STATE OF NEW YORK

2708--A

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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

AN ACT to amend the public service law and the public authorities 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 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 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.

(c) "Advanced conductor" means a conductor with a direct current electrical resistance at least ten percent lower than existing conductors of a similar diameter, while simultaneously increasing capacity by at least

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

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seventy-five percent, 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 network.

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

(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 base rate proceeding, transmission planning proceeding, or capital improvement proposal before the commission, each electric corporation or combination electric and gas corporation shall conduct and file a cost-effectiveness and timetable analysis of multiple strategies, including but not limited to deployment of advanced transmission technologies. 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-carbon resources;

(iv) increased reliability and resiliency;

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

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

(vii) increased flexibility and optionality in long-term planning, including for data center growth and other 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 rate-based proceeding, transmission planning proceeding, or capital improvement proposal before the commission, each electric corporation and combination electric and gas corporation shall file cost-effectiveness and timetable analysis with the New York independent system operator within seven days of filing such cost-effectiveness and timetable analysis with the commission. 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 technologies 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 New York independent 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" means hardware and 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) "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.

(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 a study evaluating the use and benefits of advanced transmission technologies nationally and subsequent studies evaluating the use and benefits of advanced transmission technologies in New York state.

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 New York independent 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, if NYSERDA determines that ATTs are in the public interest, the commission shall promulgate regulations requiring utilities to incorporate ATTs in their planning and investments.

§ 3. This act shall take effect on the ninetieth day after it shall have become a law. Effective immediately, the addition, amendment and/or repeal of any rule or regulation necessary for the implementation of this act on its effective date are authorized to be made and completed on or before such effective date.