STATE OF MAINE
PUBLIC UTILITIES COMMISSION

September 24, 2021

Docket No. 2021-00223

MAINE PUBLIC UTILITIES COMMISSION
Inquiry into the Procurement of Transmission and Energy Products Pursuant to An Act To Require Prompt and Effective Use of the Renewable Energy Resources of Northern Maine, P.L. 2021, Chapter 380

ISO NEW ENGLAND INC. COMMENTS IN RESPONSE TO NOTICE OF INQUIRY

ISO New England Inc.[1] ("ISO") respectfully submits these comments in response to the Maine Public Utilities Commission's ("Maine PUC") August 4, 2021 Notice of Inquiry regarding matters involving Maine's procurement of transmission and energy products pursuant to *An Act To Require Prompt and Effective Use of the Renewable Energy Resources of Northern Maine*, P.L. 2021, Chapter 380 (2021) ("Act"). The ISO submits these comments with the objective of aiding the Maine PUC in addressing the issues insofar as they implicate the ISO's Tariff. To that end, the comments address some of the questions in Sections II.A and II.C of the Notice of Inquiry regarding federal and state jurisdictional issues, and locations for interconnection. The ISO addresses the questions following the order in which they appear in the notice.

I. RESPONSES TO THE QUESTIONS IN THE NOTICE

A. Section II.A Questions Regarding Federal and State Jurisdictional Issues

1. Please comment on the nature of the jurisdictional authority, roles, and relationships that are presented (or potentially presented) by the Act with respect to the Commission, ISO-NE and FERC. Please include in these comments issues presented at the point decisions regarding the procurement awards are made, as well as ongoing issues throughout the terms of the awarded contracts. Please address in these comments the potential for the Act, or specific provisions of the Act, to be preempted by federal law, such as federal statutes, regulations or regional rules and tariffs that govern the procurement, interconnection, cost allocation and other aspects of transmission service.

ISO New England is the independent, not-for-profit corporation authorized by the Federal Energy Regulatory Commission ("FERC") to serve as the Regional Transmission Organization ("RTO") for New England. As the RTO, the ISO is charged with three critical, complex, interconnected roles: grid operation, wholesale market administration, and bulk power system planning. The ISO plans and operates the New England bulk power system (*i.e.*, those facilities located in the New England region[2])

---

[1] Capitalized terms used but not otherwise defined in these comments have the meanings ascribed to them in the ISO's Transmission, Markets and Services Tariff ("Tariff") or the *pro forma* Open Access Transmission Tariff ("OATT").

[2] Section I.2.2 of the Tariff defines "New England Control Area" as "the Control Area for New England, which includes PTF, Non-PTF, MTF and OTF. The New England Control Area covers Connecticut, Rhode Island,

and administers New England's organized wholesale electricity markets pursuant to the Tariff, and Transmission Operating Agreements with the New England transmission owners. In its capacity as the RTO, the ISO has the responsibility to protect the short-term reliability of the New England Control Area and to operate the system according to reliability standards established by the Northeast Power Coordinating Council and the North American Electric Reliability Corporation.

A proposal for the interconnection of new Generating Facilities through a generator connection line, or a transmission line to the New England Transmission System implicates various processes under the ISO's responsibilities. These include, but are not limited, the following:

Regional System Planning Process

As relevant here, the ISO's responsibilities include managing the comprehensive planning of the regional power system. The ISO carries out that responsibility in accordance with the comprehensive regional system planning provisions in Attachments K and N of the OATT.[3] As part of the regional system planning process, the ISO performs Needs Assessments to identify transmission infrastructure needs that are necessary to maintain system reliability and efficiency of the wholesale electricity markets, or for meeting public policy goals set by federal, state, and local governments. Attachment K provides two processes for the development of transmission solutions to identified needs: a competitive transmission solicitation process for identified reliability-based needs expected to be required in more than three years; and a solutions study process for near-term identified reliability-based needs. Needs identified for market efficiency or public policy are subject to the competitive solutions process that applies to reliability-based needs outside three years' time.

The regional system planning provisions also require the ISO to provide information about system conditions and needs to signal the marketplace where investment is needed, and provide for regulated transmission solutions to be set aside if market solutions that meet certain milestones address the identified system needs. The regional planning process is continuously evolving. If and as market resources come forward that can solve identified system needs, transmission plans are reduced in scope or cancelled.

The cost allocation provisions applicable to regulated transmission solutions are set forth in Schedule 12 of the OATT. In accordance with those provisions, costs for reliability and market-efficiency-based transmission solutions are allocated to consumers across the region based on a load-ratio basis; costs for public policy-driven projects are allocated differently, with 70% of the costs allocated across the region on a load-ratio basis and 30% allocated to each state in direct proportion to the state's share of the public policy planning need that gives rise to the projects.

Massachusetts, New Hampshire, Vermont, and part of Maine (i.e., excluding the portions of Northern Maine and the northern portion of Eastern Maine which are in the Maritimes Control Area)."

[3] Attachments K and N of the OATT are available at https://www.iso-ne.com/participate/rules-procedures/tariff/.

Transmission and Interconnection Services

The ISO is also the Transmission Provider for open access transmission service over the Pool Transmission Facilities ("PTF")[4] that are part of the New England Transmission System, and interconnection service to the Administered Transmission System. Specifically, the ISO offers Regional Network Service and Through or Out Service over the PTF. Regional Network Service allows Transmission Customers to deliver energy and capacity from Network Resources to any point on the PTF, with all transactions treated as firm, subject to the operation of security constrained economic dispatch. Transmission Customers pay for Regional Network Service through a single rate apportioned to transmission customers based on their network load ratio. Through or Out Service facilitates transactions that go through the New England Control Area from one boundary to another or that export energy out of the New England Control Area. As with Regional Network Service, no advanced reservations are required. Transmission Customers are subject to Through or Out Service charges, with the exception of charges for services between the New England and New York Control Areas.

The ISO's Interconnection Procedures apply to Generating Facilities and Elective Transmission Upgrades ("ETU") that are seeking to interconnect to the Administered Transmission System for the purpose of participating in the New England Markets. The Interconnection Procedures set forth the rules for the performance of Interconnection Studies – engineering studies to determine the upgrade requirements for the safe and reliable interconnection of a proposed resource to the grid – and culminates in an Interconnection Agreement that contains the terms and conditions for the requested service. Interconnection Customers are responsible for the costs of upgrades necessary to accommodate the requested interconnection reliably, with the exception of upgrades that are similar or the same as regional transmission solutions identified to address system needs through the regional system planning process, described above. Section II.47 and Schedule 11 of the Tariff, as well as individual project Interconnection Agreements set forth the cost allocation provisions applicable to interconnection-related upgrades. These provisions, however, do not foreclose alternative funding arrangements taking place outside the Tariff.

Of the processes described above, Attachment K's public policy process offers a framework for planning to meet public policy objectives, such as a renewable resource-associated transmission need based on state public policy. The Interconnection Procedures also provide a construct for developers to propose ETUs for the purpose of interconnecting multiple Generating Facilities. In order for changes to the New England Transmission System to move forward, the applicable Tariff processes will need to be completed. With respect to the processes identified above, transmission infrastructure for addressing reliability, market efficiency or public policy-based needs will need to meet the requirements of the regional system planning process. Participant- or merchant-based changes to the transmission system,

[4] PTFs comprise the transmission facilities owned by PTOs, over which the ISO shall exercise Operating Authority in accordance with the terms set forth in the TOA, rated 69 kV or above required to allow energy from significant power sources to move freely on the New England Transmission System. *See* Tariff at § II.49.

including the interconnection of ETUs or Generating Facilities, must complete the OATT interconnection requirements.

2. The statute specifies the procurement for a 345-kilovolt double circuit generation connection line, or, in the Commission's discretion, a transmission line or lines of greater capacity. What characteristics would determine whether a line would qualify as an Elective Transmission Upgrade ("ETU") pursuant to the rules and processes set forth by ISO-NE? If so, please describe what approvals, such as I.3.9 approvals, would be necessary to allow for interconnection in the ISO-NE system. If the line procured does not meet the ISO-NE definition of an ETU, what would be the nature of the line procured?

Elective Transmission Upgrades are New England's form of participant-funded transmission facilities that are developed on a merchant or other basis. The ETU Interconnection Procedures in Schedule 25 of the OATT allow for participant-funded proposals of transmission facilities, such as those contemplated in the Act – *i.e.*, a "345-kilovolt double circuit generation connection line" or "a transmission line."

In accordance with Section II.47.5 of the Tariff, an ETU Interconnection Customer must comply with Schedule 25. In addition, an ETU Interconnection Customer "shall submit its proposal for review in accordance with Section I.3.9 of the Transmission, Markets and Services Tariff and related ISO New England Operating Documents and thereafter take any action required pursuant to Section I.3.10 of the Transmission, Markets and Services Tariff as a result of such review." Section I.3.9 is the process by which the ISO reviews and approves proposed system changes for any adverse impacts on the stability, reliability or operating characteristics of the power system.

As noted above, consistent with Section II.47.5 (and Schedule 11 of the OATT), "[a]ny entity that constructs and/or maintains the Elective Transmission Upgrade shall be responsible for 100% of all of the costs of said upgrade and of any additions to or modifications of the Pool Transmission Facilities (PTF) and Non-PTF that are required to accommodate the Elective Transmission Upgrade. A request for rate treatment of an Elective Transmission Upgrade, if any, shall be determined by the Commission in the appropriate proceeding."

3. What factors would be relevant to a determination of whether an entity seeking to develop, construct and operate a transmission line pursuant to this procurement would be required to be part of the New England Regional Transmission Organization (RTO)?

As the RTO, the ISO must have operational authority over all transmission facilities in New England. Pursuant to Section 11.5 of the ETU Interconnection Procedures, ETUs are required to be under the ISO's operational authority; operational authority is established pursuant to a transmission operating agreement between the ISO and the ETU Interconnection Customer. A transmission line that is categorized as part of an Interconnection Customer's Interconnection Facilities pursuant to the Generating Facility Interconnection Procedures (such as a radial transmission line from a single generating station) would not be subject to the ISO's operational authority. However, it would be subject to the applicable requirements set forth in the project's Interconnection Agreement.

4. What would the relationship be between the Commission and the ISO-NE with respect to (1) decision making processes; (2) approval; and (3) ongoing oversight in the context of a procurement for such a line?

The ISO does not have authority over Maine's decision-making process for the selection of a Generating Facility or a transmission project. As described above, however, the ISO is responsible for the review and approval of all additions or modifications to the New England Transmission System, including the interconnection of a generator or transmission line to that system.

6. Please comment on the requirements and/or necessary provisions for any transmission line(s) and any authorized contract(s) procured or ordered by the Commission pursuant to the Act with respect to FERC open access-related rules/policies/tariffs, including the ISO-NE Open Access Transmission Tariff (OATT). For example, what jurisdictional issues (if any) would be presented by the relationship between the awarded transmission line and energy projects/contracts resulting from the procurements?

The treatment of a transmission facility for transmission, operations and scheduling will depend on the facility type. An ETU, for example, must be categorized, ultimately, as PTF, Non-PTF, Merchant Transmission Facilities (MTF) or Other Transmission Facilities (OTF),[5] and will be treated in the same manner as other similarly situated facilities under the Tariff. Unless categorized as PTF, the ETU developer will need to establish a schedule under the ISO OATT pursuant to which it will offer service over the ETU. Internal ETUs, such as a transmission line interconnecting generation to the New England system, or a transmission line with two interconnection points within the New England Control Area,[6] will be operated and scheduled by the ISO without recognition of physical transmission rights.[7] Please refer to the ISO's Transmission Service Types and Applications and the ISO OATT Business Practices Section 1—OATT Transmission Services Summary for additional information of transmission service types in the region.

[5] Section I.2.2 of the Tariff defines "Merchant Transmission Facilities" as "those transmission facilities owned by MTOs, defined and classified as MTF pursuant to Schedule 18 of the OATT, over which the ISO shall exercise Operating Authority in accordance with the terms set forth in a MTOA or Attachment K to the OATT, rated 69 kV or above and required to allow energy from significant power sources to move freely on the New England Transmission System." Other Transmission Facilities are "the transmission facilities owned by Transmission Owners, defined and classified as OTF pursuant to Schedule 20, over which the ISO shall exercise Operating Authority in accordance with the terms set forth in the OTOA, rated 69 kV or above, and required to allow energy from significant power sources to move freely on the New England Transmission System. OTF classification shall be limited to the Phase I/II HVDC-TF."

[6] Schedule 25 of the OATT defines "Internal ETU" as "an Elective Transmission Upgrade that interconnects solely within the New England Control Area."

[7] Notably, the ETU Interconnection Procedures, together with the Forward Capacity Markets qualification procedures, provide a mechanism by which an Internal ETUs and a Generating Facility can be associated in order for the Internal ETU to facilitate Generating Facility's qualification to participate in the capacity market. Additionally, under Clustering, such an Internal ETU may also be eligible to take the place of an identified Cluster-Enabling Transmission Upgrade.

Other Tariff provisions that may be applicable include:

- Schedule 11 of the OATT establishing cost allocation rules for ETU and generator interconnection-related upgrades
- Section II.47 establishing interconnection requirements
- Schedules 22, 23, and 25 establishing the interconnection processes and agreements

7. How would charges associated with the ongoing operation of such a line, once developed and constructed, be reflected in FERC-approved tariffs? What would be the process for determining such charges and ensuring resolution of disputes relating to such charges?

Under the Interconnection Procedures and Schedule 11, all costs for the transmission infrastructure, and any corresponding upgrades, are assigned directly to the respective Interconnection Customers based on their Queue Positions, unless the upgrade is the same or similar to an upgrade required for addressing a need identified in the regional system planning process, as described above. The Tariff's cost allocation provisions, however, do not preclude the Interconnection Customer and others from funding the transmission infrastructure and associated upgrades, outside the Tariff – e.g., through state-approved contracts.

In the case of an ETU, the ETU-developers' charges to the customers who use the facility will be based on the rate treatment that the ETU developer files with FERC for approval, and service will be offered pursuant to the schedule that the ETU developer establishes under the OATT. Note, for Internal ETUs, the ISO will schedule and operate the facility without recognition of physical firm rights, similar to the internal PTF.

8. What form(s) of Transmission Service Agreement(s) (TSA) could potentially be required with respect to any transmission line(s) or energy project(s) procured by the Commission pursuant to the Act, and what factors would be relevant or determinative with respect to the TSA?

Please refer to the response to Questions II.A.3 and II.A.6, above.

B. Section II.C Questions Regarding Right of Way Use Rights, Local and Land Use Issues

1. What steps should be undertaken, either by potential bidders or the Commission, to allow a transmission line approved in this process to be "regionalized" as part of the ISO-NE transmission tariff? Should such regional treatment by required or preferred as part of the procurement process?

To achieve regionalization, transmission upgrades must meet the requirements of, and complete the procedures for, reliability, market efficiency or public policy upgrades set forth in Attachment K of the OATT, as described in the response to Question II.A.1, above.

2. What are the preferred points of interconnection of any transmission line with the ISO-NE system? Please comment on how the Commission should and could ensure that the value of energy (or other products) delivered over the line is not diminished due to the point at which it is delivered.

Interconnection Studies[8] performed by the ISO have identified that requests to add significant new interconnections north of the Orrington South interface are not feasible because of multiple system performance limitations in that part of the system.

3. With respect to the interconnection or delivery point, how should the Commission consider and evaluate (as part of the selection process) the potential impact a line and the associated generation to be delivered over it would have on congestion, losses, generator curtailment, or other locational implications?

Given the response to Question II.C.4 above, this response assumes a connection to the south of the Orrington-South interface. A large new interconnection connecting to the south of the Orrington interface is still likely to contribute to congestion on the Surowiec-South and Maine-New Hampshire interfaces.

4. How should the Commission consider any positive and negative implications from a proposed line that would interconnect the NMISA and ISO-NE regions?

A proposal for a transmission interconnection between the NMISA and New England neighboring systems would be subject to the Section II.47.5 and Schedule 25 requirements for an External ETU. A transmission line connecting the NMISA and ISO-NE regions would be considerably more complicated to implement than a transmission line that only radially interconnects generation to the New England system. It is expected that there would be significant additional upgrades to make such an interconnection work. This complication arises from the existing connection between the NMISA system and the New Brunswick system – whereby a connection between NMISA and New England would result in multiple interactions with the New Brunswick-New England interface.

[8] 2016 Maine Resource Integration Study, Planning Advisory Committee Presentation, November 16, 2016 (Contains Critical Energy Infrastructure Information)

II. CONCLUSION

The ISO appreciates the opportunity to submit these comments, and looks forward to continuing discussions and serving as a technical partner to the state in achieving its goals.

Respectfully submitted,

By: *Eric Johnson*
Director, External Affairs

By: *Monica Gonzalez*
Monica Gonzalez
Assistant General Counsel –
Operations & Planning

ISO New England Inc.
One Sullivan Road
Holyoke, MA 01040-2841
(413) 535-4000