STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Proceeding on Motion of the Commission to Implement Transmission Planning Pursuant to the Accelerated Renewable Energy Growth and Community Benefit Act	**)** **)** **)**	**Case No. 20-E-0197**

Comments of NextEra Energy Transmission New York, Inc. in Response to SAPA I.D. No. PSC-13-22-00014-P – Petition to Develop and Construct Local Transmission Projects and to Allocate and Defer Associated Costs and the Public Service Commission's Notice Seeking Comment Issued April 21, 2022

Pursuant to the Notice I.D. No. PSC-03-21-00006-P issued in the March 30, 2022 edition of the *New York State Register,* and the "Notice Seeking Comment" issued by the New York State Public Service Commission ("Commission") on April 21, 2022, NextEra Energy Transmission New York, Inc. ("NEETNY") submits comments on "Petition Identifying Area of Concern ("AOC") Needs and Recommended Solutions" filed by Central Hudson Gas & Electric Corporation, New York State Electric & Gas Corporation, Niagara Mohawk Power Corporation d/b/a National Grid, and Rochester Gas and Electric Corporation ("Upstate Utilities") filed in this proceeding on March 8, 2022 ("Petition").[1] In the Petition, the Upstate Utilities seek Commission approval of: (i) the development and construction of transmission solution recommendations ("Phase 2A Projects"); (ii) the use of regional cost allocation and recovery through the New York Independent System Operator ("NYISO") Tariff; and (iii) deferral for future recovery of certain incremental expenses associated with the Phase 2A Projects that are not recovered regionally through a NYISO Tariff or through an existing rate plan.

[1] The Upstate Utilities filed the Petition in response to the "Order on Local Transmission and Distribution Planning Process and Phase 2 Project Proposals" issued by the Commission in this proceeding on September 9, 2021.

NEETNY commends the Commission and Department of Public Service Staff for advancing the assessment of the ability of the New York transmission system to support the objectives of the Climate Leadership and Community Protection Act ("CLCPA").[2] The CLCPA established ambitious statewide goals including a minimum of 70 percent of statewide electricity being generated from renewable sources by 2030, and ultimately reducing 100 percent of the emissions from the electricity sector by 2040. In order to reach these goals, significant investment in New York's transmission system is required to ensure renewable energy can be efficiently and cost-effectively delivered to customers. However, as set forth below, the Phase 2A Projects fail to adequately address and provide transmission solutions to serve the required amount of renewable projects necessary to meet the CLCPA goals. In contrast, utilizing the Public Policy Transmission Need ("PPTN") processes conducted by the New York Independent System Operator ("NYISO") to develop competitive bulk power solutions can produce a more cost effective and efficient expansion of headroom for the renewable capacity required under CLCPA.

The Phase 2A Projects, with an estimated cost of nearly $4.5 billion, provide only a fraction of the overall investment required to meet the CLCPA goals. NEETNY has performed an analysis examining the cost-effectiveness of a bulk solution versus the proposed Phase 2A Projects. This analysis demonstrates the cost to customers could be nearly 60% lower with a bulk power solution in comparison to the proposed Phase 2A solutions while providing long term solutions that produce greater headroom.[3] Accordingly, it is imperative that such transmission investments be selected through a process that promotes innovation and cost efficiency. The NYISO competitive PPTN is

[2] Chapter 106 of the New York State Laws of 2019.
[3] Appendix A, which has been filed separately pursuant to a Request for Trade Secret Status, provides a summary of NEETNY's analysis.

a proven process that will provide New York State with a well-planned, cost-effective transmission solution to meet CLCPA goals.

A. The Phase 2A Projects Address Only Short Term Needs

The Upstate Utilities recommended a portfolio of projects to address the AOCs as directed by the Commission. The Upstate Utilities' proposal includes over 500 miles of reconductoring and rebuilding the local transmission lines and rebuilding or expanding approximately 20 substations. The total cost for the Phase 2A Projects is approximately $4.5 billion (*see* Table 1).

Table 1. Upstate Utilities Proposed Phase 2A Projects

Area of Concern	Generator Pocket	Project(s) Description	Developing Upstate Utility	In-Service Date	Estimated Cost ($M)
Southern Tier	Z1	Upgrade 30 miles of 34.5 kV, 204 miles of 115 kV, and 64 miles of 230 kV transmission lines. Replace one (1) 230/115 kV transformer, Rebuild four (4) 115kV substations, Expand one (1) 345/230 kV substation to 345/230/115 kV, install four (4) 115kV static capacitor banks, install two (2) 115kV dynamic reactive devices, install one (1) power flow control device	AVANGRID	2030	$2,245
Northern NY	X2&X3	Rebuild 220 miles of 115kV transmission lines, perform 11 station upgrades, Build two (2) new 115kV greenfield station, install four (4) synchronous condensers, add dynamic line ratings and two (2) PARs.	Niagara Mohawk & AVANGRID	2030	$2,072
Capital Region	Y1	Marshville Station - This project will build a 345kV/115kV yard in a breaker and a half configuration with two (2) transformers tying the existing 115kV yard to the new yard.	Niagara Mohawk	2030	$81.3
Capital Region	Y2	Rebuild the North Catskill to Coxsackie Line for 115 kV and operate at 69 kV	Central Hudson	2029	$15.7
				Total	$4,414

The Petition asserts that the Upstate Utilities' assessment was crafted to address a "Near-Term CLCPA Need" that was limited to renewable generation projects considered to be in "advanced development".[4] The Upstate Utilities define renewable generation projects in "advanced development" to include: (i) generation projects with awards from prior NYSERDA auctions; (ii) generation projects that are operating or under construction; (iii) generation projects that are the subject of a complete application for siting approval; and (iv) generation projects deemed likely to enter into operation, which includes generation projects that have received approval of the System Reliability Impact Study in the Interconnection process.

However, renewable generation projects that meet the "advanced development" criteria represent only a small fraction of all the projects in the NYISO interconnection queue. In fact, the Petition acknowledges that the expected renewable generation in AOC "does not represent the full amount of renewable generation developer interest that may be needed within these areas to meet 70 x 30 objectives" and "falls well short of what is needed to achieve 70 x 30".[5] Consequently, the Upstate Utilities' Phase 2A Projects will only meet short-term capacity needs for certain renewable projects in development while failing to adequately provide solutions for the level of renewable projects necessary to meet the CLCPA goal of 70 percent renewables by 2030. This band aid approach is likely to result in inefficient system planning that could result in stranded assets. In order to achieve the CLCPA goals, a wholistic long-term view of the transmission capacity is required. Sound planning and responsible investment decisions will facilitate the state's efforts to reach these goals in a cost-effective manner.

[4] *See* Petition at 8.
[5] *See* Petition at 9.

Unfortunately, the Upstate Utilities dismissed bulk power solutions, providing only very limited data and results in some AOCs[6] and without any modeling results in other AOCs.[7] However, despite the Upstate Utilities' focus on local transmission solutions, alternatives including bulk power solutions must be fully explored. In contrast to the local solutions proposed by the Upstate Utilities, bulk power solutions can often provide more efficient and cost effective results.[8] As demonstrated in the Western New York PPTN, the NYISO evaluated a solution consisting of only local transmission upgrades against multiple bulk power solutions. The NYISO found that the bulk power solution was the most cost effective and efficient project to relieve the Western New York renewable pocket as it enabled transmission of the full 2,700 MW of renewable energy from the New York Power Authority's Niagara hydroelectric plant along with significant other environmental benefits.

Implementing local transmission upgrades before evaluating and comparing bulk alternatives can lead to a short-term solution that may subsequently require additional upgrades -- potentially resulting in stranded assets that failed to address long-term requirements. Bulk power transmission solutions should be a core consideration of any transmission development to enable New York to achieve its clean energy goals. In fact, a combination of bulk and lower voltage solutions may prove to be the most cost effective solution in addressing transmission needs.

Moreover, the Upstate Utilities' analysis fails to adequately examine the potential reliability and economic impacts of the Phase 2A Projects. In the Petition, the Upstate Utilities' utilized the headroom methodology as a proxy to estimate annual energy curtailment without

---

[6] See page 24 of the Southern Tier section of Attachment B to the Phase 2A Petition.
[7] See page 31 of the Watertown/Oswego/Porter Region section of Attachment B to the Phase 2A Petition.
[8] As stated above, NEETNY's analysis, which is included as Confidential Attachment A hereto, demonstrates that bulk system solutions achieved similar or better performance in comparison to the Phase 2A Projects, requires significantly less transmission build, addresses aging infrastructure concerns, and cost consumers approximately 60% less than the Phase 2A Projects.

explicitly modeling and performing hourly simulation using production-cost models and software. Traditionally, production cost model software simulation, transfer limit calculations, and other powerflow methodologies are utilized to quantify the reliability and economic benefits of proposed transmission projects. Use of a production cost model helps ensure that the proposed transmission projects provide the maximum transmission capability to unlock curtailed renewable energy and ensure that an investment into a transmission solution is properly justified. Accordingly, without production cost modeling and simulation, the Utilities' assessment and selection process falls short of the robust and transparent process needed when considering public investment of this magnitude.

B. Utilization of Competitive Solicitations Produces Long-Term, Cost Efficient Results

New York has proven success in utilizing the competitive PPTN process to address public policy transmission needs. Both the Western New York and AC PPTN processes presented the NYISO with a menu of innovative transmission solutions that resulted in the selection of cost-effective projects that increased system reliability while reducing congestion and emissions. The competitive PPTN process also encourages developers to minimize costs, optimize solutions, and bring forth innovation. The use of a competitive PPTN process also brings in new market entrants that can bring innovative solutions to old problems not previously considered. Some examples of innovation include novel approaches to deal with limited right-of-way using single monopole double-circuit structures, power flow control through the utilization of phase angle regulator ("PAR"), and the installation of series compensation. PPTN projects also have included cost containment measures, which reduces the risk of potential cost overruns for consumers.

The PPTN process allows for the inclusion of cost containment provisions. The utilization of cost containment measures provides an incentive to developers to efficiently construct the

project thereby reducing the risk of potential cost overruns. As discussed above, the Upstate Utilities' Phase 2A Projects require an approximately $4.5 billion investment. Significantly, the Upstate Utilities' cost bandwidth is -25%/+50% -- thus the total cost could be closer to $6.6 billion as the project engineering and development advances. The utilization of cost containment provisions through a PPTN process has the potential to limit the scope of potential cost overruns.

Finally, the use of the PPTN to solicit competitive solutions can be achieved in a similar timeframe to the scheduled completion of the Phase 2A projects. The Upstate Utilities estimate that the proposed Phase 2A solutions would not be completed until 2030.[9] For example, the on-going Long Island Offshore Wind PPTN, despite being more complex than previous needs, is progressing more quickly than prior PPTNs. The AOCs are technologically simpler in nature than the Long Island Offshore Wind solutions and can be implemented more expeditiously if acted on sooner than later. Additionally, the PPTN rate recovery mechanism is already in place, which eliminates any risk of delay or challenge to any newly proposed rate mechanisms.

[9] See Table 10 of the Petition of Central Hudson Gas & Electric Corporation, New York State Electric & Gas Corporation, Niagara Mohawk Power Corporation d/b/a National Grid, and Rochester Gas and Electric Corporation; Identifying Area of Concern Needs and Recommended Solutions (March 8, 2022)

Conclusion

For all the foregoing reasons, NEETNY recommends that the Commission declare a PPTN for each of the AOCs. This will help ensure that the most efficient cost effective transmission solutions are identified to meet the CLCPA goals for 2030 and beyond.

Dated: May 31, 2022

Respectfully submitted,

/s/ Richard W. Allen

Richard W. Allen
President
NextEra Energy Transmission New York, Inc.
13 Executive Park Drive
Clifton Park, New York 12065
E-mail: Richard.Allen2@nexteraenergy.com

APPENDIX A

Bulk Power Alternative to Local Transmission Investment

PHASE 2A COMMENTS - APPENDIX A – CONFIDENTIAL DRAFT – TO BE FILED UNDER CONFIDENTIAL SEAL

[redacted]