New York ISO
Independent System Operator

New York City PPTN Update

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Tuesday, February 6, 2024

Agenda

- Sufficiency Assessment Update
- Evaluation and Selection Metrics
- Solicitation Schedule
- Next Steps

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Sufficiency Assessment Update

PAR Loading - Update

- **Previous Guidance for VSA**
  - For any PAR that is (a) existing within Zone J, (b) on a Zone J tie line, or (c) proposed as part of a Public Policy Transmission Project to address the NYC PPTN, the scheduled pre-contingency flow on the PAR should be no more than 75% of its rating consistent with the NYISO's Transmission Expansion and Interconnection Manual
- **Updated Guidance for VSA**
  - For any PAR that is (a) existing within Zone J, (b) on a Zone J tie line, or (c) proposed as part of a Public Policy Transmission Project to address the NYC PPTN, the flow on the PAR may be up to 100% of its rating
- **In its evaluation, consistent with the operability metric under the tariff, the NYISO will evaluate the operability of solutions. Solutions that provide greater operability benefits, such as maintaining pre-contingency (N-0, N-1-0) PAR loading up to 75% of the pre-contingency rating, will be valued**

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Flow on New York-PJM tie-lines

- For VSA, solutions may dispatch down flow on Linden VFT to 0 MW to mitigate thermal and voltage violations under N-0, N-1, and N-1-1 conditions
- A proposed solution's impact on New York-PJM interface will be studied in the interconnection studies
  - Network Upgrade Facilities (NUF) will be identified, as necessary, in accordance with the NYISO Transmission Interconnection Standard during the System Impact Studies

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Treatment of Storage

- Energy storage units are modeled at 0 MW in the baseline cases provided by the NYISO
- For VSA, project solutions may propose to dispatch energy storage units in charging or discharging mode under N-0, N-1, and N-1-1 conditions
- If a project solution proposes to dispatch storage, the planning study report should clearly document dispatch of storage for specific system contingencies
- If a transmission solution proposes to dispatch storage in the VSA, the NYISO may consider the solution's ability to inject offshore wind without reliance on storage under the operability metric in the evaluation
- When energy storage units are assumed to be dispatched during evaluation analyses, they will be dispatched in a manner consistent with anticipated market operations (e.g., production cost simulations)

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Sufficiency Criteria

- Redispatch of generation (within Zone J or rest of NYCA) to accommodate 4,770 MW of offshore wind with the proposed transmission solution should not result in thermal or voltage violations under N-0, N-1, and N-1-1 conditions
- When securing the system to respect bulk export constraints, reduction of the incremental 4,770 MW offshore wind is NOT permissible

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Evaluation & Selection Metrics

Evaluation and Selection

- In assessing and valuing proposed projects under the evaluation metrics, the NYISO considers how the benefits will be measured based on specific characteristics of the proposed solutions
- Developers must demonstrate how solutions meet the viability and sufficiency criteria and should also clearly and succinctly highlight specific characteristics and benefits of their solutions under the evaluation metrics. Information can be shared as part of the project proposal in Attachment C under ‘Project Overview’ section

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Operability and Performance

- **In addition to the factors presented in the December 7th NYISO Technical Conference, the NYISO will consider the following to evaluate flexibility in operation of the system:**
  - OSW injection with post-contingency loading limited to LTE for all facilities without assuming implementation of the NYSRC Reliability Rule permitting loading up to STE under certain conditions
  - OSW injection with PAR loading limited to 75% of the pre-contingency rating under N-0 and N-1-0 conditions
  - OSW injection without reliance on storage

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Location of Offshore POI(s)

- **The costs and risks associated with OSW generator connections to the proposed projects will be considered**
- **Developers can demonstrate the benefits of the proposed offshore POI(s) by highlighting the following:**
  - Construction risk
  - Permitting risk
  - MW of OSW that can be connected to the offshore POI(s)
  - Proximity and flexibility for connection to different offshore wind energy areas
  - Benefits to the OSW generators to connect to the offshore POI (e.g., distance to connect to offshore POI, voltage level, etc.)
  - Permitting/routing risk for OSW generators to connect to the offshore POI

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Location of Offshore POI(s)

- Developers may highlight the benefits of the location of their projects' proposed offshore substation, such as how the location balances the total equipment cost between the transmission project and future OSW generators
- In balancing the total equipment cost between the transmission project and future OSW generators, the illustrative example on the next slide demonstrates an approach to evaluate how proposed solution balances the total equipment cost

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Simplified Illustrative Example

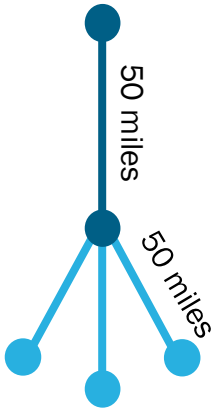
NYC PPTN Offshore Transmission

OSW Generator Cables

= $2/mile

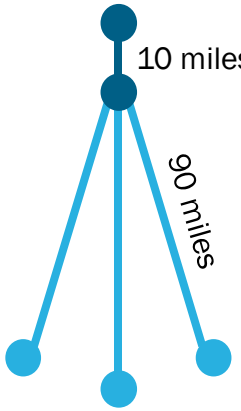
= $1/mile

Scenario 1



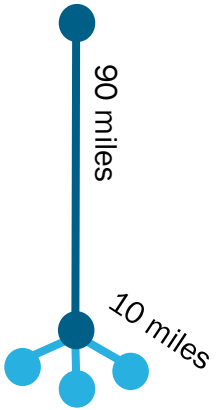
Total Cost = $100 + $150
= $250

Scenario 2



Total Cost = $20 + $270
= $290

Scenario 3



Total Cost = $180 + $30
= $210

In this example, the lowest PPTN project cost does not result in lowest OSW generator cable cost. In addition, other factors, such as those identified on the previous slide are also considered for each proposed project configuration.

This is a fictitious example to highlight how the costs and risks to connect OSW generation to NYC PPTN projects may be considered. Developers can highlight the benefits as per the methodology relevant to their respective designs in the project submission.

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Offshore Grid Network

- Proposed solutions should demonstrate that the solution does not preclude or foreclose on the ability to expand and/or integrate into a future offshore transmission network by identifying construction risks, permitting risks, and mitigation for the risks, if applicable. Developers can also highlight other factors based on the specific characteristics of their proposed solutions that facilitate the integration of an offshore grid network
- Proposed solutions to the NYC PPTN are not limited to offshore network designs that conform with the NYSERDA's Meshed Ready Technical Requirements
- The potential benefits of the offshore grid network, if proposed as part of the solution, will be considered in the evaluation

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Synergy with LI PPTN

- Solutions should consider potential interference and/or synergy with the Long Island Offshore Wind Export PPTN
- Total Zone J & Zone K OSW curtailment will be examined in production cost simulations. Injection of offshore wind in Zone J should not lead to curtailment of offshore wind in Zone K

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Solicitation Schedule

Solicitation Schedule

- This presentation addresses the key technical feedback provided by stakeholders and interested developers
- Given recent developments in NYSERDA's OREC solicitation and contracts, NYISO will provide an update on the NYC PPTN solicitation schedule in upcoming stakeholder meetings
- NYISO continues to discuss stakeholder's feedback on solicitation schedule with DPS and NYSERDA
- Upcoming stakeholder meetings:
  - February 15th (Tentative)
  - February 22nd

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Next Steps

- **Prior to issuing a solicitation, NYISO will share the following:**
  - Additional FAQs
  - Updates to Developer Technical Guidance Document
  - Updates to Attachments B and C of the PPTPP manual
- **Solicitation Kickoff**
  - The NYISO will open the 60-day window by posting to the NYISO's website a letter
  - Developers will be notified of the letter posting via email and postings to the ESPWG
    - The notification via email will be sent to the current list of entities on the NYISO's distribution lists
    - Interested parties that are not on a distribution list (or are unsure) should reach out to Kirk Dixon, kdixon@nyiso.com, or routinely check the NYISO's website for updates

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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

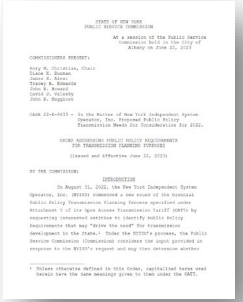
November 21, 2023
- NYC PPTN Update

December 7, 2023
- NYISO Technical Conference

December 19, 2023
- PPTPP Manual Updates

January 23, 2024
- NYC PPTN Update

PSC Order



STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

At a session of the Public Service Commission held in the City of Albany on June 22, 2023

COMMISSIONERS PRESENT:

Rory M. Christian, Chair
Diane X. Burman
James S. Alesi
John B. Howard
David J. Valesky
John B. Rhodes

CASE 22-E-0633 - In the Matter of New York Independent System Operator, Inc. Proposed Public Policy Transmission Needs for Consideration for 2022.

ORDER ADDRESSING PUBLIC POLICY REQUIREMENTS FOR TRANSMISSION PLANNING PURPOSES

(Issued and Effective June 22, 2023)

BY THE COMMISSION:

INTRODUCTION

On August 31, 2022, the New York Independent System Operator, Inc. (NYISO) commenced a new round of its biennial Public Policy Transmission Planning Process specified under Attachment Y of its Open Access Transmission Tariff (OATT) by requesting interested entities to identify Public Policy Requirements that may "drive the need" for transmission development in the State.[1] Under the NYISO's process, the Public Service Commission (Commission) considers the input provided in response to the NYISO's request and may then determine whether

[1] Unless otherwise defined in this Order, capitalized terms used herein have the same meanings given to them under the OATT.

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 FAQs
- NYISO FAQs #1
- DPS PSC Order Q&A Document (Jan 2024)

New York ISO

Our Mission & Vision

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

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