



October 31, 2022

Zachary Smith
Vice President, System and Resource Planning
New York Independent System Operator
10 Krey Blvd
Rensselaer, NY 12144

Re: Proposed Transmission Needs Driven by Public Policy Requirements for the 2022-2023
Transmission Planning Cycle

Dear Mr. Smith:

NextEra Energy Transmission New York (“NEETNY”) provides this letter in response to the New York Independent System Operator’s (“NYISO”) August 31, 2022 Request for Proposed Transmission Needs Being Driven by Public Policy Requirements for the 2022-2023 Transmission Planning Cycle pursuant to Section 31.4.2 of Attachment Y of the NYISO Open Access Transmission Tariff (“OATT”).

As discussed more fully below, NEETNY recommends that NYISO consider the Public Policy Transmission Needs (“PPTN”) that address the Public Policy Requirements (“PPR”) embodied in the Climate Leadership and Community Protection Act (“CLCPA”) and the Accelerated Renewable Energy Growth and Community Benefits Act (“AREGCBA”), as well the findings and recommendations contained in the NYISO’s own recent 2021-2040 System & Resource Outlook (“the Outlook”) issued September 22, 2022. It is well-established based on the ongoing 2020-2021 transmission planning cycle¹ and the above-noted legislation, that additional transmission infrastructure is needed to support New York’s 2040 policy goals, and timely and coordinated transmission planning is required to achieve New York’s climate agenda and requirements.

The Outlook goes further in light of the goals identified in the CLCPA and facilitated by the AREGCBA, and anticipates the changes in electric energy supply and storage resources over the next twenty years necessary to achieve the State’s energy policy targets. Importantly, the NYISO worked with interested parties, stakeholders and regulators and conducted various

¹ A common theme among the submissions from stakeholders in the 2020-2021 public policy transmission planning cycle is the identification of transmission needs to achieve the statewide targets such as the need to upgrade the Long Island transmission system to meet the offshore wind goal embodied in the CLCPA.

scenario studies to provide a comprehensive overview in its report of resource development and “... opportunities for transmission investment driven by economics and public policy in New York State.”² This confirms the view that NEETNY has espoused in its various filings³ that transmission solutions on a bulk power and comprehensive scale, using the NYISO process, are necessary to meet and address the policy goals of the CLCPA. The most urgent of the resulting transmission needs are highlighted here.

I. Renewable Generation Pockets – Transmission Limitations Prevent Full Delivery of Renewable Energy

The Outlook defines the concept of renewable generation pockets.

In many parts of the New York grid, transmission constraints form a perimeter around renewable resource development areas, creating renewable generation pockets. The greater the transmission constraints in the pockets, the greater the renewable generation will be curtailed (i.e., prevented from generating their full potential energy). These pockets result in an inability of renewable resources to deliver the potential energy to the grid and to consumers.

Transmission expansion is critical to facilitating efficient CLCPA energy target achievement. The current New York transmission system, at both local and bulk levels, is inadequate to achieve currently required policy objectives. Some renewable generation pockets throughout the State already face curtailments, more curtailments will be experienced in the future and will become more constrained as an increasing number of intermittent generation resources connect.

Outlook at 74.

² NYISO’s 2021-2040 System & Resource Outlook (“the Outlook”) issued September 22, 2022, at 4.

³ See, e.g., Comments of NEETNY dated May 31, 2022 to the Petition in Case No. 20-E-0197 of Upstate Utilities Identifying Area of Concern Needs and Recommended Solutions and NEETNY’s comments filed on July 11, 2022 in PSC Case No. 20-E-0197 Petition of Consolidated Edison Company of New York, Inc. for approval to recover costs of Brooklyn Clean Energy Hub.

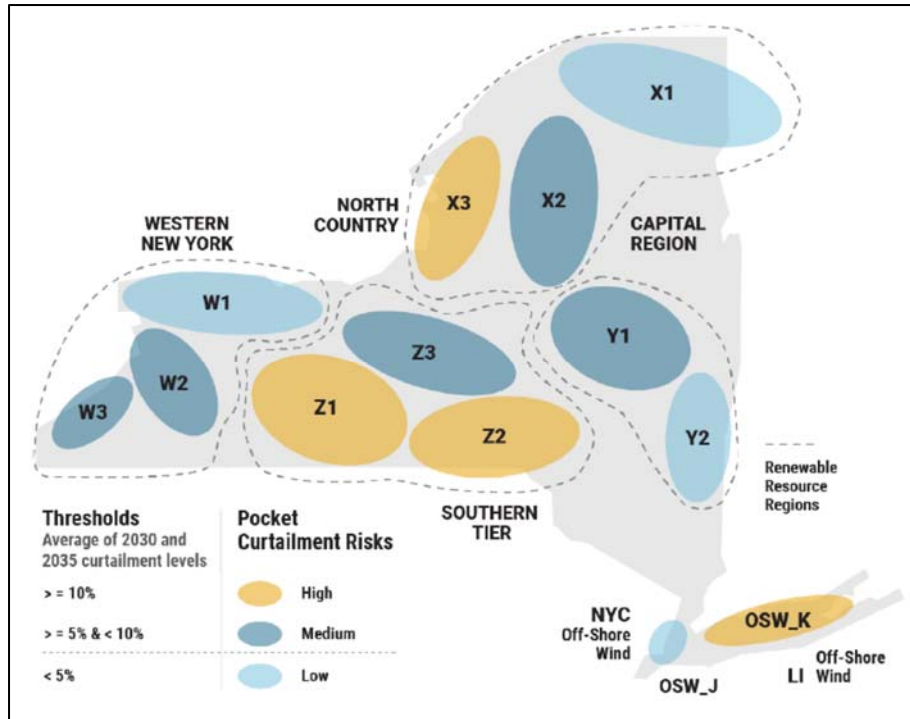


Figure 1. New York Renewable Generation Pocket Map. Outlook at 14

Specifically, there are three areas of particular PPTN focus that emerge from the NYISO’s Outlook as being areas where, with the expected addition of renewable generation under the CLCPA, transmission constraints will challenge the deliverability of energy without curtailment. These areas are:

1. Watertown (X2) and (X3) in Upstate New York,
2. Southern Tier in Upstate New York including Finger Lakes (Z1) and (Z2)
3. Offshore Wind on Long Island (“OSW”)

These renewable generation pockets will require transmission expansion to reach CLCPA goals and are identified by the NYISO as posing the most significant and urgent transmission needs. Indeed, the NYISO categorically states in its report that “[w]ithout investment in transmission, these areas of the New York grid will experience persistent and significant limitations to deliver the renewable power from these pockets to consumers in the upcoming years.” Outlook at 15.

II. The PPTN Planning Process Will Identify the Most Cost Effective And Efficient Combination of Bulk And Local Transmission to Achieve CLCPA Goals

NEETNY submits that the Outlook⁴ together with the New York State Climate Action Council’s Draft Scoping Plan⁵ establish the need for transmission to achieve the state climate goals. Trying to address the State’s ambitious clean energy goals with local transmission upgrades alone will not solve the physical constraints of these respective systems in a manner consistent with those goals. Instead, such an approach will result in continuing physical constraints that will either increase the costs of relieving the congestion resulting from the addition of renewable generation or it will prevent New York from achieving its clean energy goals. Rather, a coordinated transmission approach that identifies optimal Bulk and Local transmission upgrades will best serve the State’s clean energy goals, cost effectively and efficiently.

A. A Public Policy Transmission Need Should be Declared to Enable at Least 2,000 MW of Additional Renewable Capacity into Watertown

The renewable generation pockets are a grouping of congested lines and generators that are likely to be curtailed within a localized area. The limitations and constraints in the Watertown/Tug Hill Plateau that lead to a renewable generation pocket arise from the 115kV network in this area that will be unlikely to deliver wind and solar that is already contracted without curtailment. These constraints will likely worsen with the integration of additional renewable resources. The Watertown/Tug Hill Plateau area can potentially integrate at least 2,000 MW of additional renewable capacity to help New York reach CLCPA energy targets.

The Upstate Utilities comprising Central Hudson Gas & Electric Corporation, New York State Electric and Gas Corporation, Niagara Mohawk Power Corporation and Rochester Gas and Electric Corporation (“Upstate Utilities”) filed a petition to develop local transmission solutions to partially address what they view as transmission constraints. (“Petition”).⁶ NEETNY submitted comments on the Petition⁷ that included a side-by-side comparison of a holistically planned bulk and local transmission solution against the Upstate Utilities’ proposed local upgrades, demonstrating that a combination involving bulk and local upgrades would be more cost effective. NEETNY proposes that there are opportunities to issue a PPTN to ensure that the right transmission solution is developed to enable New York to meet its clean energy goals cost-effectively.

B. A Public Policy Transmission Need Should be Declared to Enable at Least 2,000 MW of Additional Renewable Capacity into the Southern Tier

⁴ Some solar generation curtailment is observed in the North Country and Capital Region (pockets X2, X3, and Y1), which have increasing amounts of solar projects proposed in the Interconnection Queue. These curtailments are generally due to a lack of a strongly interconnected network to deliver power, at both bulk and local system levels. Outlook at 65

⁵ New York State Climate Action Council Draft Scoping Plan, December 30, 2021.

⁶ Petition of Upstate Utilities Identifying Area of Concern (“AOC”) Needs and Recommended Solutions (“Petition”) dated March 8, 2022 in PSC Case No. 20-E-0197.

⁷ See fn. 3 above.

Similar to the Watertown/Tug Hill Plateau area, the land and natural resource availability in the Finger Lakes and Southern Tier region attract renewable generation buildout. The Southern Tier has limited bulk transmission capability today, but with improvements, can potentially integrate at least 2,000 MW of additional renewable capacity to help New York reach CLCPA energy targets. The area is primarily served by 115kV transmission, with limited 230kV transmission lines. In order to properly transfer a large amount of power over a long distance cost-effectively and efficiently, higher voltage transmission is optimal. Relying only on lower voltage transmission solutions will result in limited transfer capability and limit operational flexibility. Therefore, a Public Policy Transmission Need should be considered to allow developers to consider both bulk and local transmission upgrades to enable delivery of additional renewable power to consumers without curtailment.

C. A Public Policy Transmission Need Should Be Declared for a Coordinated Transmission Project on Long Island to Integrate at Least 2,400 MW of Offshore Wind

NYISO is currently evaluating proposed projects in the on-going Long Island Offshore Wind Export Public Policy Transmission Need (“LI PPTN”) pursuant to the state’s 9 GW goal, with an assumed 3 GW of offshore wind injection into Long Island. However, it is anticipated that more offshore wind will be needed to achieve the state’s climate goals.⁸ Additionally, the New York State Energy Research and Development Authority (“NYSERDA”) has conducted a cable constraint assessment that demonstrates physical challenges and limitations to routing transmission cables to New York City.⁹

With the anticipated need for increased offshore wind beyond what is currently required by the CLCPA, New York City’s challenges with respect to limited points for offshore wind interconnection and physical cable constraints will only be compounded. These challenges demand a coordinated and planned approach that accounts for the long-term clean energy goals. Con Edison’s proposed Brooklyn Clean Energy Hub is a step in the right direction, but has significant flaws, including constraints through the New York Harbor Approach area and the East River, as identified by NYSERDA’s constraint report.¹⁰ Three other alternatives were presented at the NYSERDA Offshore Wind Interconnection Webinar on September 28, 2022. It is unknown how any of these four proposed solutions perform against each other, or in conjunction with the soon-to-be-selected LI PPTN project. Should it be determined that any further transmission is needed to support current or future state goals for offshore wind, a NYISO PPTN should be established to ensure the most efficient and cost effective solution is competitively selected for such a significant buildout of offshore wind.

Conclusion

NEETNY submits that a Public Policy Transmission Need should be considered to enable and relieve the constraints to integrate at least 2,000 MW of renewable capacity in the Watertown

⁸ New York State Climate Action Council Draft Scoping Plan, December 30, 2021, at 74.

⁹ NYSERDA’s Draft Offshore Wind Cable Corridor Constraints Assessment Framework, December 2021.

¹⁰ NYSERDA’s Draft Offshore Wind Cable Corridor Constraints Assessment Framework, December 2021, at Section 3.3.

area; 2,000 MW of renewable capacity into the Southern Tier; and at least 2,400 MW of additional offshore wind capacity on Long Island. It has been established that meeting the CLCPA targets will require significant new investment in transmission solutions. While some local transmission upgrades will be necessary alongside bulk power solutions, the PSC and the NYISO are well-positioned, using the established NYISO PPTN process, to determine competitive holistic and integrated solutions that will address these transmission needs. Using the NYISO process will allow for statewide coordination to provide for full deliverability of renewable generation to consumers using innovative and cost-effective transmission solutions.

Sincerely,

/s/ Richard W. Allen

Richard W. Allen
President
NextEra Energy Transmission New York

Sent via email to PublicPolicyPlanningMailbox@nyiso.com