

### **NYC PPTN Update**

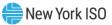
#### **Supriya Tawde** Manager, Transmission Integration

#### Electric System Planning Working Group (ESPWG)

Monday, October 21, 2024

### Agenda

- NYC PPTN Review
- Sufficiency Criteria
- Viability and Sufficiency Assessment
- Viability and Sufficiency Assessment Results
- Next Steps

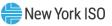


## **NYC PPTN Review**



### 2022-2023 Public Policy Process Cycle

- On August 31, 2022, the NYISO requested potential transmission needs driven by Public Policy Requirements from interested parties
- On November 7, 2022, the NYISO filed the proposed transmission needs with the PSC from 17 entities, as well as applicable proposed needs with LIPA
- On June 22, 2023, the PSC issued an order declaring a Public Policy Transmission Need ("PSC Order"):
  - https://www.nyiso.com/documents/20142/1406395/PSC-Order-NYC-PPTN.pdf



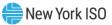
### **PSC Order Highlights**

- "The CLCPA ... constitutes a Public Policy Requirement driving the need for additional transmission facilities to deliver the output of offshore wind generating resources to New York City interconnection points"
- The NYC PPTN calls for proposed solutions that must accommodate the full output of at least 4,770 MW of incremental offshore wind (OSW)
  - The Order notes that scenarios representing up to 8,000 MW of incremental OSW should be used by NYISO to evaluate performance of proposes solutions for expandability, renewable energy deliverability, and other metrics in evaluation phase
- "Appendix A: Technical Requirements" of the PSC Order contains technical details that will be used in defining the viability & sufficiency criteria and evaluation criteria



### **PSC** Order Highlights (cont.)

- Solutions to the transmission need must, among other things:
  - Consist of a complete end-to-end proposal comprised of both offshore and onshore components to enable power injection into Zone J
  - Contain a plan to complete all permitting and construction activities for facilities required to inject 4,770MW of OSW into Zone J to achieve an in-service date no later than January 1, 2033
  - Contain a plan for how offshore wind generation would interconnect to the end-to-end transmission proposal at the offshore interconnection points



### **Complete "End-to-End" Solutions**

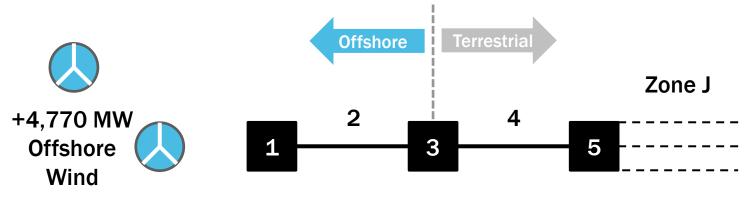
- Complete end-to-end solutions must be comprised of both offshore and onshore components to enable power injection into Zone J and should include the following components:
  - offshore interconnection point(s),
  - offshore transmission (i.e., submarine cables),
  - sites for cable landing points,
  - onshore transmission path(s) (i.e., terrestrial cables) from cable landing points to points of interconnection in Zone J, including sites for converter stations, and
  - necessary improvements to and/or expansion of the existing onshore transmission system.



# **Sufficiency Criteria**



#### New York City Offshore Wind PPTN





- **1** offshore interconnection point(s)
- 2 offshore transmission (i.e., submarine cables)
- **3** sites for cable landing points
- **4** onshore transmission path(s) (i.e., terrestrial cables)
- **5** necessary improvements to and/or expansion of the existing onshore transmission system



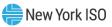
### **Sufficiency Criteria**

- Accommodate the full output of at least 4,770 MW of incremental OSW generation injected into New York City (Zone J), under applicable reliability standards, without reducing the overall output of other renewable resources interconnected in Zones J and K
- 4,770 MW of OSW generation is incremental to the 816 MW of OSW generation identified as interconnecting into Zone J



### **Sufficiency Criteria**

- Consist of a complete end-to-end proposal comprised of both offshore and onshore components to enable power injection into Zone J
- Demonstrate that facilities that are required to inject 4,770 MW of OSW generation can achieve an in-service date no later than January 1, 2033
- A proposed solution must satisfy the sufficiency criteria by itself

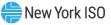


# Viability and Sufficiency Assessment



#### **Viability Assessment**

- Section 31.4.6.3 of the OATT requires the NYISO to consider the following in determining the viability of the proposed solutions
  - Developer qualification data provided pursuant to Section 31.4.4 and the project information data provided under Section 31.4.5
  - Whether the proposed solution is technically practicable
  - Developer's possession of, or approach for acquiring, any necessary rights-of-way, property, and facilities that will make the proposed facilities required to inject 4,770MW of OSW into Zone J reasonably feasible to be in service by the required timeframe (i.e., 4,770 MW no later than January 1, 2033)
  - Whether facilities required to inject 4,770MW of OSW into Zone J can be in service by the required timeframe (i.e., no later than January 1, 2033)
- The viability assessment serves as a high-level assessment of a proposed solution's satisfaction of the minimum requirements for viability under Section 31.4.6.3 of the OATT. Detailed evaluation of risk factors related to construction, schedule, and property rights will be performed in the Evaluation & Selection phase



### **Sufficiency Assessment**

- NYISO assessed the proposed solutions' satisfaction of the sufficiency criteria as follows:
  - NYISO modeled the proposed solutions in the VSA Baseline case
  - NYISO performed steady-state N-0, N-1, and N-1-1 analysis to confirm that no criteria violations (thermal and voltage) occur as a result of the proposed injection of 4,770 MW of OSW generation into Zone J



Viability and Sufficiency Assessment Results



#### **Viability and Sufficiency Assessment Results**

Developer	Project Name	Project #	Viable?	Sufficient?
EnergyRe Giga-Projects USA, LLC	Clean Borough Power Link #1	T102	Yes	Yes
EnergyRe Giga-Projects USA, LLC	Clean Borough Power Link #2	T103	Yes	Yes
EnergyRe Giga-Projects USA, LLC	Clean Borough Power Link #3	T104	Yes	Yes
Viridon New York Inc.	Liberty Link 1	T105	Yes	Yes
Viridon New York Inc.	Liberty Link 2	T106	Yes	Yes
Viridon New York Inc.	Liberty Link 3	T107	Yes	Yes
New York Transco, LLC	Energy Link New York Solution 1	T108	Yes	Yes
New York Transco, LLC	Energy Link New York Solution 2	T109	Yes	Yes
New York Transco, LLC	Energy Link New York Solution 3	T110	Yes	Yes
New York Transco, LLC	Energy Link New York Solution 4	T111	Yes	Yes
New York Transco, LLC	Energy Link New York Solution 5	T112	Yes	Yes
New York Transco, LLC	Energy Link New York Solution 6	T113	Yes	Yes
New York Transco, LLC	Energy Link New York Solution 7	T114	Yes	Yes
New York Transco, LLC	Energy Link New York Solution 8	T115	Yes	Yes
New York Transco, LLC	Energy Link New York Solution 9	T116	Yes	Yes
New York Transco, LLC	Energy Link New York Solution 10	T117	Yes	Yes



#### **Viability and Sufficiency Assessment Results**

Developer	Project Name	Project #	Viable?	Sufficient?
NYPA & LS Power Grid New York Corporation I	Five Boro Energy Connect – Mint	T118	Yes	Yes
NYPA & LS Power Grid New York Corporation I	Five Boro Energy Connect – Sage	T119	Yes	Yes
NYPA & LS Power Grid New York Corporation I	Five Boro Energy Connect – Olive	T120	Yes	Yes
NYPA & LS Power Grid New York Corporation I	Five Boro Energy Connect – Kelly	T121	Yes	Yes
NYPA & LS Power Grid New York Corporation I	Five Boro Energy Connect – Hazel	T122	Yes	Yes
NYPA & LS Power Grid New York Corporation I	Five Boro Energy Connect – Navy	T123	Yes	Yes
NYPA & LS Power Grid New York Corporation I	Five Boro Energy Connect – Royal	T124	Yes	Yes
NYPA & LS Power Grid New York Corporation I	Five Boro Energy Connect – Cobalt	T125	Yes	Yes
NYPA & LS Power Grid New York Corporation I	Five Boro Energy Connect – Ruby	T126	Yes	Yes
NYPA & LS Power Grid New York Corporation I	Five Boro Energy Connect – Rose	T127	Yes	Yes
NYPA & LS Power Grid New York Corporation I	Five Boro Energy Connect – Honey	T128	Yes	Yes
NYPA & LS Power Grid New York Corporation I	Five Boro Energy Connect – Golden	T129	Yes	Yes

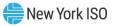


## **Next Steps**



## Initial Characterization of Project Facilities

- NYISO posted the Initial Characterization of Project Facilities for the NYC PPTN projects on September 20, 2024
  - <u>https://www.nyiso.com/documents/20142/40894368/New-York-City-Offshore-Wind-PPTN-Initial-Facility-Characterization-List.pdf/3b80f382-aaa2-e76b-1a03-44c27c5b7715</u>
- Con Edison, NYPA, and Viridon submitted disputes to NYISO's Initial Characterization of Project Facilities, which are available on NYISO's website
  - <u>https://www.nyiso.com/documents/20142/40894368/NYC-PPTN-Comments-Initial-Facility-Characterization.zip/24bb4153-26ee-37e0-1c00-7b531726c823</u>
- NYISO is currently processing the disputes in accordance with Sections 31.4.6.5.1.1 of the OATT
- NYISO will post a final list on or before the date that it files the Viability & Sufficiency Assessment with the PSC



### Viability and Sufficiency Assessment

- Comments on the Viability and Sufficiency Assessment are due to the NYISO by noon of October 25, 2024
  - Submit comments (must not include CEII) with subject line, "NYC PPTN VSA comments," to <u>PublicPolicyPlanningMailbox@nyiso.com</u>
- NYISO will publish comments on its website and submit the final Viability and Sufficiency Assessment report to the PSC



### **Evaluation and Selection**

- Prior to the evaluation of NYC PPTN projects, the following steps will be taken:
  - Within 15 Calendar Days of filing the assessment with the PSC, Developers must provide notice of their intent to proceed with the evaluation of their viable and sufficient Public Policy Transmission Projects for purposes of the NYISO's selection of the more efficient or cost-effective project, if any
  - Developers will also need to include with its notification a demonstration that it has an executed System Impact Study Agreement



### **NYC PPTN Schedule**

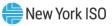
Major Steps	Process Steps	Estimated Timeline
Solicitation of Solutions	Prepare baseline assessment	Q3 - Q4 2023
	Hold technical conference	Q4 2023
	System Data and Information Sharing	Q4 2023
	Issue solicitation for solutions	April 4, 2024
	Solutions due on	June 17, 2024 (Q2)
	Project information release, facility characterization	Q2 – Q3 2024
Viability & Sufficiency Assessment	Perform Viability & Sufficiency Assessment	Q2 – Q4 2024
	Final Viability & Sufficiency Assessment filed with PSC	Q4 2024
Evaluation & Selection	Evaluate viable and sufficient transmission solutions	Q4 2024 - Q1 2025
	Identify top-tier projects	Q2 2025*
	Evaluate top-tier projects and issue draft report	Q2 – Q3 2025*
	Board review and action	Q4 2025*

\*Denotes change to schedule presented at September 27, 2024 ESPWG meeting



## 2024-2025 Cycle of Public Policy Transmission Planning Process

- The deadline for proposed transmission needs driven by Public Policy Requirements has been extended to November 4
- NYISO's notice soliciting proposed needs for the 2024-2025 cycle is published <u>here</u>
- Submissions must be sent to: <u>PublicPolicyPlanningMailbox@nyiso.com</u>



#### **Our Mission & Vision**

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#### Mission

Ensure power system reliability and competitive markets for New York in a clean energy future



#### Vision

Working together with stakeholders to build the cleanest, most reliable electric system in the nation



## Supplemental Information



### **Requesting Information from NYISO**

 Transmission Projects' redacted proposals will be available on request by completing CEII/NDA form with the NYISO <u>here</u>

Requested Information	(Select all applicable)	): *
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- NYISO FERC 715 Files
- NYISO TCC Auction Data (TAD)
- Project Specific Interconnection Materials
- NYISO Direct Communications Procedure
- Dynamics and Short Circuit Databases (Non project specific)
- Phasor Measurement Equipment Requirements Document (PMU)
- MyNYISO.com access
- 🗹 Other

Other Information & Acknowledgements	
Specify what information you are looking for *	
NYC PPTN Transmission Projects' redacted proposals	
	llowing
	llowing
I affirm that the requested information is needed and will be used solely for the fo purpose: * Accessing NYC PPTN Transmission Projects' redacted proposals	llowing



### **Requesting Information from NYISO**

#### Baseline cases are available on request by completing CEII/NDA form with the NYISO <u>here</u>

Requested Information (Select all applicable): \*

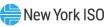
- NYISO FERC 715 Files
- NYISO TCC Auction Data (TAD)
- Project Specific Interconnection Materials
- NYISO Direct Communications Procedure
- Dynamics and Short Circuit Databases (Non project specific)
- Phasor Measurement Equipment Requirements Document (PMU)
- MyNYISO.com access
- Other

Other Information & Acknowledgements	
Specify what information you are looking for *	
New York City Public Policy Transmission Need cases and other supporting material	
	1
I affirm that the requested information is needed and will be used solely for the followi purpose: *	ng
Development of a NYC PPTN project	
	ĥ
Describe in detail	



#### Feedback

- NYISO conducts an open and transparent process and will continue to ensure information is available to all stakeholders and Developer(s)
- Feedback and questions on the NYC PPTN should be raised during stakeholder discussions or provided to the NYISO by submitting questions to <u>stakeholder\_services@nyiso.com</u> with the subject line "NYC PPTN"
- NYISO will review questions received from stakeholders and will address them, to extent feasible, during stakeholder meetings, other open forums, and/or in FAQ documents



#### **New York City PPTN Data Catalog**

#### **Stakeholder Presentations**

July 25, 2023 NYC PPTN Update August 22, 2023 NYC PPTN Update PPTPP Lessons Learned September 21, 2023 NYC PPTN Update October 2, 2023 NYC PPTN Update October 24, 2023 NYC PPTN Update November 2, 2023 NYC PPTN Update November 6, 2023 NYISO Technical Conference November 21, 2023 NYC PPTN Update December 7. 2023 NYISO Technical Conference

December 19, 2023 PPTPP Manual Updates January 23, 2024 NYC PPTN Update February 6, 2024 NYC PPTN Update February 22, 2024 NYC PPTN Update March 8, 2024 NYC PPTN Update March 21, 2024 NYC PPTN Update June 7.2024 NYC PPTN Update August 6, 2024 NYC PPTN Update September 27, 2024 NYC PPTN Update

#### PSC Order

#### NYC PPTN Report



#### **Other Documents**

DPS/NYISO PSC Order Q&A Document NYISO CEII Data Request Form Con Edison NYC PPTN Related Website NYSERDA Offshore Wind Cable Corridor Constraints Assessment Agency Working Group Technical Conference Presentation Con Edison Technical Conference Presentation Con Edison Technical Conference Presentation Con Edison FAQs NYISO FAQs #1 NYISO FAQs #2 NYISO FAQs #3 NYISO FAQs #4 DPS PSC Order Q&A Document (Jan 2024) DPS PSC Order Q&A Document (Feb 2024) DPS NYC PPTN Letter to NYISO Attachment B, O13 – NYC PPTN Information Request Form

