric public utilities shall apply for a certificate pursuant to section 4 of P.L.2026, c.34 (C.48:7-33), including categories of information that an electric public utility is required to submit pursuant to paragraph (1) of subsection a. of section 4;

(2) establishing processes for the review of applications for certificates submitted pursuant to section 4 of P.L.2026, c.34 (C.48:7-33), which processes may vary, as determined by the board, depending on the type of supplemental project;

(3) determining the amount of the application fee to be collected pursuant to paragraph (5) of subsection a. of section 4 of P.L.2026, c.34 (C.48:7-33): and

(4) establishing grid performance benchmarks pursuant to section 7 of P.L.2026, c.34 (C.48:7-36).

b. The rules and regulations adopted pursuant to subsection a. of this section shall be in effect for a period not to exceed one year after the date of the filing. These rules and regulations shall thereafter be adopted, amended, or readopted by the board in accordance with the requirements of the "Administrative Procedure Act," P.L.1968, c.410 (C.52:14B-1 et seq.).

C.48:7-38 Applicability of act.

9. a. The provisions of P.L.2026, c.34 (C.48:7-30 et seq.) shall apply to any application to construct or modify a supplemental project filed on or after the effective date of P.L.2026, c.34 (C.48:7-30 et seq.).

b. P.L.2026, c.34 (C.48:7-30 et seq.) shall not apply to any project, or discrete component thereof, that has received final approval from the Board of Public Utilities prior to the effective date of P.L.2026, c.34 (C.48:7-30 et seq.) pursuant to:

(1) an infrastructure investment program order issued by the board;

(2) a base rate case order; or

(3) any other board order specifically authorizing construction of the project.

c. Any application or proceeding pending before the board on the effective date of P.L.2026, c.34 (C.48:7-30 et seq.) that relates to a supplemental project within the scope of the provisions of P.L.2026, c.34 (C.48:7-30 et seq.) shall conform to the requirements of P.L.2026, c.34 (C.48:7-30 et seq.) to the extent practicable, as determined by the board.

d. Nothing in P.L.2026, c.34 (C.48:7-30 et seq.) shall be construed to create a separate certificate of public convenience and necessity requirement for distribution infrastructure investment or to require approval of distribution infrastructure investment, except as otherwise required under applicable law or to supersede, preempt, or otherwise affect the authority of any municipality, county, or other local government to review or approve the siting, construction, or modification of transmission facilities under the "Municipal Land Use Law," P.L.1975, c.291 (C.40:55D-1 et seq.), and rules and regulations promulgated by the New Jersey Department of Environmental Protection.

e. Nothing in P.L.2026, c.34 (C.48:7-30 et seq.) shall be construed to confer upon the board authority over matters within the exclusive jurisdiction of the Federal Energy Regulatory Commission, including, but not limited to, the rates, terms, and conditions of transmission service in interstate commerce , determinations made pursuant to federal law by NERC, FERC, PJM, or the Secretary of Energy, and cost allocation determinations adopted pursuant to the "Federal Power Act" (16 U.S.C. s.791a et seq.) and FERC orders. The board's consideration of the factor set forth in paragraph (1) of subsection b. of section 6 of P.L.2026, c.34 (C.48:7-35) shall be undertaken solely for purposes of determining public convenience and necessity, in a manner consistent with federal law, and shall not constitute rate regulation or the exercise of planning authority over electric transmission facilities.

10. Sections 7 and 8 of this act shall take effect immediately. Sections 1 through 6 and section 9 of this act shall take effect either 90 days following the board's adoption of the rules and regulations required under section 8 of this act or on the first day of the 19th month next following the effective date of sections 7 and 8 of this act, whichever is earlier.

Approved July 7, 2026.