



New England States Committee on Electricity

To: Al McBride, Vice President, System Planning, ISO New England
From: NESCOE
Date: December 13, 2024
Subject: Transmission Needs for a Longer-term Transmission Planning RFP
CC: Planning Advisory Committee (PAC)

NESCOE requests that ISO New England (ISO-NE) issue its first regional solicitation under the longer-term transmission planning (LTTP) process.¹ This letter identifies NESCOE’s requested scope for this solicitation.

Background

On July 8, 2024, the Federal Energy Regulatory Commission (FERC) approved a new scenario-based, longer-term transmission planning process in New England. This process allows NESCOE to request that ISO-NE pursue transmission investment through a state-driven, study-based process that evaluates broad regional benefits. NESCOE expects that this new process will enable proactive, competitive, and sensible transmission investment that will meet New England’s future needs and provide net benefits to New England’s customers.

ISO-NE’s 2050 Transmission Study was the first study to inform future investment under the new FERC-approved process. The 2050 Transmission Study provides visibility into potential future transmission needs and high-likelihood concerns, offers potential roadmaps, and provides high-level cost estimates for solutions. The study provides the necessary information for states to turn information into action that would support integrating clean energy resources into, and ensure a reliable cost-effective transition to, our future grid.

On October 16, 2024, NESCOE notified ISO-NE and stakeholders of certain needs that NESCOE was interested in including in the first request for proposals (RFP) under the new longer-term transmission planning process. NESCOE indicated it was interested in pursuing a reasonable, measured approach to explore needed transmission investment with sufficient flexibility to promote meaningful competition for the benefit of ratepayers.

At the October 23, 2024, Planning Advisory Committee meeting, NESCOE discussed its October 16, 2024, request, and stakeholders offered their preliminary observations and questions. On November 22, 2024, twenty-six commenters submitted written feedback, which included additional and more detailed suggestions, observations, and questions.²

As discussed above, this communication reflects NESCOE’s interest in pursuing a reasonable, measured approach to needed transmission investment that has sufficient flexibility to promote

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

² See <https://www.iso-ne.com/system-planning/transmission-planning/competitive-transmission>.

meaningful competition and NESCOE’s interest in positioning the region to more efficiently integrate affordable resources in the coming years. NESCOE’s views on the scope of the first RFP are grounded in the results of the 2050 Transmission Study, the thoughtful feedback from diverse stakeholders, and further consultation with ISO-NE.

For this first LTTP RFP, NESCOE is requesting that ISO-NE focus on two related objectives to enhance reliability and market efficiency. Specifically, NESCOE seeks to achieve a twofold objective 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 Maine. As noted in the October 16, 2024 letter, the 2050 Transmission Study and other studies show that bottlenecks on the interfaces between Maine and southern New England will persist and only worsen in the future, even when generation is relocated south of these interfaces.³ 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. There is broad interest in addressing these long-standing system challenges and strengthening the transmission system in Maine is a reasonable, measured first step toward the region’s needed transmission investment.

Diverse stakeholder feedback has provided invaluable insights to NESCOE and informed the details of this final request. In the first instance, the feedback has affirmed the states’ objectives for this RFP—strengthening the connections between northern and southern New England to enhance reliability and market efficiency and positioning the region to more efficiently integrate affordable resources in coming years. Stakeholders’ thoughtful feedback and questions also helped NESCOE to refine the scope and provide additional information, such as expanding on the states’ evaluation priorities, to enable a successful outcome.

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.

Final Requested Scope

After further consideration, including stakeholder feedback and consultation with ISO-NE, NESCOE requests that ISO-NE adopt the following scope for the first LTTP RFP:

- (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 and
- (2) a requirement to develop new infrastructure (e.g., substation) at Pittsfield, Maine that can accommodate the interconnection of **at least** 1,200 MW (nameplate) of onshore wind. Pittsfield should be used as the presumed location based on previous analysis,⁵ however, bidders may propose alternate locations which, based on their own expertise, bidders conclude would be more efficient and cost-effective.
- (3) The required in-service date for both scope components is by 2035 unless a bidder can demonstrate supply chain issues that warrant a later in-service date. A strong preference should be given to bids with an in-service date by 2035, or as close as possible thereto recognizing supply chain constraint information bidders provide.

First and foremost, NESCOE emphasizes that the requested scope components reflect **minimum** requirements.⁶ As with other energy infrastructure investments, states are mindful of overall consumer cost implications and believe that the minimum requirements would result in material, important improvements to the transmission system. Against that backdrop, NESCOE notes that bidders may, and are encouraged to, propose projects that exceed these minimum requirements if they believe that those expanded scopes will be cost-effective. The benefits of an expanded scope (for example, increasing Boston import interface capacity, enabling additional generation capacity, or other scope expansions suggested by some commenters) would be captured by ISO-NE in the LTTP evaluation process.

⁴ The current limit for the Maine-New Hampshire interface is 2,200 MW and the current limit for the Surowiec-South interface is 2,800 MW. These limits reflect the New England Clean Energy Connect (NECEC) transmission line and associated upgrades. See ISO-NE. *Post-NECEC Maine Transfer Limits* (Dec. 2024), at https://www.iso-ne.com/static-assets/documents/100018/a07_2024_12_18_post_necec_maine_transfer_limits.pdf.

⁵ A new substation at Pittsfield, Maine has been repeatedly identified as a key component to interconnecting onshore wind resources in Maine into the New England system. See ISO-NE. *2016/2017 Maine Resource Integration Study* (2018), at https://www.iso-ne.com/static-assets/documents/2018/03/final_maine_resource_integration_study_report_non_ceii.pdf; ISO-NE. *Final Second Maine Resource Integration Study* (2020) at <https://www.iso-ne.com/static-assets/documents/2021/01/second-maine-resource-integration-study-report-non-ceii-final.pdf>; ISO-NE. *Third Maine Resource Integration Study Results* (June 2024) at https://www.iso-ne.com/static-assets/documents/100012/a02_third_maine_resource_integration_study_june2024_non_ceii.pdf.

⁶ See, e.g., Comments of American Council on Renewable Energy, American Clean Power, and RENEW Northeast (Nov. 22, 2024), at 3; Comments of Brookfield Renewable (Oct. 16, 2024); Comments of Conservation Law Foundation, et al. (Nov. 8, 2024), at 1-2; Comments of Clearway Energy Group (Nov. 22, 2024) at 1, 3; Comments of Longroad Energy (Nov. 22, 2024), at 3; Comments of NextEra Energy Transmission (Nov. 22, 2024), at 6, available at <https://www.iso-ne.com/system-planning/transmission-planning/competitive-transmission>.

NESCOE's final requested scope includes two equally important requirements⁷ that, when taken together, should result in improvements to the transmission system that will benefit consumers. Some stakeholders recommended that ISO-NE separate out individual RFP scope components into multiple RFPs.⁸ Given that this is the first procurement under the new LTTP framework and ISO-NE's conclusion that a single, comprehensive RFP as described above is the most efficient way to achieve the objectives NESCOE identified for this solicitation, NESCOE accepts ISO-NE's recommendation not to issue multiple RFPs in this solicitation. NESCOE has endeavored to maximize the benefits of a competitive solicitation process with this first RFP and remains committed to exploring further ways to increase competition going forward, including additional discussion with stakeholders and ISO-NE on partial solutions. NESCOE's evaluation priorities include joint proposals to encourage collaboration among bidders, recognizing that complete solutions are required under the tariff for this first RFP.

Finally, the scope does not limit the technologies that may be deployed in proposals (e.g., HVDC, advanced conductors, etc.).⁹ However, NESCOE recognizes that some transmission technologies have long lead times associated with their procurement. In light of that fact, NESCOE requests that the scope include limited leeway for bidders to propose an in-service date later than 2035, provided that bidders are required to clearly demonstrate supply chain circumstances that warrant a delayed in-service date. Timely transmission investment remains a priority, and bids with an in-service date of 2035 or earlier are strongly preferred.

Evaluation Priorities

NESCOE agrees with the many stakeholders that stressed the importance of a clear and transparent evaluation process.¹⁰ While the economic analysis will quantify certain benefits to develop a benefit-cost ratio, additional criteria will need to be considered in a comprehensive evaluation.¹¹ To provide as much clarity to ISO-NE and bidders as possible, NESCOE has grouped the additional evaluation criteria identified in the tariff into priority categories. In

⁷ NESCOE notes that many commenters recommended that the scope be defined in clear requirements as opposed to preferences.

⁸ See, e.g., Comments of American Council on Renewable Energy, American Clean Power, and RENEW Northeast (Nov. 22, 2024), at 3-4; Comments of NextEra Energy Transmission (Nov. 22, 2024), at 2, 12-13; Comments of Rhode Island Energy (Nov. 22, 2024), at 3, available at <https://www.iso-ne.com/system-planning/transmission-planning/competitive-transmission>.

⁹ See, e.g., Comments of NV Bekaert SA (Oct. 24, 2024); Comments of CTC Global (Nov. 22, 2024); Comments of Form Energy (Nov. 22, 2024); Comments of Onward Energy (Nov. 22, 2024), at 9, available at <https://www.iso-ne.com/system-planning/transmission-planning/competitive-transmission>.

¹⁰ See, e.g., Comments of Acadia Center (Nov. 22, 2024), at 4; Comments of American Council on Renewable Energy, American Clean Power, and RENEW Northeast (Nov. 22, 2024), at 5-6; Comments of Con Edison Transmission, Inc. (Nov. 22, 2024), at 10-13; Comments of Eversource Energy (Nov. 22, 2024), at 3-4; Comments of National Grid (Nov. 22, 2024), at 1-2; Comments of NextEra Energy Transmission (Nov. 22, 2024), at 15-18; Comments of Rhode Island Energy (Nov. 22, 2024), at 1, available at <https://www.iso-ne.com/system-planning/transmission-planning/competitive-transmission>.

¹¹ NESCOE requests that in the evaluation ISO-NE quantify any carbon reductions associated with proposals as well as identify what portion of avoided capital cost of local resources needed to serve demand is attributable to avoided interconnection costs. This information should not be used by ISO-NE in its evaluation beyond the evaluation of avoided capital cost of local resources needed to serve demand contemplated in the tariff. NESCOE requests this information as it may be considered by the states in the unlikely event the supplemental process is triggered.

addition, NESCOE has identified additional criteria beyond those listed in the tariff that should be a part of ISO-NE's comprehensive evaluation. NESCOE provides this information on evaluation priorities for this initial RFP in Attachment A.

NESCOE thanks ISO-NE and stakeholders for their feedback and constructive engagement on the 2050 Transmission Study, the LTTP process development, and on NESCOE's October 16, 2024, letter. NESCOE acknowledges this final scope is an initial step toward a successful RFP and particularly appreciates ISO-NE's effort to ready itself to undertake the significant and novel work ahead. With the LTTP solicitation process now part of a routine, recurring planning process, the instant solicitation will be the first of a continuing assessment of and investment in the transmission system to meet future needs.

ATTACHMENT A

LTTP Non-Economic Evaluation Factors Prioritization Groupings

A Factors - Highest priority

1. Life-cycle cost, including all costs associated with right of way acquisition, easements, and associated real estate
2. Cost cap or cost containment provisions
 - a. Including considerations to manage consumer bill impacts (e.g., smoothing or other mechanisms to mitigate rate impacts)
3. Potential siting/permitting issues or delays
 - a. Consideration of whether bidder has demonstrated a clear plan to get support through engagement (assess experience, engagement strategy).
4. Future expandability
 - a. Consideration of whether the proposal enables the interconnection of additional resources
5. In-service date of the project or portion(s) thereof
6. Qualified Transmission Project Sponsor(s) capabilities
7. System performance
8. Impact on NPCC Bulk Power System classification

B Factors - Second highest priority

1. Extreme contingency performance
2. Impact on interface limits other than those defined in the scope
3. Operational impacts
4. Winter reliability impacts
5. Environmental impact

C Factors - Third highest priority

1. Project constructability
2. Generation and transmission facility outages required during construction
3. Incremental costs for potential resource retirement
4. Consistency with good utility practice
5. Design standards
6. Joint proposals
7. Deployment of advanced transmission technologies

ATTACHMENT B

Response to Stakeholder Feedback

Transmission Needs for an LTTP RFP: Review of Stakeholder Feedback

December 18, 2024



Background

- In 2020, the NE States' Vision Statement called for a scenario-based, longer-term transmission planning (LTTP) process to enable proactive, competitive, and sensible transmission investment to meet future needs
- In response, ISO revised its tariff to enable NESCOE to request that ISO-NE:
 - Perform scenario-based transmission planning studies on a routine basis (Phase 1, Feb. 2022)
 - Pursue transmission investment under a state-driven, study-based process that evaluates broad regional benefits (Phase 2, July 2024)
- ISO-NE's 2050 Transmission Study, the first in what will be a regular part of transmission analysis and planning, 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

Background, cont.

- On October 16, 2024, NESCOE notified ISO-NE and stakeholders of certain needs that NESCOE was interested in including in the first potential request for proposals (RFP)
 - Interest in pursuing a reasonable, measured approach to explore needed transmission investment with sufficient flexibility to promote meaningful competition for the benefit of ratepayers
- NESCOE's stated objectives for the first RFP were:
 - Strengthening the connection between northern and southern New England, and
 - Facilitating the integration and deliverability of additional affordable generation resources located in northern Maine beyond Surowiec
- NESCOE sought feedback on:
 - The best way to achieve the stated objectives
 - The specific preliminary needs and the considerations identified in the letter
 - Any other feedback that may increase the likelihood of a successful solicitation

Primary Considerations

- As the states sought to develop an objective and scope for the potential RFP, several important considerations remained front of mind
- This is the first in what is a regular, recurring study and procurement process
 - There is uniform interest in designing the first RFP in a way that allows for a high likelihood of success - meaningful competition that achieves the primary objective of a cost-effective outcome for consumers
 - There is a lot to learn, and the process will undoubtedly evolve over time
- The states gathered around addressing long-standing system challenges, reaching affordable energy resources and capturing that value for all
- Consumer cost consciousness is an important consideration in the scope

Request for Feedback

- At the October 23, 2024, Planning Advisory Committee meeting, NESCOE discussed its October 16 request, and stakeholders offered their preliminary observations and questions
- On November 22, 2024, twenty-six commenters submitted written feedback to NESCOE and ISO-NE with more detailed suggestions, observations, and questions
- The states greatly appreciate the timely and constructive feedback from stakeholders, which has provided invaluable insights to NESCOE
- States read and considered all feedback carefully
- In the interest of time, we will address these comments as common topics
 - These themes represent feedback that was repeated by a number of commenters; given the commonality of views, and time constraints, this presentation does not reflect all comment and is not meant to be an exhaustive list of considerations

Feedback - Timeline

Recommendation

- Solicitations be conducted as soon as possible
- Timeline for solicitation and evaluation should be shortened
- Consider issuing a second solicitation before the completion of the first

Response

- NESCOE is working as expeditiously as possible to ensure that the solicitation is conducted in the nearest term while also ensuring that all stakeholder feedback is considered and the RFP is thoughtfully constructed so as to enable a successful solicitation

Feedback – Need Definition

Recommendation

- Need should be clearly defined, with a focus on the critical Maine-New Hampshire and Surowiec-South interfaces
- Interface capacity requirements should be minimum thresholds
- Some commenters recommended a separate solicitation for generation resources in Northern Maine beyond Surowiec

Response

- The final request maintains a focus on strengthening the connection between northern and southern New England, with a requirement to increase the Maine-New Hampshire and Surowiec-South interface capacities
- There is broad interest in addressing these long-standing system challenges and strengthening the transmission system in Maine is a reasonable, measured first step toward the region's needed transmission investment
- The requested scope components reflect minimum requirements
- Also see response to feedback on multiple RFPs

Feedback – Multiple RFPs

Recommendation

- Consider multiple RFPs for targeted solutions

Response

- ISO-NE has advised that multiple RFPs risks an unintended consequence of inefficient investment while extending the timeline for needed investment
- NESCOE accepts ISO-NE's recommendation that a single, comprehensive RFP scope is the most efficient way to achieve NESCOE's twofold objective for this initial solicitation in what will be a recurring process
- NESCOE is open to discussing process reforms that may address issues related to multiple RFPs, including the need for sequential RFPs, extended timelines, and administrative constraints on ISO-NE

Feedback – Competitiveness

Recommendation

- Prioritize competitive practices, allow Qualified Transmission Project Sponsors to participate and propose range of solutions
- Consider removing prohibition on submitting partial solutions

Response

- NESCOE has endeavored to maximize the benefits of a competitive solicitation process
- NESCOE developed the request with overall consumer cost implications in mind and believes that the minimum requirements would result in material, important improvements to the transmission system while bearing in mind consumer costs
- Qualified Transmission Project Sponsor capabilities are included the highest priority category of evaluation factors
- NESCOE added in an evaluation criterion to prioritize joint proposals to encourage collaboration among bidders, recognizing that complete solutions are required
- NESCOE remains committed to exploring further ways to increase competition going forward, including additional stakeholder and ISO-NE discussion of partial solutions

Feedback – Flexibility

Recommendation

- Allow transmission developers to propose optional elements to expand transmission capability in addition to targeted interfaces

Response

- NESCOE is interested in providing sufficient flexibility to promote meaningful competition for the benefit of ratepayers
- Scope requirements are expressed as minimum values
- Bidders may, and are encouraged to, propose projects that exceed the minimum scope requirements should they believe those expanded scopes to be cost-effective
- The benefits of an expanded scope would be captured in the LTTP evaluation process

Feedback – Public Engagement

Recommendation

- Prioritize public engagement and/or consideration of environmental justice communities

Response

- Engagement is included under siting and permitting as the highest priority evaluation criteria

Feedback – Evaluation Criteria Transparency

Recommendation

- The evaluation process should be transparent and include clear evaluation criteria and weighting

Response

- NESCOE has provided transparent priorities for the RFP
- NESCOE grouped the non-economic evaluation criteria identified in the tariff into priority categories
- In addition, NESCOE has identified criteria beyond those listed in the tariff that should be a part of ISO-NE's comprehensive evaluation

Feedback – Advanced Transmission Technologies

Recommendation

- Evaluation process should recognize benefits of advanced transmission technologies

Response

- The scope does not place limitations on the technologies that may be deployed in proposals
- NESCOE requests that scope include limited leeway for bidder to propose in-service date later than 2035 to account for potential long lead times for technology procurement
- Deployment of advanced transmission technologies is included in evaluation criteria

Feedback – Future Needs Compatibility

Recommendation

- Consider including RFP evaluation factors that will make transmission projects compatible with other future needs

Response

- Future expandability is included in the highest priority category of evaluation factors

Next Steps

- Thank you to all the stakeholders who provided feedback both in writing and at PAC
- The feedback materially informed NESCOE's request to ISO-NE for the first longer-term transmission solicitation
- NESCOE will continue to be to actively involved as ISO-NE works to implement NESCOE's request

Questions?
