



New England States Committee on Electricity

November 23, 2022

Maria Robinson
Director, Grid Deployment Office
United States Department of Energy
1000 Independence Avenue SW
Washington, DC 20585

Dear Ms. Robinson:

The New England States Committee on Electricity (NESCOE)¹ appreciates the opportunity to provide comments on the Department of Energy’s (Department) Consultation Draft of the National Transmission Needs Study (NTS). With this study, the Department is for the first time considering anticipated transmission capacity constraints. NESCOE supports the Department’s first effort at identifying anticipated transmission constraints. We offer further information below to assist the Department in its analysis and to encourage better alignment with ongoing regional work in New England.

ISO New England (ISO-NE) is currently working on the *2050 Transmission Study*, initiated in response to the states’ request for more visibility into longer-term system needs that account for the states’ clean energy laws and mandates.² The *2050 Transmission Study* uses state-provided assumptions on load and resource mix to provide visibility into potential transmission needs to reliably meet demand in the 2035, 2040 and 2050 timeframes.³ The study will also consider possible solutions to address potential needs and provide transmission upgrade “roadmaps” that consider both constructability and cost. While work on the *2050 Transmission Study* is expected

¹ NESCOE is New England’s Regional State Committee and represents the collective views of the six New England states. These comments are submitted to the Department on behalf of the States of Connecticut, Maine, New Hampshire, Rhode Island, Vermont and the Commonwealth of Massachusetts.

² In 2020, NESCOE released a Vision Statement that called for, among other proposals, a “regional transmission planning effort that provides a high-level transmission system plan to meet the needs of States’ energy transition.” NESCOE, *New England States’ Vision for a Clean, Affordable, and Reliable 21st Century Regional Electric Grid* (Oct. 2020) (Vision Statement), at <http://nescoe.com/resource-center/vision-stmt-oct2020/>.

³ NESCOE provided a carbon compliant hypothetical future scenario based on the 2040 “All Options” scenario in the Energy Pathways to Deep Decarbonization commissioned by the Commonwealth of Massachusetts (Dec. 2020). This scenario reflects the region’s energy and environmental laws. Evolved Energy Research, *Energy Pathways to Deep Decarbonization: A Technical Report of the Massachusetts 2050 Decarbonization Roadmap Study* (Dec. 2020), at <https://www.mass.gov/doc/energy-pathways-for-deep-decarbonization-report/download>.

to carry into 2023, the preliminary results indicate “significant new transmission will be needed to reliably serve load.”⁴

The states have also worked with ISO-NE to ensure that this type of longer-term analysis can be conducted on a regular basis. Earlier this year, the Federal Energy Regulatory Commission approved tariff changes providing the opportunity for such state driven, longer-term transmission analysis as a routine planning process tool.⁵ In the coming months, a second phase of work is expected that would establish the rules for a state or states to operationalize the results of this transmission analysis. Going forward, the Department should include the *2050 Transmission Study* and subsequent ISO-NE studies under this provision of the tariff in its work to identify anticipated transmission capacity needs.

We note that the New England specific studies considered in the draft NTS focus primarily on offshore wind development, including a 2019 Offshore Wind Integration Economic Study that NESCOE requested.⁶ Since that offshore study was completed, further work has been done that may provide insight into transmission needs related to offshore wind, particularly in southeastern Massachusetts and Rhode Island (SEMA/RI). In July 2021, ISO-NE completed the First Cape Cod Resource Integration Study, which identified the transmission upgrades necessary to enable the interconnection of 1,200 megawatts (MW) of offshore wind resources.⁷ The Second Cape Cod Resource Integration Study is currently underway, which is intended to build on the First Integration Study and identify transmission upgrades necessary to interconnect the remaining offshore wind resources.⁸ Together, these studies put a finer point on the potential transmission needs to interconnect offshore wind in Cape Cod and allow that generation to flow out of SEMA/RI. We recommend the Department consider including these recent studies in the NTS to enhance the analysis of transmission needs associated with offshore wind integration in New England.

⁴ ISO-NE, *2050 Transmission Study: Preliminary N-1 and N-1-1 Thermal Results*, Planning Advisory Committee, March 16, 2022, at Slide 50, at https://www.iso-ne.com/static-assets/documents/2022/03/a4_2050_transmission_study_preliminary_n_1_and_n_1_1_thermal_results_presentation.pdf.

⁵ *ISO New England Inc. and New England Power Pool*, 178 FERC ¶ 61,137 (2022).

⁶ The draft NTS identifies three New England specific studies, two of which focus on offshore wind integration. Brattle/Anbaric. *Offshore Wind Transmission in New England* (2020); ISO-NE. *2019 Economic Study: Offshore Wind Integration* (2019); Potomac Economics. *2020 Assessment of the ISO-NE Electricity Markets* (2021).

⁷ ISO-NE, *First Cape Cod Resource Integration Study*, (July 2021), at <https://www.iso-ne.com/static-assets/documents/2021/07/cape-cod-resource-integration-study-report-non-ceii-final.pdf>.

⁸ ISO-NE, *Second Cape Cod Resource Integration Study Status Update*, Planning Advisory Committee (Sep. 21, 2022), at https://www.iso-ne.com/static-assets/documents/2022/09/a03_second_cape_cod_resource_integration_study_status_update.pdf.

Recently, five of the New England states issued a joint Request for Information (RFI), “seeking comment on an initiative to integrate offshore wind and other resources in a cost-effective, reliable and efficient manner—including opportunities to leverage federal funding for New England transmission investments under the federal Infrastructure Investment and Jobs Act (IIJA) and Inflation Reduction Act (IRA).”⁹ Along with the RFI, the states included a conceptual framework for a modular offshore wind integration plan, focused on identifying efficient, least-cost offshore transmission infrastructure solutions.¹⁰ This effort complements the Department’s ongoing Atlantic Offshore Wind Transmission Study.¹¹ Continued dialogue around and alignment of Department and regional work can help promote the timely and efficient consideration of further federal and regional efforts to advance both landside and offshore transmission solutions.

Finally, NESCOE notes that the draft NTS indicates a modest need for increased international transmission between New England and Québec. Other studies, however, indicate that the draft NTS may underestimate possible future needs for such increased transmission capacity. For example, ISO-NE’s recent Future Grid Reliability Study found unlimited bidirectional flows between ISO-NE and Québec “eliminated any curtailment of New England renewables and imports on existing tie-lines and [the New England Clean Energy Connect] while significantly decreasing natural gas production and emissions.”¹² In that study, the flows exceeded 10,700 MW.¹³ Similarly, regional analysis conducted for a Massachusetts study found that an additional 4.1 to 7.1 gigawatts of capacity between Québec and New England would be required.¹⁴ While the estimates range across different studies using different assumptions and modeling tools, together they indicate that the estimates in the draft NTS may be low.

NESCOE appreciates the opportunity to comment on the Consultation Draft. We look forward to continued collaboration with the Department as it finalizes this study and continues work on the Atlantic Offshore Wind Transmission Study and the National Transmission Planning Study.

⁹ New England States Transmission Initiative, Five New England States Announce New Regional Energy Transmission Infrastructure Initiative – Request for Information to Integrate Clean Energy Resources, Sept. 1 2022, at <https://newenglandenergyvision.com/new-england-states-transmission-initiative/>.

¹⁰ Regional Transmission Initiative, Notice of Request for Information and Scoping Meeting, Sept. 1, 2022, Exh. 1, at <https://newenglandenergyvision.files.wordpress.com/2022/09/transmission-rfi-notice-of-proceeding-and-scoping-revised.pdf>.

¹¹ NESCOE is participating as member of the Technical Review Committees for the ongoing Atlantic Offshore Wind Transmission Study and the National Transmission Planning Study.

¹² ISO-NE, Future Grid Reliability Summary Study, July 29, 2022, at 32, at https://www.iso-ne.com/static-assets/documents/2022/07/2021_economic_study_future_grid_reliability_study_phase_1_report.pdf.

¹³ *Id.*

¹⁴ Evolved Energy Research, *Energy Pathways to Deep Decarbonization: A Technical Report of the Massachusetts 2050 Decarbonization Roadmap Study* (Dec. 2020), at 64, at <https://www.mass.gov/doc/energy-pathways-for-deep-decarbonization-report/download>.

Respectfully Submitted,

/s/ Sheila Keane

Sheila Keane

Director of Analysis

New England States Committee on Electricity

P.O. Box 322

Osterville, MA 02655

Tel: (845) 490-7320

Email: sheilakeane@nescoe.com