STATE OF NEW YORK

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2025-2026 Regular Sessions

IN SENATE

January 22, 2025

Introduced by Sen. MAY -- read twice and ordered printed, and when printed to be committed to the Committee on Energy and Telecommunications -- recommitted to the Committee on Energy and Telecommunications in accordance with Senate Rule 6, sec. 8 -- reported favorably from said committee, ordered to first and second report, ordered to a third reading, amended and ordered reprinted, retaining its place in the order of third reading -- passed by Senate and delivered to the Assembly, recalled, vote reconsidered, restored to third reading, amended and ordered reprinted, retaining its place in the order of third reading

AN ACT to amend the public service law, in relation to advanced transmission technologies; and to direct the New York state energy research and development authority to conduct a study on the effectiveness of such technologies

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. The public service law is amended by adding a new section 66-x to read as follows:

§ 66-x. Advanced transmission technologies. 1. For the purposes of this section, the following terms shall have the following meanings:

(a) "Advanced transmission technologies" or "ATTs" means hardware and/or software that enhance the performance, efficiency, or capacity of the electric transmission system, including but not limited to, grid enhancing technologies, advanced conductors, advanced reconductoring, and energy storage used as a transmission resource.

(b) "Grid enhancing technology" means any hardware and/or software technology that enables enhanced or more efficient performance from the electric distribution or transmission system, including, but not limited to dynamic line rating, advanced power flow control technology, topology optimization, and energy storage when used as a distribution resource.

EXPLANATION--Matter in *italics* (underscored) is new; matter in brackets [-] is old law to be omitted.

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(c) "Advanced conductor" means a conductor with a direct current electrical resistance substantially lower than traditional conductors of a similar diameter, while simultaneously increasing capacity, which may include rebuilding support structures or other associated facilities.

(d) "Dynamic line rating" means hardware and/or software technologies used to update the calculated thermal limits of existing transmission lines based on real-time and forecasted weather conditions.

(e) "Advanced power flow control" means hardware and/or software technologies used to push or pull electric power in a manner that balances overloaded lines and underutilized corridors within the transmission system.

(f) "Topology optimization" means hardware and/or software technologies that identify reconfigurations of the transmission system and enable the routing of electrical power flows around congested or overloaded elements of the transmission system.

(g) "Electric corporation" shall have the same meaning as defined by section two of this chapter.

(h) "Combination electric and gas corporation" shall have the same meaning as defined by section two of this chapter.

(i) "Transmission", except as used within the term advanced transmission technologies, shall have the same meaning as the term major electric transmission facility as defined by section one hundred thirty-seven of this chapter.

2. (a) In any hearing considering a major change in rates or charges, transmission planning proceeding, or capital improvement proposal before the commission initiated one year after the effective date of this section, each electric corporation or combination electric and gas corporation shall file with the commission a cost-effectiveness analysis relating to the deployment of advanced transmission technologies; provided however nothing in this section shall be construed to prohibit an electric corporation or combination electric and gas corporation from filing a cost-effectiveness analysis relating to the deployment of ATTs prior to such date. Such cost-effectiveness analysis shall evaluate such strategies against a set of enumerated transmission goals, including:

(i) increased transmission capacity;

(ii) reduced transmission system congestion;

(iii) reduced curtailment of renewable and zero-emission resources;

(iv) increased reliability and resiliency;

(v) reduced risk of equipment failure in light of climate-driven hazards;

(vi) increased capacity to connect new renewable and zero-emission resources;

(vii) increased flexibility and optionality in long-term planning, including for major load growth; and

(viii) improvement of consumer affordability, reduced overall ratepayer costs, and/or mitigation of rate increases.

(b) During or subsequent to any hearing considering a major change in rates, transmission planning proceeding, or capital improvement proposal before the commission, each electric corporation and combination electric and gas corporation shall file cost-effectiveness analysis with the federally designated bulk system operator. Such filing shall reflect analyses conducted within such proceedings and shall not require duplicative standalone evaluations.

3. (a) Where a cost-effectiveness analysis conducted under subdivision two of this section identifies one or more advanced transmission tech-

nologies or advanced conductors as cost-effective strategies, the utility shall submit to the commission a strategic implementation plan within ninety days of completion of such analysis.

(b) An implementation plan submitted under paragraph (a) of this subdivision shall include proposed timelines, procurement strategies, including solicitations where appropriate, and measurable performance metrics.

(c) The commission shall review implementation plans submitted under paragraph (a) of this subdivision and, where consistent with the public interest, direct the timely deployment of the technologies identified in such implementation plans.

4. Each electric corporation and combination electric and gas corporation shall submit a filing on their compliance with the provisions of this section to the commission, and provide a separate report to the federally designated bulk system operator and the legislature's standing committees on energy, within one year of the effective date of this section, and every two years thereafter, which shall include, but not be limited to:

(a) the status of deployment of ATTs;

(b) results of cost-effectiveness analyses;

(c) implementation plans and progress; and

(d) projected opportunities for future deployment.

§ 2. Study on effectiveness of advanced transmission technologies. 1. For the purposes of this section, the following terms shall have the following meanings:

(a) "Advanced transmission technologies" or "ATTs" shall have the same meaning as defined in section 66-x of the public service law.

(b) "Transmission", except as used within the term advanced transmission technologies, shall have the same meaning as the term major electric transmission facility as defined by section 137 of the public service law.

(c) "NYSERDA" means the New York state energy research and development authority.

2. Within 12 months of the effective date of this act, NYSERDA shall conduct and complete a study evaluating the use and benefits of advanced transmission technologies within this state and other jurisdictions.

3. The study shall include:

(a) a description of all advanced transmission technologies deployed by utilities in New York state;

(b) an evaluation of the impacts of ATTs on transmission performance, including but not limited to:

(i) increased capacity and efficiency;

(ii) congestion reduction;

(iii) curtailment reduction;

(iv) reliability and resiliency improvements;

(v) cost savings to ratepayers; and

(vi) integration of new renewable energy and load growth;

(c) at least two multi-technology case studies, including cost, timeline, reliability, and consumer impacts; and

(d) a projection of future opportunities for deployment of ATTs to meet demand growth and improve affordability.

4. NYSERDA may consult with the federally designated bulk system operator, federal energy regulatory commission, consumer advocates, utilities, academic experts, and other stakeholders in conducting the study.

5. Upon completion of the study, NYSERDA shall submit a report on the results of such study to the legislature and the governor, and make such study available on its website.

§ 3. This act shall take effect immediately.