



New England States Committee on Electricity

To: Al McBride, Vice President, System Planning, ISO New England
From: NESCOE
Date: October 16, 2024
Subject: Potential Transmission Needs for a Longer-term Transmission Planning RFP
CC: Planning Advisory Committee (PAC)

Four years ago today, the six New England states, acting through NESCOE, set forth their shared vision for a clean, affordable, and reliable 21st century regional electric grid. A key component of that vision was a scenario-based, longer-term transmission planning process to enable proactive, competitive, and sensible transmission investment to meet future needs. NESCOE appreciates the thoughtful, diligent efforts of ISO-NE and stakeholders over the last several years to establish a robust process for longer-term regional transmission planning and investment. Today, NESCOE writes to notify ISO-NE and stakeholders of certain needs that NESCOE is interested in including in a potential request for proposals (RFP).¹

The first longer-term transmission study, the 2050 Transmission Study, provided visibility into potential future transmission needs that would support the integration of clean energy resources into, and ensure a reliable transition to, our future grid. By identifying high likelihood concerns along with potential roadmaps and high-level cost estimates for solutions, the 2050 Transmission Study provides the information necessary for the states to advance these study results into action in the nearest term.²

The LTTP process allows NESCOE to request that ISO-NE pursue transmission investment under a state-driven, quantitative process that is grounded in the evaluation of broad regional benefits and consumer interests. For this first RFP, NESCOE is interested in pursuing a reasonable, measured approach to explore needed transmission investment with sufficient flexibility to promote meaningful competition for the benefit of ratepayers.

NESCOE is interested in focusing the first LTTP solicitation on increasing transfer capability within the system to allow more power to flow from Maine to New Hampshire and into southern New England. Constraints on various interfaces have posed longstanding impediments to the flow of power from northern New England to the southern parts of the region. The 2050 Transmission Study and other studies show that bottlenecks on the interfaces between Maine and

¹ NESCOE submits this communication in accordance with Attachment K, Section 16.4 of the Tariff.

² The 2050 Transmission Study identified four high likelihood concerns: North-South, Boston Import, Northwestern Vermont Import, and Southwest Connecticut Import. ISO-NE, *2050 Transmission Study* (Feb. 2024), at https://www.iso-ne.com/static-assets/documents/100008/2024_02_14_pac_2050_transmission_study_final.pdf.

southern New England will persist and only worsen in the future.³ Additional 2050 Transmission Study analysis further shows that even relocating generation south of these interfaces did not resolve the constraints. Strengthening the connections between northern and southern New England will enhance reliability and market efficiency by resolving known constraints on the transmission system and will also position the region to more efficiently integrate affordable resources in coming years. Recent studies, along with the current interconnection queue, indicate that on the order of 3,000 megawatts (MW) of additional generation capacity could potentially be developed in northern Maine. NESCOE is interested in solutions that would facilitate the integration of these resources.

As NESCOE considers the first RFP under New England's new LTTP process, we seek to define the scope in a way that allows for a high likelihood of a successful solicitation – meaningful competition that achieves the primary objective of a cost-effective outcome for consumers. Further, we believe that a successful RFP scope should be defined simply so that bidders can easily understand it and so that ISO-NE can administer and evaluate the responses in a straightforward way. The RFP's scope should also allow bidders sufficient flexibility to propose a variety of potential solutions.

NESCOE has identified possible needs requiring competitive solutions to achieve these ends based on both the analysis in the 2050 Transmission Study and subsequent consultation with ISO-NE. NESCOE is currently contemplating defining any need as a minimum value that would set the floor but would not preclude bidders from proposing larger projects. All costs and/or benefits of exceeding the minimum values would be reflected in the economic analysis.

The minimum values proposed here balance the objectives of strengthening the connection between northern and southern New England and facilitating the integration and deliverability of additional affordable generation resources with the recognition that significant increases to the Maine-New Hampshire and Surowiec-South interfaces may require additional investments on downstream interfaces.

NESCOE is considering possible ways to solicit proposed solutions that further facilitate the integration of additional generation resources located in northern Maine, such as including:

- (1) a requirement to increase the Maine-New Hampshire interface capacity to at least 3,000 MW by 2035 and increase the Surowiec-South interface capacity to at least 3,200 MW by 2035;⁴

³ See ISO-NE, *Economic Planning for the Clean Energy Transition* at <https://www.iso-ne.com/system-planning/system-plans-studies/economic-studies/?key-topic=2022%20Economic%20Study%20Planning%20Year>; ISO-NE, 2021 Economic Study: *Future Grid Reliability Study Phase 1* (July 2022) at https://www.iso-ne.com/static-assets/documents/2022/07/2021_economic_study_future_grid_reliability_study_phase_1_report.pdf.

⁴ The current limit for the Maine-New Hampshire interface is 2,000 MW and the current limit for the Surowiec-South interface is 1,800 MW. These limits do not reflect the New England Clean Energy Connect (NECEC) transmission line and associated upgrades. See ISO-NE, *Maine Transfer Limit Updates* (June 20, 2024), at https://www.iso-ne.com/static-assets/documents/100012/a09_maine_transfer_limits.pdf.

- (2) a requirement or recommendation to increase the capacity of additional interfaces (e.g., Orrington-South, North-South, or others); or
- (3) a requirement that any solution facilitate the interconnection of a minimum amount of new generation capacity at substations above the Surowiec-South interface; or
- (4) a strong preference for solutions that facilitate the interconnection of incremental generation north of the Surowiec-South interface.

Based on the 2050 Transmission Study analysis, these increases should accommodate substantial incremental power flows and could potentially help facilitate the integration of new or incremental generation resources. NESCOE is weighing the tradeoffs of including a requirement for solutions that extend farther north into Maine. While such a requirement would further facilitate the transfer of cost-effective power across these interfaces, NESCOE seeks to avoid an overly prescriptive scope that may hinder the success of a potential RFP by unduly limiting the pool of bids or by reducing the likelihood of soliciting a cost-effective solution.

NESCOE seeks feedback on the best way to achieve the stated objectives of (1) strengthening the connection between northern and southern New England and (2) facilitating the integration and deliverability of additional affordable generation resources located in northern Maine beyond Surowiec. NESCOE further seeks feedback on the specific preliminary needs and the considerations identified above. NESCOE welcomes any other feedback that may increase the likelihood of a successful solicitation.

We look forward to discussing our preliminary interest with ISO-NE and stakeholders at the Planning Advisory Committee meeting on October 23, 2024. We also welcome written feedback on our preliminary proposed scope and the questions above. Comments should be submitted to NESCOEstates@gmail.com and pacmatters@iso-ne.com by Friday, November 22, 2024.

NESCOE appreciates ISO-NE's and stakeholders' contributions and looks forward to ongoing dialogue.